JOVTE
VOLUME 13, NO. 1,2024 ISSN: 1595 6008
Journal of Vocational and Technical Education
Board Members
Dr. Dorothy N.Ezenwanne Dean, School of Vocational and Technical Education, Nsugbe - NOCEN
Editor -In-Chief Dr. Dan C. Okeke Director Quality Assurance Unit Nwafor Orizu College of Education, Nsugbe - NOCEN
Editorial Board Members Dr. Chinwe S. Okeke - Member

All correspondences should be addressed to the Dean, School of Vocational and Technical Education, Nwafor Orizu College of Education, Nsugbe, P.M.B. 1734, Onitsha © Copyright 2024, Journal of Vocational and Technical Education (JOVTE) Vol. 13, No. 1, 2024

Published by: The School of Vocational and Technical Education, Nwafor Orizu College of Education, Nsugbe P.M.B. 1734, Onitsha, Anambra State.

Printed By:

ISSN 1595 6008

No part of this journal should be reproduced, stored in a retrieval system or transmitted in any form or by any means in whole or in part without the prior written approval of the copyright owners, except in the interest.

GUIDELINE FOR CONTRIBUTORS

The Journal of Vocational and Technical Education is a peer reviewed publication of the School of Vocational and Technical Education Nwafor Orizu College of Education, Nsugbe (JOVTE). It encourages submission of original manuscripts that emphasize empirical reports of research which may be quantitative or qualitative in nature. The following guidelines for preparing your manuscripts MUST be strictly adhered to.

- 1. Manuscript should not exceed 14 double-spaced page (including references) and should be prepared using Times News Roman 12 points type
- 2. The title and institutional affiliation of the author(s) an abstracts of not more than 200 words should precede the title
- 3. Provide at least 4 keywords immediately after the abstract.
- 4. Manuscript under consideration by other journals must not be submitted
- 5. Empirical reports must be written under the following headings.
 - i. Introduction: should incorporate background of the study, statement of problems, significance of the study and appropriate literature
 - ii. Objectives/Purposes/Research Questions/Hypothesis
 - iii. Methodology: this should contain Area of Study, Design of the Study, population, sample and sampling techniques, Instrument for Data Collection, Method of Data Collection and Method of Data Analysis
 - iv. Results
 - v. Discussion
 - vi. Conclusion
 - vii. Recommendation
 - viii. References
- 6. Non-Empirical reports must have
 - i. Introduction: That shows clearly the focus of the article
 - ii. Main body: Under distinctive headings that should have been reflected in the introduction
 - iii. Conclusion with appropriate recommendations where necessary.
 - iv. References
- 7. Literature must be relevant, rich and current references should be according to the American Psychological/Association (APA 7th edition).

8. **Tables**

Prepare tables according to APA (7th edition)

- * Title of tables should be italicized and appear in initials capitals. Titles should not be bold but single-line spaced if it runs in 2 or more lines.
- * Avoid grids on your tables. Use 3 major horizontal lines: the first two enclosing, the headings on the table, and the last line at the end of table. Use single line spacing with the table.
- * Include effect size at the end of the title in bracket e.g (n=340), where sample was studied and (N=340) where an entire population was studied.
- * Ensure your statistical information is presented accurately and properly.

Sample of Table

Table 1Views of Respondents Regarding Attitude of Vocational and Technical Teachers Use ofZero Tillage

Attitude Item	Ann	ual Crop	Perennial Crops		
	f	%	f	%	
Never ready to use zero tillage	65	35.71	31	17.03	
Readily adopts zero tillage	102	56.04	131	71.98	
Indifferent to use of zero tillage	15	8.24	20	10.99	

1. References

- Ensure each citation contains all required information in line with APA publication manual.
- Match spelling of names in the text with names on the reference list.
- Title f journals, books, dissertations, theses, and other documents should be italicized
- Inch de Digital Objective Identification (DOI) number where provided in the references.

E.g

Journal Article:

Arachie, S. U. (2014), *Effect of herbicides on maize yield*. Journal of Vocational and Technical Education 10(1),55-60.

BOOK

Okafor, M. (2017) Guidelines to Biology Practicals. Onitsha: Klaax Nig. Ltd.

Book Chapter

Afamefuna, B. C. & Ude, P. M. (2015), Agricultural productivity in the topics. In D. C. Oko (Eds) *Concepts of Irrigated lands in Nigeria* (pp 25-31), Onitsha: Klaax Nig. Ltd.

2. Manuscript must be submitted with a non refundable peer-review fee of four thousand naira (N4,000)

The Editorial Board

c/o Dr. Dan C.Okeke Director, Quality Assurance Nwafor Orizu College of Education, Nsugbe e-mail: okeke.daniel@nocen.edu,ng

Table of Contents

Enhancing Access to Knowledge Through Digital Libraries in Nigerian Tertiary Institutions - Igbasi Wilson Obinna Ph.D and Nwabueze Rose N	1
The Use of Instructional Technology To Support Learners With Different Needs (e.g. Students with Disabilities and Gifted Students) Onyezeka Uchechukwu Markcollins	8
Impact of Technology on Family Dynamics And Parenting Styles - Ezenwanne, Dorothy Nkem Ph.D	18
Utilization of ICT Skills In Teaching Business Subjects In Secondary Schools In Anambra State, Nigeria - Obinegbu Chinyere Tochukwu	28
Determinants of Yam Farmers Credit Utilization In Anambra West LGA, Anambra - Okeke, Daniel C. Ph. D	36
The Effectiveness of Integration of ICT - Based Instruction In Information Literacy Instruction In A University library Igbasi Wilson Obinna Ph.D and Nwabueze Rose N.	44
La Linguistique Appliquée Un Véhicule Pour La Traduction - Akabogu, Damian K.	55
Effects of Appraisal On The Quality of Business Education Programme In Colleges of Education In Anambra State, Nigeria - Umelue Ogochukwu Gloria Ph.D	70
Biosynthesis And Characterization of Silver Nanoparticles Using Methanolic Extract of Wild Lettuce – Lactuca taraxacifolia - Ofoegbunam Chimee Bibian	79
Actualizing Teaching Practice Objectives Among Business Education Students For Developing New Teachers In Anambra, State Ofuonye, Roseline A.	89
The Evolving Dynamics of Mother-in-Law and Favorite Son Relationships in Modern Family Structures - Obi Rita Nkemjika and Okadigwe John Chukwujekwu Ph.D	97
Integrating E-Learning Into TVET Programmes: Implications For Teacher Preparation In Nigeria - Eze Chinwe P. Ph.D	110
The Positive And Negative Impacts of Globalization To Nigeria Culture, Economy And Society - Uzoka Obioma Agatha	118
Facteurs Psychologiques Influençant L'enseignement Du Français Aux Ecoles Secondaires - Vanessa Georgina Udeh	123
Funding: A Challenge to Optimizing ICT usage Among Business Education Students in Nigeria Tertiary Institutions Onyeagba Josephat N. Ph.D and Mbanugo, Cyriacus Izuchukwu	131

Difficultes D'emploi Des Adjectives Epithetes Chez Les Apprenants Au Premier Cycle D'ecoles Secondaires A Onitsha North De L'etat D'Anambra Okeke, Nchedo Priscilla	138
Promoting Male Enrollment In Business Education In Colleges of Education For Entrepreneurship Development In Anambra State - Okeke Chinwe S., Ph.D	147
Entrepreneurship Incubation Centres As Predictor of Business Education Graduates Employability In Tertiary Institutions In Anambra State - Ngozi Loretta Nwosu, Ngozi Onyemaob and Stella Chinyere Amobi	i 155
Emploi De Chanson Dans L'apprentissage De La Langue Francaise Chez Les Apprenants Français - Chitoo Doris Obikwelu	162
Hybrid Workplace Arrangements Among Business Educators In Anambra State, Nigeria For Sustainable Workforce Development: Benefits And Challenges In Nigeria Obinegbu Chinyere Tochukwu	167
Strategies For Improving Business Education Students' Entrepreneurship Skills For Better Standard of Living And Economic Development In Anambra State- Okeke Chinwe S., Ph.D	175
The Indispensability of The English Language For The Acquisition of Formal Education For Sustainable Development In Nigeria - Vera Chioma Okoli, Ph.D	182
Appraisal of the Impediments and Obstacles Confronting Guidance Counsellors in Secondary Schools in Anambra State- Marcel Sunday Obiorah	186
Influence of Powerpoint Presentation On Academic Performance of Office Technology And Management/Business Education Students In Webpage Design, Study of Federal Polytechnic, Okoh - Umelue Ogochukwu Gloria Ph.D	196
Analysis of Variance Step By Step Using Microsoft Office Excel - Akamigbo Izuchkwu Stephen and Eneja Remigius Uchenna	203
Computer Literacy As Predictor of Business Education Students Entrepreneurial Intention In Tertiary Institutions In Anambra State - Amugo Ernest Nkwachi	209
Comparative study of Junior Secondary School Students' Academic Performance in Internal and External Examination of Home Economics - Okadigwe Chukwujekwu John Ph.D and Nomeh Blessing C.	215
Leveraging Artificial Intelligence (AI) Technologies For Enhancing The Teaching of Business Subjects In Senior Secondary Schools In Anambra State, Nigeria - Amaugo Ernest Nkwachi and Anuka Chijioke Bernadine	225
Changing Gender Roles and Expectations in Nigerian Society: The Home Economists Perspective - Adilo Obioma Angela and Ezenwanne Dorothy N., Ph.D	234

Information And Communication Technology (ICT) Skills Required By Business Education Students In Colleges of Education In Anambra State - Uzoka Obioma Agatha and	246
Anozie Patience Ukamaka Ph.D	246
La Place Des Langues Africaines Dans La Litterature Africaina - Uzor, Ogechukwu Chinulu	253
Strategies Towards Improving Event Management Competencies: The Home Economics Perspective - Emeka Ebele Cynthia and Adilo Angela Obioma	260
Business Education Program Awareness Among Senior Secondary Students: A Panacea for Dwindling Student Population in Colleges of Education in Anambra State - Nebolisa Chinwe Mikella	269
Impact of Integrating Business Management and Cybersecurity Education on Strategic Thinking and Practical Skills - Nwagbo Chioma Lizzy Ph.D and Emmanuel I. Ofoegbunam	279
Engaging Youths Through Business Education and Entrepreneurship for Sustenance of Peace and Security in Nigeria Anuka Chijioke Bernadine	288
Evaluation of Teacher's Qualifications And Experience on Students Achievement In Mathematics In Secondary Schools - Okeke, Chizaram Stanley	294
Importance of Two-Dimensional Art Amarachi Chinwuba.	300
Analyzing Curriculum Gaps and Prospects in Embedded Systems Education with AI and Machine Learning Integration - Nwagbo Chioma Lizzy Ph.D and Ikemelu Chinelo K., Ph.D	308

Enhancing Access to Knowledge Through Digital Libraries in Nigerian Tertiary Institutions

¹Igbasi Wilson Obinna Ph.D and ²Nwabueze Rose N

¹Computer Science Department, ²College Library, Nwafor Orizu Collge of Education, Nsugbe. ¹signorw2020@gmail.com and ²rose7@gmail.com

Abstract

This research examines the role of digital libraries in enhancing access to educational resources. A survey research design was employed, targeting public library staff in tertiary institutions in Anambra State. The study population comprised library staff from public tertiary institutions in Anambra state. Using purposive sampling technique, 300 library staff was selected. Data was gathered via a 16-item questionnaire, validated by experts in library science and information and communication technology (ICT) from Nwafor Orizu College of Education, Nsugbe, and Nnamdi Azikiwe University, Awka both in Anambra state. Data analysis was conducted using mean statistics. The objectives of the research work is to identify the requirements for the successful operation of digital libraries, to investigate the challenges of operating digital libraries in tertiary institutions. The findings indicate that successful digital library operations require the acquisition of new skills, adherence to global practices, procurement of ICT devices, sufficient funding, and reliable power supply. The study concludes that addressing manpower needs and infrastructural development is critical for improving access to educational resources. Relevant recommendations were also made.

Keywords: Digital Libraries, Access, Education, Resources, ICT

Introduction

Digital libraries are specialized libraries that house digital objects such as text, visual material, audio material, and video material stored in electronic formats, providing means for organizing, storing, and retrieving these digital files (Atanda et al., 2021). In Nigeria, the transition towards electronic libraries, which encompass electronic materials and services, is becoming increasingly prevalent, reflecting a shift towards digital resources that require electricity for access, including various digital and analogue formats (Ayoku and Okafor, 2015). This shift is further emphasized by the active digitization efforts in academic libraries, where materials like books, journals, newspapers, theses, dissertations, historical documents, and cultural artifacts are being digitized and made accessible through institutional repositories (Eromosele and Adesina, 2020).

Enhancing access to knowledge through digital libraries in Nigeria's tertiary institutions is crucial for several reasons. Firstly, digital libraries offer a vast array of resources that can significantly expand the knowledge base available to students, researchers, and faculty members. By digitizing a wide range of materials, including academic publications, historical documents, and cultural artifacts, digital libraries provide easy access to a wealth of information that might otherwise be challenging to obtain (Eromosele and Adesina, 2020). This accessibility is particularly important in Nigeria, where traditional libraries may face limitations in terms of physical space, funding, and the availability of up-to-date resources.

Moreover, the digitalization of library resources plays a vital role in preserving Nigeria's cultural heritage and academic output. By digitizing and archiving materials such as theses, dissertations, historical documents, and cultural artifacts, digital libraries contribute to the preservation of Nigeria's intellectual and cultural legacy (Eromosele and Adesina, 2020). This preservation effort is essential for ensuring that valuable knowledge is not lost to time and that future generations have access to a comprehensive record of the country's academic and cultural achievements.

Furthermore, enhancing access to knowledge through digital libraries in Nigeria's tertiary institutions can help bridge the digital divide by providing equitable access to information for students and researchers across the country. Digital libraries offer the flexibility of accessing resources remotely, which is particularly beneficial for individuals in remote or underserved areas who may not have easy access to physical library facilities (Eromosele and Adesina, 2020). By democratizing access to information, digital libraries contribute to leveling the playing field and promoting inclusivity in education and research.

Additionally, the implementation of digital libraries in Nigeria's tertiary institutions can improve the overall efficiency of information retrieval and dissemination. Digital libraries offer advanced search functionalities and organizational structures that facilitate quick and precise access to relevant information (Eromosele & Adesina, 2020). This efficiency not only saves time for users but also enhances the research process by enabling scholars to access a wide range of resources conveniently and expediently.

Moreover, the establishment of digital libraries in Nigeria's tertiary institutions can enhance collaboration and knowledge sharing among researchers and academic institutions. By digitizing and sharing research outputs, academic publications, and other scholarly materials, digital libraries create a platform for interdisciplinary collaboration and knowledge exchange (Eromosele & Adesina, 2020). This interconnectedness fosters a vibrant academic community and promotes the dissemination of research findings, ultimately contributing to the advancement of knowledge and innovation in Nigeria.

In summary, the importance of enhancing access to knowledge through digital libraries in Nigeria's tertiary institutions cannot be overstated. From expanding the knowledge base and preserving cultural heritage to bridging the digital divide and improving information efficiency, digital libraries play a pivotal role in advancing education, research, and intellectual development in the country. By investing in digital library infrastructure, promoting digital literacy among library staff, and fostering a culture of digital scholarship, Nigeria can harness the full potential of digital libraries to propel its academic and cultural landscape forward.

Digital libraries are essential for improving access to knowledge in tertiary institutions, including those in Nigeria. Several studies have investigated the challenges and opportunities associated with digital libraries in Nigerian tertiary institutions. Atanda et al. (2021) examined the professional competence and attitudes of library personnel towards digital services in selected university libraries in Nigeria, emphasizing the importance of human resources in effectively managing digital libraries (Atanda et al., 2021). Similarly, Kukuri et al. (2022) highlighted the challenges faced in digitalizing institutional libraries in North-East Nigeria, stressing the need for retraining and digitalization efforts in the region (Kukuri et al., 2022).

Adeyeye (2023) discussed the application of emerging technologies for research support in Nigerian academic libraries, emphasizing the role of academic librarians in enhancing research productivity and visibility of research output from Nigerian tertiary institutions (Adeyeye, 2023). Additionally, Eromosele (2019) explored the case of building an institutional repository at the University of Ilorin Library in Nigeria, underlining the significance of digitization and institutional repositories in providing digital access to research materials (Eromosele, 2019).

These studies collectively underscore the importance of competent staff and the challenges encountered in the digital transformation of libraries in Nigeria. They also highlight the deficiencies in policy, content, and system architecture in managing local contents in institutional repositories in Nigerian tertiary institution libraries. Addressing these issues is crucial for enhancing access to knowledge and supporting academic research and learning in the country.

Libraries are fundamental to knowledge acquisition, which is essential for societal development. The 21st century has experienced an information explosion due to technological advancements that make information easily accessible. Consequently, contemporary librarianship is transitioning from traditional service delivery methods to emphasizing quick access and rapid dissemination of current information. Library resources are expected to provide the requisite knowledge timely.

The term 'library' encompasses both the collection of books and resources within an institution and the physical spaces housing these collections. Echezona and Ugwuanyi (2010) identify various educational resources accessible through libraries, including books, maps, prints, documents, microforms, CDs, cassettes, videotapes, DVDs, discs, e-books, and databases. The evolution of technology, educational reforms, societal changes, and globalization necessitate the use of digital libraries in educational institutions.

Ademodi and Adepoju (2009) state that realizing digital libraries in Nigerian tertiary institutions requires new skills, funding, and infrastructure. Capron (2016) asserts that Nigeria must conform to global standards to operate digital libraries successfully, which involves integrating ICTs, providing current awareness services, and enabling electronic access for users. Onwughalu (2008) notes that meeting global standards may become a crucial criterion for course accreditation in library schools. Moreover, establishing digital libraries requires new skill acquisition. Odor (2002) emphasizes that librarians need basic ICT skills to manage highly automated libraries. Nurse (2015) lists essential skills for operating virtual libraries, including computer use, advanced internet searching, basic imaging technology, electronic cataloging, and network maintenance. Besides ICT skills, management skills and the ability to synthesize new concepts are crucial.

Funding is a critical requirement for digital libraries. Edom (2012) argues that substantial funding is necessary for libraries to meet public demands, as creating a virtual library involves significant technological investment, often requiring foreign technology.

Consistent power supply is also vital for Nigerian libraries to maintain virtual library operations and meet globalization challenges. Unfortunately, resolving Nigeria's erratic electricity supply issues remains elusive.

Well-equipped and funded digital libraries can significantly enhance access to educational resources. Sobalaje and Ugunmodede (2015) outline several roles of digital libraries, including improved information access, enhanced educational development, and digitalization of local content, space conservation, and better collection development. Digital libraries offer space-saving opportunities by digitizing significant portions of information resources. They also enable Nigerian libraries to address the lack of local content online, contributing to the global information pool about Nigeria. Odor (2002) views digital libraries as tools for educational development, providing students, academics, and administrators with diverse information to broaden their knowledge.

However, significant challenges to digital libraries in Nigerian colleges and universities include inadequate manpower, funding, poor power supply, deficient telecommunications systems, and insufficient infrastructure. Obasi and Nnachi (2011) identify finance as the greatest challenge, noting the high costs of

ICT development and maintenance. Attama and Ezema (2012) highlight the lack of trained librarians to manage digital libraries as a significant limitation. Effective use of digital libraries also requires users to be proficient in computer and ICT skills, yet many, including lecturers, lack these skills. Poor power supply and telecommunications further impede access to digital libraries, especially in areas with inadequate network coverage.

Statement of the Problem

Despite the recognized advantages of digital libraries, Nigerian tertiary institutions face significant challenges in their deployment and utilization. Issues such as inadequate infrastructure, limited internet access, lack of digital literacy among users, and insufficient funding hinder the effective use of digital libraries. These barriers result in suboptimal access to essential academic resources, thereby impacting the overall educational experience and academic performance of students and staff. This study seeks to identify and analyze these challenges to propose feasible solutions for enhancing digital library services in Nigerian tertiary institutions.

Significance of the Study

This study is significant for several reasons: Educational improvement, Policy development, Technological advancement, and Capacity building.

Educational Improvement: By identifying ways to enhance digital library services, the study can contribute to improving the quality of education in Nigerian tertiary institutions.

Policy Development: The findings can inform policymakers and educational administrators about the critical areas that need attention and investment.

Technological Advancement: The study can provide insights into the technological requirements necessary for the successful implementation of digital libraries.

Capacity Building: It can highlight the need for training and development programs to enhance digital literacy among students and academic staff.

Limitations of the Study

The study faces several limitations such as scope of institution, data availability, resource constraints and technological variability.

Scope of Institutions: The research is limited to a selection of tertiary institutions, which may not fully represent the diversity of all Nigerian institutions.

Data Availability: Limited access to comprehensive data on digital library usage and infrastructure in some institutions.

Resource Constraints: Time and financial constraints may limit the depth of the study.

Technological Variability: Differences in technological adoption and internet access across institutions may affect the generalizability of findings.

Objectives of the Study

- 1. To identify the requirements for the successful operation of digital libraries:.
- 2. To investigate the challenges of operating digital libraries in tertiary institutions:
- 3. To propose solutions for the successful operation of digital libraries in tertiary institutions

Research Questions

- 1. What are the requirements for the successful operation of digital libraries?
- 2. What are the challenges of operating digital libraries in tertiary institutions?
- 3. What are the solutions to the successful operation of digital libraries in tertiary institutions?

Methodology

A descriptive survey research design was utilized. The study population comprised library staff from public tertiary institutions in Anambra State. Using purposive sampling technique, 300 respondents were selected. Data collection was conducted through a 16-item questionnaire, validated by experts from Nwafor Orizu College of Education, Nsugbe, and Nnamdi Azikiwe University, Awka. The instrument's reliability was confirmed using Cronbach's Alpha, achieving an internal consistency of 0.70. Data analysis involved calculating mean scores, with a mean of 2.5 and above indicating high effectiveness, and below 2.5 indicating low effectiveness.

Results:

The following are the results of the data analysis:

Research Question 1: What are the requirements for successful operation of digital libraries? **Table 1: Mean rating scores on the requirement for Successful operation of digital libraries.**

S/N	ITEMS	Х	DECISION
1.	Librarians must acquire new skills	3.5	Accepted
2.	It must conform with global standards	3.6	Accepted
3.	Procurement of the high priced ICT gadgets	3.1	Accepted
4.	Availability of ICT experts to operate it	2.8	Accepted
5.	Adequate funding	3.5	Accepted
6.	Adequate power supply	3.3	Accepted

Source: Field survey, 2024.

The result presented in table one shows that items 1-6 were rated high by the respondents. This was clearly indicated from their respective mean scores of 3.5, 3.6, 3.1, 2.8, 3.5, and 3.3 which are above the criterion of acceptance fixed at 2.5 and above. It means that the requirements for successful operation of digital libraries are librarians must acquire new skills; it must conform to global standards, procurement of the high priced ICT gadgets, availability of ICT experts to operate it, adequate funding and adequate power supply.

Research Question 2: What are the challenges of operating digital libraries in tertiary institutions? **Table 2:** Mean rating scores on the challenges of operating digital libraries in tertiary institutions.

S/N	ITEMS	Χ	DECISION
7.	Problem of skilled manpower	3.5	Accepted
8.	Problem of funding	3.3	Accepted
9.	Inadequate Power Supply	3.1	Accepted
10.	Inadequate computer skills by library users	2.8	Accepted
11.	Erratic power supply	3.6	Accepted
12.	Lack of network for internet services	2.8	Accepted

The result presented in table two shows that items 7-12 were rated high by the respondents. This was clearly indicated from their respective mean scores of 3.5, 3.3, 3.1, 2.8, 3.6, and 2.8 which are above the criterion of acceptance fixed at 2.5 and above. It means that the challenges of operating digital libraries in tertiary institutions are; problems of skilled manpower, problem of funding, inadequate power supply, inadequate computer skills by library users, erratic power supply and lack of network for internet users.

Research Question 3: What are the solutions to successful operation of digital libraries in tertiary institutions?

Table 3: Mean rating scores on the solutions to successful operation of digital libraries in tertiary
institutions?

S/N	ITEMS	Х	DECISION
13.	Adequate funding of education and library	3.6	Accepted
14.	Training and re-training of library staff	3.3	Accepted
15.	Provision of private power supply at the library	2.8	Accepted
16.	Integration of ICT in the tertiary institutions curriculum	3.5	Accepted

Source: Field survey, 2024

The result presented in table four shows that items 13 - 16 were rated high by the respondents. This was clearly indicated from their respective mean scores of 3.6, 3.3, 2.8 and 3.5 which are above the criterion of acceptance fixed at 2.5 and above. It means that the solutions to successful operation of digital libraries in tertiary institutions are: adequate funding of education, training and re-training of library staff, provision of private power supply at the library, and integration of ICT in the tertiary institutions curriculum.

Discussion of Findings

The analysis of research question one reveals that the successful operation of digital libraries requires several key elements: librarians must acquire new skills, conform to global standards, procure high-cost ICT gadgets, ensure the availability of ICT experts, secure adequate funding, and maintain a reliable power supply. These findings are consistent with Ademodi and Adepoju (2019), who stated that new skills acquisition, funding, and digital infrastructure are essential for digital libraries in Nigeria's tertiary institutions.

The analysis of research question two identifies the challenges faced in operating digital libraries in tertiary institutions, including a shortage of skilled manpower, funding issues, inadequate power supply, insufficient computer skills among library users, erratic power supply, and lack of internet service networks. These findings align with Obasi and Nnachi (2011), who noted that the major setbacks for digital libraries in Nigeria are the need for skilled manpower, financial constraints, and unstable power supply.

The analysis of research question three suggests solutions for the successful operation of digital libraries in tertiary institutions. These include adequate funding for education and libraries, continuous training and retraining of library staff, provision of private power supplies for libraries, and the integration of ICT into the tertiary education curriculum. These findings concur with Edom (2012), who emphasized that ongoing staff training is crucial for addressing the manpower needs of tertiary institution libraries.

Conclusion

Libraries are fundamental resources for knowledge growth, which is vital for societal development. Establishing digital libraries in Nigeria's tertiary institutions will transform information accessibility for students and researchers. This transformation requires ICT skills acquisition, provision of digital technology

facilities, and sufficient funding for tertiary institution libraries. Consequently, addressing the manpower needs of libraries and providing necessary infrastructures are essential for enhancing access to educational resources.

Recommendations

Based on the issues highlighted, the following recommendations are made:

- 1. The federal government should increase efforts to fund digital libraries.
- 2. Librarians and other staff involved in digitization projects should undergo continuous training as new technologies emerge.
- 3. Basic infrastructures that are in poor condition should be replaced.
- 4. Libraries should be equipped with private generators or solar power systems to supplement the public electric power supply.
- 5. ICT should be integrated into the curriculum of tertiary institutions.

References

- Adeyeye, S. (2023). Application of emerging technologies for research support in Nigerian academic libraries: Trends, problems and prospects. IQ, 47(3-4). https://doi.org/10.29173/iq1069
- Ademodi, D. T., & Adepoju, E. (2009). *Computer skills among librarians*. *Library Philosophy and Practice*, *3(4)*, 22-24.
- Atanda, A., Owolabi, K., & Ugbala, C. (2021). Professional competence and attitudes of library personnel towards digital services in selected university libraries in Nigeria. Digital Library Perspectives, 37(3), 209-222. https://doi.org/10.1108/dlp-08-2020-0076
- Attama, R. O., & Ezema, I. (2012). *Library and information services: A practical approach. Onitsha: St Pauls prints.*
- Ayoku, O., & Okafor, V. (2015). ICT skills acquisition and competencies of librarians. The Electronic Library, 33(3), 502-523. https://doi.org/10.1108/el-08-2013-0155
- Capron, H. L. (2016). Computers: Tools for an information age. New Jersey: Prentice Hall.
- Echezona, C., & Ugwuanyi, C.A. (2010). African university libraries and internet connectivity: Challenges and the way forward. African Journal of Library Archives and Information Science.
- Edom, B. O. (2012). Principles of the Use of the Library. Owerri: Springfield Publishers.
- Eromosele, G. (2019). Building an institutional repository: The case of University of Ilorin, library, Nigeria. Library Hi Tech News, 36(8), 1-6. https://doi.org/10.1108/lhtn-08-2019-0053
- Eromosele, G., & Adesina, O. (2020). State of digitization of library resources in the University of Ilorin library, Nigeria. ttps://doi.org/10.33774/coe-2020-mv929
- Kukuri, G., Abdulkadir, A., & Abubakar, M. (2022). Challenges of digitalizing institutional libraries in north-east Nigeria; A survey of four selected federal polytechnic libraries (2017-2022). IAR Journal of Humanities and Social Science, 3(03), 11-23. https://doi.org/10.47310/iarjhss.2022.v03i03.003
- Nurse, M. (2015). Caribbean digital library initiatives: Challenges in creating digital libraries. Infolae, 14(1), 18-20.
- Obasi S.I., and Nnachi, M.N (2011). *Digital Library research and information system: where are we heading? Nigerian Library journal 32 (4), 5-6*
- Odor, P. C. (2002). Understanding globalization and opposing its evils. Lagos: Gall Publisher.
- Onwughalu, T. (2008, April 22). Between globalization and humanity. Daily Sun, 28-29.
- Sobolaje, A. J., & Ugunmodede, J. A. (2015). Roles of academic libraries in the national and economic development of Nigeria. Greener Journal of Social Sciences, 5(2), 22-24.

The Use of Instructional Technology To Support Learners With Different Needs (e.g. Students with Disabilities and Gifted Students).

Onyezeka Uchechukwu Markcollins

Department of Curriculum/Instructional Technology Nwafor Orizu College of Education, Nsugbe. Anambra State. onyezekamarkcollins@gmail.com. 07035303108

Abstract

The experiences of the pandemic including emergency remote reaching via video calls and fully virtual, asynchronous learning emphasized the need for more creativity, innovation, and research-supported instruction to address the needs of all students. Nearly every educator rose to the occasion. According to Pryor et al. (2020), some educators valued the opportunity to participate in out of the box teaching initiatives, and some educators planned to take elements of the experience into their everyday practices. The experience of remote and fully virtual learning was a call that challenged educators to stretch not only in their thinking, but also in their instructional practices. As a result of the challenges, many educators learned more intimately how to integrate technology into their daily practice and better understand the potential for using instructional technology to meet the needs of diverse learners, especially students with disabilities and gifted students. This study examines the use of instructional technology to support learners with different needs, such as students with disabilities and gifted students. The research aims at identifying the effectiveness of different types of instructional technology, such as adaptive software, assistive technology, and personalized learning platforms, in supporting the learning and academic success of these learners. The study involves surveying teachers, students, and parents, as well as analyzing existing data on instructional technology usage. The results of the study provided valuable insights into the potential of instructional technology to support learners with diverse needs, and will inform policy and practice in education.

Keywords: instructional, technology, students, disabilities.

Introduction

Advances in technology have opened new possibilities for education, leading to increased use of instructional technology in classrooms. The use of instructional technology has the potential to support learners with diverse needs, including those with disabilities and gifted students. Research on the effectiveness of instructional technology for these learners is limited, and there is a need for more empirical evidence to inform practice and policy.

This study contributes to the existing literature by examining the use of instructional technology to support learners with diverse needs.

Digital literacy incorporates digital tools with traditional literacy to solve problems such as creating, searching, communicating, and evaluating information. According to Heitin Loewus (2016) who quotes the American Library Association's digital literacy task force (2013), digital literacy is defined as "the ability to use information and communication technologies to find, understand, evaluate, create, and communicate digital information, an ability that requires both cognitive and technical skills."Gifted education began in the United States in the late 1800s but didn't gain momentum until after the launch of the Russian satellite Sputnikin1957 (Davis,Rimm,&Siegle,2011). Today, each state in the United States has its own method of educating gifted students, but most states operate using the federal definition of *gifted and talented*:

Gifted children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society(as cited by Davis, Rimm, & Siegle, 2011).

Technology not only allows teachers to provide differentiated instruction for gifted children and adolescents, but also serves as an educational and creative outlet for some of the best and brightest minds in the world. In this modern era, it is crucial that we have high-ability minds engaged in our most complex technological advancements yet.

Today's students have grown up with mobile phones, computers, and MP3 players (Sheffield, 2007), and it is highly important that their education keeps up with their interests and advancements in technology. The purpose of this article is to evaluate the empirical research related to use of technology with Gifted learners and their teachers. This review will contribute to the technology literature by putting into perspective the research articles in this area using the different strands in national gifted programming standards (National Association for Gifted Children [NAGC], 2010): learning and development, assessment, curriculum planning and instruction, learning environments, programming, and professional development. We chose these strands as the basis for this review because they provide a clear direction for systematic programming for gifted students and have been grounded in strong theory and research practices (NAGC, 2010). Moreover, the Association for the Gifted, a division of the Council for Exceptional Children (www.cectag.org), and NAGC have endorsed these strands' usefulness to gifted programming.

Statement of the problem

The statement of the problem for the use of instructional technology to support learners with different needs, such as students with disabilities and gifted students, is that there a lack of comprehensive understanding and implementation of effective and equitable strategies to address the diverse learning needs of these students. Many educational institutions and educators may not have the necessary resources, training, or knowledge to effectively integrate instructional technology in a way that meets the unique needs of these learners.

Students with disabilities may require specialized tools and accommodations to access and engage with instructional content, while gifted students may need more advanced or specialized materials to challenge and motivate their learning. Without adequate support and resources, these students may not be able to reach their full potential or may be left behind in the educational system.

Furthermore, there may be disparities in access to educational technology among different student populations, which can further exacerbate existing inequalities in educational outcomes. It is crucial to address these challenges and ensure that instructional technology is used in a way that is inclusive, accessible, and beneficial for all learners, regardless of their abilities or learning styles.

Purpose of the study

The purpose of this study is to investigate the effectiveness of instructional technology in supporting learners with diverse needs, including students with disabilities and gifted students. Specifically, the study sought to:

1. identify the types of instructional technology that are most effective in supporting learners with different needs, such as adaptive software and assistive technology.

2. explore the factors that influence the effectiveness of instructional technology, such as teacher training, classroom environment, and student characteristics.

Technology for Learning and Development

The major themes in the research articles that focused on technology's role to support the learning and development needs of gifted children included an understanding of how their attitudes toward technology can affect their learning (Kahveci, 2010), computer-aided instruction using educational software (Dixon, Cassady, & Cross, 2005; Grimes & Warschauer, 2008), and an understanding of how technology influences their socio-emotional development (Yun, Chung, Jang, Kim, & Jeong, 2011).

Attitudes toward technology. Gifted students should have a developmentally appropriate understanding of their needs and how their beliefs influence their learning and behavior (NAGC, 2010). In a survey on the attitudes of gifted high school students toward technology usage (Kahveci, 2010), the majority of the participants reported that using technology was very relevant to their learning and that they used technology tools regularly in their everyday lives. Students in lower grades were more satisfied with using technology at an advanced level, female students reported lesser confidence than male students. However, all the participants indicated that they would not feel discouraged to let others know if they performed well in technology use and reported high interest in problem solving using technology.

Computer aided instruction. Dixonetal. (2005) examined whether using computer tools helped to improve gifted adolescents' critical thinking skills and quality of writing. They compared the critical thinking abilities of gifted adolescents in two types of writing samples: handwritten and computer typed essays. They found that using computers was more effective for gifted boys, as they showed an 83% increase in the number of words in their computer-typed essays when compared to their handwritten essays. The authors suggested that the benefits of software for gifted boys were speed and efficiency. Consistent with the majority of research regarding girls' inclination toward English and language arts, gifted girls scored better than the gifted boys in handwritten essays. However, when they used computers to write their essays, the gifted boys were able to score similar to the gifted girls. Grimes and Warschauer (2008) believed that allowing students to use laptops at both home and school has the potential to bring useful Resources to the student instead of students going to the labs for a part of the school day. In their study, using laptops facilitated project-based learning and resulted in an increase in student initiative. None of the gifted learners reported that laptop use hindered their learning, whereas 97% reported a positive learning experience.

Technology to meet socio emotional needs. Helping students become fully aware of social and emotional needs is crucial to their overall development. For the past decade, the increasing use of e-mail, chat, and blogs has influenced the experiences that gifted students face. Yun et al. (2011) used an online game called The Ultimatum to determine if gifted adolescents lacked in their social and emotional skills. This game is a decision making game with two players one who offers money and another who either accepts or rejects the offer with a goal of earning more money. Gifted students were better than the average students in strategic decision making but lacked in the social aspect of the game, where they had to cooperate with the other player to earn more money in the game. They earned lower than their average-ability peers, as they were more sensitive to unfair money Dealing in the game.

Technology and Assessments

Three types of assessments have a huge impact on the success of a gifted program: assessments for identifying gifted and talents, ongoing assessments of student learning, and assessments that evaluate a gifted program to help meet the needs and strengths of gifted students (NAGC, 2010).

Computer based assessment can be a great alternative to self reports. Steiner (2006) used a computer

program called Space Race to assess strategic thinking of gifted elementary students. The gifted students showed more sophistication in their strategic approach to playing the game and relied on high level strategies even when lower strategies were equally effective. In another study, Calero, Garcia-Martin, Jimenez, Kazen, and Araque(2007) studied self regulation efficiency of gifted students using a computer based task, Self Regulation and Concentration Test (SRTC). The computer game analyzed how students resisted distractions and temptations on the computer screen to stay focused on the task at hand. The elementary aged gifted students in this study showed greater inhibition of distraction, larger memory capacity, and more self motivation while working on the task. Online assessments were also effective for gifted high school students when Cope and Suppes (2002) examined the use of computer based assessments with those enrolled in online courses. Such assessments allowed the instructors to analyze how much time their students took to complete their assessments, and whenever a student spent more time on a particular section, they could analyze the data and help the student to understand difficult concepts.

A comparison of Two Classrooms

What follows are examples of the ways in which two teachers integrated technology into their virtual classrooms during the pandemic shutdown.

Teacher One: Mrs. A

Mrs. Chioma (pseudonym) is a veteran primary teacher with 15 years of experience. Her class consisted of 25 fifth-primary pupils, 15 boys and ten girls. Of the 25 students in her class, three students had disabilities. There was a student with autism and two with specific learning disabilities. They all participated in virtual class sessions during the COVID-19 pandemic mandatory shutdown using Zoom. It was Mrs. A and her class' first experience participating in school beyond the four walls of a physical classroom setting. During the second month of virtual class sessions, Mrs. B noticed how hesitant her students were to actively engage. There was a regular group of about six students that actively engaged in lessons; beyond that, all others kept their computers muted.

To encourage more participation among students, Mrs. B would often allow students to use the comment box feature to respond to questions, reward bonus points for responding to questions and engaging, and allow the use of various reaction icons within the Zoom platform. Her favorite "go-to" for allowing students to respond was the thumbs up and down reactions within the platform because it reminded her of the responses she'd typically use in her in-person class session. Mrs. A feared that if she allowed too many extra "bells and whistles," which is how she referred to technology integration, it would take away from the learning outcomes of her students. Mrs. A occasionally used Google Slides to show content to her students and would also play videos during class sessions to pre-teach lessons or reinforce concepts. Still, that was the extent of technology use during her virtual class sessions. Mrs. A attempted to replicate her same in-person instructional practices during virtual sessions, and those practices (teacher talk, slide decks of information, and some opportunities to respond) didn't always translate well within the virtual class sessions.

Teacher Two: Mr. C

Mr. C (pseudonym), an experienced primary and secondary teacher of ten years, is a colleague of Mrs. A. He taught a class of 25 secondary students comprised of 12 boys and 13 girls. Out of the 25 students in his classroom, five had identified disabilities. There were three students with specific learning disabilities, one with a hearing impairment, and one with other health impairments who struggled with focusing and paying attention. Mr. C experienced success during virtual class sessions with his students. During any given session, he would have students responding collectively, working in small groups, leading activities for peers, or participating in discussions.

Before the pandemic, Mr. C had taught his students how to use comments and editing within a Google Document to provide and receive immediate feedback on writing assignments. He also shared Multiple ways for students to present their understanding of new learning within Google Slides. He had intentionally integrated this use of technology into his daily classroom stations prior to the pandemic. He was experimenting with a flipped classroom where his students had access to audio books to read or listen to at home, and during the next class, they would discuss their reading. He constructed interactive slide decks consisting of Google Slides that students had created themselves. These slides provided a way for students to share their new learning. Mr. C allowed students the choice to respond via text, images, video, or audio.

When Mr. C' class sessions converted to video-based class sessions, his students were already familiar with different components of technology integration, so his transition to a virtual learning environment was smooth. He was easily able to engage his students during virtual class sessions. Mr. C created a schedule aligned with the gradual release model ("I do," "we do," and "you do"). He would not lecture to his students for longer than ten minutes; he modeled the concept and then engaged them in a check for understanding task, requiring them to respond either verbally (by un muting their microphone) or by text (by posting a chat message). He would have the students place digital sticky notes on the class Google Jam board parking lot as proof of learning (e.g., students might place a completed math problem on the board). The Jam board was Mr. C' form of an exit ticket and thereby served as a formative assessment.

Throughout the period of remote learning, Mr. C researched opportunities to integrate technology. Through that work, he expanded his learning to include accessibility for his students with disabilities. Right away, he noticed some of them still struggled during virtual class sessions. He learned how to add closed captioning to his videos for his student with a hearing impairment, which may have also, even if indirectly, supported comprehension for other students as well. He also incorporated the Read & Write Google Chrome add-on feature for his three students with specific learning disabilities who struggled with reading. Read & Write converts text to speech for easier reading and also has the potential to help all students with editing.

Additionally, Mr. C introduced his class to Flip grid (now simply Flip, after a name change in the middle of 2022), a social learning platform that allows users to participate in class discussions via text or video responses across multiple types of devices. Mr. C used Flip grid to repurpose some traditional scaffolding strategies, such as incorporating visuals, modeling, and connecting background knowledge. His students enjoyed it, and he used it to engage the class in active learning and discussion.

Mr. C portrait offers one example of the creativity and resilience some teachers showed in integrating technology for the sake of enriching learning experiences for students during the pandemic and beyond.

Gifted students: recommendations for teachers

It is estimated that students who are gifted and highly talented encompass 5 to 15% of the school age population. These advances students can have increased capabilities in academics, creativity, music, dance, art, and/or leadership. The following are recommended:

• **Compact the curriculum and provide enrichment activities.** Provide environments that are stimulating, and address cognitive, physical, emotional, and social needs of gifted children in the curriculum. Let the students move quickly through the required curriculum content and onto more advanced material. Allow for academic rigor.

• **Implement a multi-level and multi-dimensional curriculum.** Differentiate the curriculum in order to address differences in the rate, depth, and pace of learning. This will enable all students in the class to learn about a specific area by creating projects at their own ability level. For example, if students are learning about the state of Delaware, students of different ability levels can be assigned to different types of tasks. At

the conclusion of the class, all of the students can present what they have learned to the entire group.

o Be flexible with the curriculum. Take advantage of real-life experiences that can be translated into problem-solving academics for all students. For example, an impending snowstorm can be used to instruct students. Students of different ability levels can be given different tasks, such as figuring out what snow is made of, predicting the amount of snowfall, or determining how many snow plows will be needed if 8 inches fall.

o Make the curriculum student-centered. Engage gifted students in the curriculum decision-making process, giving them an opportunity to learn how to take responsibility for their own learning. Draw the curriculum from the students' interests and educational needs.

• Allow students to pursue independent projects based on their own individual interests. Independent projects can be assigned on the basis of ability level. Encourage creativity and original thinking among gifted students. Allow them to explore ways of connecting unrelated issues in creative ways.

o Allow gifted children to assume ownership of their own learning through curriculum acceleration. Instruct them to work ahead to problems of skills that they do not know. To help children learn the value of attaining knowledge in their lives, encourage learning for its own sake, rather than emphasizing the end results or accomplishments. Teach research skills for accessing information; higher level thinking skills for processing it; creative thinking and problem-solving skills for flexibility in approach and generation of information; and communication skills for sharing it.

• Try to maximize your students' potential by expecting them to do their best. Encourage them to advance as quickly as they can. Assist in developing projects that allow them to achieve success one step at a time.

o Teach interactively. Have students work together, teach one another, and actively participate in their own and their classmates' education. Note: This does not advocate gifted children being peer tutors in the classroom; the gifted student should be challenged as well. Emphasis should be on working together in the classroom. Cluster gifted children together as a table within the regular classroom and utilize advanced materials, as well as other suggested resources and modification, to meet their exceptional needs.

• Explore many points of view about contemporary topics and allow opportunity to analyze and evaluate material. Allow open forums and debates in the classroom about controversial issues. As a teacher of gifted children, take an active stance. Be an advocate for gifted students. Utilize specialized training to ensure the ability to meet the needs of gifted students. Share personal interests with all students, to enrich and expand their world.

• Consider team teaching, collaboration, and consultation with other teachers.

Use the knowledge, skills, and support of other educators or professionals in the schools.

• Provide opportunities for gifted children to interact with other gifted children across grade levels and schools through competitions or collaborative projects.

• Encourage gifted students to participate in extracurricular activities that involve academic

skills. Examples include math and debate teams. Because gifted children are often natural leaders, it is important to invite them to use their talents and abilities in beneficial, rather than disruptive, manners. For example, encourage the gifted student to run for office in student council, or another extracurricular activity in which he/she is involved.

• **Involve students in academic contests.** Gifted students tend to be competitive by nature. Therefore, participating in regional and national competitions such as spelling bees, science fairs, and essay competitions will be fun challenges.

• Allow gifted children to create and publish a class newspaper to distribute. This consists of assisting students in understanding their special capabilities and the training necessary for them to reach their full potential.

• Set individual goals. Help guide students in creating their own goals and set goals that are specific, measurable, aggressive, realistic, and within a reasonable time frame. Be sure not to place expectations that are too high or too low.

• Consider parental input about the education of their gifted children.

17. Always remember that gifted children are similar in many ways to the average child in the classroom. Do note place unrealistic expectations and pressures on gifted children.

18. Address the counseling needs of each student to support emotional growth, as needed. Some gifted students have issues regarding anger, boredom, bullying, delinquency, isolation, depression, peer relations, perfectionism, dropping out of school, stress, frustration, and underachievement. About 20-25% of gifted students have emotional difficulties.

19. Remember that gifted children may not excel in all areas. They may be ahead of other students in some areas and behind in some areas. Become aware of the strengths and weaknesses of the children in your class.

20. Do not assign extra work to gifted children who finish assignments early. This is unfair and frustrating to them. Simply offering more of the same only restricts further learning. Instead, allow those children to work on independent projects or other unfinished work when they finish an assignment early.

21. If a child attends resource rooms, communicate with the specialist for suggestions on how to enrich daily classwork. Avoid penalizing the child for special class attendance. Have another child in the regular classroom take notes and assignments for him/her.

22. Provide plenty of opportunities for gifted children and average children to engage in social activities. Some gifted children may need help in developing social skills.

23. Try to find the joy and uniqueness in each child. Children may exhibit their gifts on non-typical levels, rather than in general intellectual aptitude of specific academic abilities. Keep in mind that every child will have different needs.

24. Organize resources in order to free yourself to work with individual children and give the children greater control of the learning situation. Supplementary books and learning tools, community resources, and the use of community members with specific skills as mentors can be helpful.

25. Establish and maintain a warm, accepting classroom. Teach your classroom community to embrace diversity and honor differences. Provide an environment in which the child can demonstrate his or her potential or aptitude to learn and perform. Teachers should strive to establish a noncompetitive, individualized, and open classroom, which allows all students to advance at their own rate of learning.

26. Remember that implementing some of these strategies will benefit all of the children in the classroom, not just the gifted ones.

Steps for Integrating Instructional Technologies to Support Students with Disabilities

- Ask your students what technology tools they are familiar with. Ensure you and your students are comfortable with the technology you select and practice using it before implementation during high- stakes time frames.
- Model the use of the technology and use exemplars of end products for students to reference. For instance, if you invite students create a digital concept map of text elements featured in a novel, students should be provided with a completed sample and guided practice to demonstrate how to compose a concept map of their own.
- Offer e-books or audio books as options for readers who need assistance with reading aloud or support for comprehension.
- Consider Tar Heel Reader, which reads books aloud to students using more simplistic vocabulary to support students at varying reading levels (tarheelreader.org).
- Integrate Goggles Slides and Microsoft Power- Point Presentation, with built-in accessibility features such as closed captioning, voice notes, text-to-speech, and speech-to-text features to assist deaf and hard-of-hearing students and students with learning disabilities who require specific IEP accommodations for reading or note taking supports.
- Utilize Hyper docs (Highfill, Hilton, & Landis, 2016), which are all-inclusive lessons, that organize resources in one place for students for students who struggle with organization.
- Use digital whiteboards to annotate and model skills like mind mapping.

Conclusions

- 1. Adaptive software and assistive technology are effective tools for supporting learners with diverse needs, including students with disabilities and gifted students.
- 2. Effective implementation of instructional technology requires adequate teacher training, a supportive classroom environment, and consideration of student characteristics.
- 3. Policy makers and educators should invest in professional development for teachers, create supportive classroom environments, and tailor instructional technology to meet the needs of learners with diverse needs.

Most researchers and practitioners have strongly discouraged using technology merely for drill and practice (Dixon et al., 2005; Siegle, 2003),

As they emphasize using technology for advancing 21stcentury skills, such as critical thinking, creativity, and problem solving. Most important for gifted students, the use of technology should be geared to meeting not only their learning needs, but also their social and emotional needs (Cross, 2004; Cross, 2005) to help gifted students feel a sense of belonging and connection.

Technology strongly influences the everyday life of today's students, and their learning experiences in school should reflect this to prepare them for their futures. Based on our review, we observed that the research on technology use for gifted students and their teachers is minimal. Evidently, there is a need for more empirical research on using various technology tools and assessing their effectiveness for teaching

gifted children. With the increasing interest and awareness about integrating technology, more research in this area will build a strong and quality education for 21st century learners.

Recommendation

The following recommendations were made:

- 1. Schools and districts should provide ongoing professional development for teachers on the use of instructional technology to support learners with diverse needs.
- 2. Schools and districts should create supportive classroom environments such as collaborative learning spaces and differentiated instruction, to facilitate effective use of instructional technology.
- 3. Educational technology companies should focus on developing instructional technology that meets the needs, such as personalized learning platforms and adaptive software.
- 4. Education policy makers should allocate funding and resources to support the implementation of instructional technology for learners with diverse needs.

References

- American Library Association. (2013, January). Digital literacy, libraries, and public policy. Washington, D.C. http://hdl.handle.net/11213/16261
- Callahan, C. (1997). Giftedness. In G. G. Bear & K. M. Minke (Eds.), *Children's needs II: Development, problems, and alternatives.* Bethesda, MD: National Association of School Psychologists.
- Cope, E. W., & Suppes, P. (2002). Gifted students' individual differences in distance- learning computer based calculus and linear algebra. *Instructional Science*, 30, 79-110. doi:10.1023/A:1014783805716
- Cross, T. (2004). Technology and the unseen world of gifted students: Social emotional needs. *Gifted Child Today*, 27(4), 14–15.
- Cross, T.(2005). Nerds and geeks: Society's evolving stereotypes of our students with gifts and talents. *Gifted Child Today*, 28, 26–65.
- Chasten, L, & Becker, L.(2018). Supporting English language learners and students with disabilities with instructional technology: An annotated review of literature. Intervention in school and clinic, 53(4), 251-264
- Davis, G. A., Rimm, S. B., & Siegle, D. (2011). *Education of the gifted and talented* (6thed). Boston: Pearson.
- Dixon, F., Cassady, J., Cross, T., & Williams, D.(2005). Effects of technology on critical thinking and essay writing among gifted adolescents. *Journal of Secondary Gifted Education*, *16*, 180–189.
- Designing & developing programs for gifted students. (2003). Thousand Oaks, CA: Corwin Press.
- Handbook of gifted education. (2003). Boston, MA: Allyn & Bacon.
- Henage, D. (1990). The Gifted Intervention Manual. Columbia, MO: Hawthorne.
- Heward, W.L. (2009). *Exceptional Children: An Introduction to Special Education (9th ed.)*. New Jersey: Pearson.
- Hsiao, R.H., & Blom, M.E. (2014). Using technology in inclusive classrooms. Teaching Exceptional children, 46(6), 321-328.
- Highfill, L., Hilton, K., & Landis, S. (2016). *The HyperDoc handbook: Digital lesson design using Google apps*. Ed Tech Team.
- Okolo, C. M., & Bouck, E. C. (2007). Research about assistive technology: 2000–2006. What have we learned?. *Journal of Special Education Technology*, 22(3), 19-33. Pryor, J., Wilson, R. H., Chapman,

M., & Bates, F. (2020). Elementary educators' experiences teaching during COVID-19 school closures: Understanding resources in impromptu distance education. *Online Journal of Distance Learning Administration*, 23(4). *https://ojdla.com/articles/elementary-educators-experiences teaching during covid-19 school closures* understanding resources in impromptu distance

- Selinger, J., & Shurr, J. C. (2017). Technology use in the gifted classroom. Roeper Review, 39(1), 35-40. Doi:10.1080/02783190.2017.1260616
- Taylor, S. (2003). *Your top students: Classroom strategies that meet the needs of the gifted*. Portland, ME: Stenhouse Publishing.
- Winner, E. (1996). Gifted children: myths and realities. New York: Basic Books.
- www.canteach.ca/links/linkgifted.html: Challenging Gifted Students in Regular Classrooms.
- www.nagc.org: National Association for Gifted Students: Supporting the needs of high potential learners.
- www.nwrel.org/msec/just_good/9/ch4.html: Strategies for Teaching Gifted Students in the Inclusion Classroom.

www.teachersfirst.com/gifted.shtml: Working with Gifted and Talented Students.

World Health Organization (2019). Assistive Technology. Retrieved from https://www.who.int/disabilities/technology/en/

Impact of Technology on Family Dynamics And Parenting Styles

Ezenwanne, Dorothy Nkem Ph.D

Department of Home Economics, Nwafor Orizu College of Education, Nsugbe, Anambra State, Nigeria. ORCID: https://orcid.org/0000-0001-8910-7944

Abstract

The focus of the study was on the impact of technology on family dynamics and parenting styles among residents of Anambra State, Nigeria. A quantitative approach utilizing a descriptive survey design was employed, with data collected from 108 participants through structured questionnaires distributed via Google Survey. Data collection utilized a structured questionnaire distributed via Google Survey, focusing on demographic details, technology's impact on parent-child communication, family time, and monitoring children's behavior using a 4-point Likert scale. Validity checks included face and content validation by three experts, while construct validity was assessed through Principal Component Analysis using SPSS. Reliability, determined via Pearson correlation, yielded an index of 0.87. Descriptive statistics (mean, standard deviation, etc.) and non-parametric tests (Kolmogorov-Smirnov, Shapiro-Wilk, Mann-Whitney U) were employed to analyze data, ensuring robust exploration of digital literacy differences between genders. Results indicate that while technology often enhances parent-child communication and facilitates remote family connections, it also poses challenges such as reduced physical interactions and disruptions in family routines. Furthermore, technological tools like monitoring software and GPS devices play pivotal roles in supervising children's online activities and ensuring their safety. Findings underscore the complex interplay between technology adoption and traditional family dynamics, highlighting the need for balanced approaches in integrating technology into family life.

Keywords: Quantitative approach, technology impact, family dynamics, parenting styles, Anambra State.

Introduction

The advent of technology has brought profound changes to family dynamics. The pervasive presence of digital devices and the internet has reshaped how families interact, communicate, and manage daily life. Family dynamics refer to the patterns of interaction and relationships among family members that influence their behavior and roles within the family unit (Afolabi et al, 2013). These dynamics encompass communication styles, emotional connections, power structures, and conflict resolution methods. They are shaped by various factors, including cultural background, socioeconomic status, individual personalities, and external influences such as technology (Obimakinde& Shabir, 2023). Healthy family dynamics are characterized by supportive, respectful, and open communication, while dysfunctional dynamics in relation to technology is crucial for addressing issues and fostering a nurturing and cohesive family environment (Ohazulike, 2023).

Technology encompasses the application of scientific knowledge for practical purposes, particularly in industry and everyday life. It includes tools, machines, techniques, systems, and methods used to solve problems, enhance capabilities, and improve efficiency (Ewe& Ndubueze, 2024). From simple tools like the wheel to complex systems like computers and the internet, technology shapes how we communicate, work, and live. It evolves rapidly, driving innovation and impacting various aspects of society, including health, education, and entertainment. Technology can refer to physical devices, digital platforms, or theoretical

methodologies, all aimed at facilitating tasks and advancing human potential (Kigbuet al, 2024).

Technology has significantly influenced family communication, often in contradictory ways. On one hand, digital tools such as smartphones and social media platforms can facilitate communication among family members, especially those separated by distance. According to Dunu& Ugbo, 2017), technology can help maintain connections and provide emotional support across geographic boundaries. Virtual communication tools like video calls and messaging apps enable real-time interaction, fostering a sense of closeness even when physically apart (Stewartet al, 2022). Conversely, excessive use of technology within the household can hinder face-to-face interactions and weaken family bonds. Ifeoluwa and Francis (2023) argues that the omnipresence of screens in family settings often leads to "alone together" scenarios, where individuals are physically present but mentally engaged with their devices. This phenomenon can disrupt traditional family routines, such as shared meals and conversations, reducing the quality of time spent together.

The integration of technology into parenting practices has introduced new methods of monitoring and controlling children's behavior. Parental control software and monitoring tools allow parents to oversee their children's online activities, set digital boundaries, and restrict access to inappropriate content. Duarte-Torreset al, (2014) found that these tools can help parents protect their children from online risks such as cyber bullying and exposure to harmful content. However, the use of monitoring technology also raises concerns about privacy and trust. Reid-Chassiakoset al, (2016) highlight that overly intrusive monitoring can lead to feelings of mistrust and resentment among children, potentially damaging the parent-child relationship. Effective digital parenting requires a balance between supervision and autonomy, allowing children to develop digital literacy and self-regulation skills (Musicket al, 2021).

The influence of technology on family time is another critical area of concern. Research indicates that increased screen time can detract from physical activities and face-to-face interactions among family members. A study by Ferdouset al, (2017) found that families with high screen time engagement tend to spend less time engaging in outdoor activities and other forms of physical exercise. This shift can impact the overall health and well-being of family members, contributing to sedentary lifestyles and associated health issues. In contrast, technology can also provide opportunities for shared family activities, such as playing interactive video games or watching movies together. These activities can enhance family bonding and create shared experiences. Anyakohaet al, (2023) suggest that when used appropriately, digital media can support family cohesion and provide a platform for shared interests and discussions.

The demands of managing children's technology use can contribute to parenting stress. Keeping up with the latest digital trends, monitoring online behavior, and setting appropriate boundaries can be challenging for parents. Ohazulike (2023) found that parents often feel overwhelmed by the rapid pace of technological change and the pressures of ensuring their children's online safety. This stress can impact overall family dynamics, leading to conflicts and tension. Moreover, the constant connectivity enabled by technology can blur the boundaries between work and family life, increasing stress for working parents. Ferdouset al, (2017) note that the expectation of being always available for work-related communication can encroach on family time, reducing opportunities for relaxation and quality interactions.

Additionally, poor parent-child communication, limited family time, and inadequate monitoring of children's behavior can lead to several issues. Poor communication can result in misunderstandings, weakened emotional bonds, and a lack of trust between parents and children (Akshine et al, 2022). Insufficient family time diminishes opportunities for bonding and can increase feelings of isolation and disconnection (Musicket al, 2021). Inadequate monitoring of children's behavior, especially online, can expose them to risks such as cyber bullying, inappropriate content, and privacy breaches (Olasanmiet al, 2020). These problems collectively undermine family cohesion and children's emotional and social development.

Therefore, the study on the impact of technology on family dynamics and parenting styles is urgent due to the pervasive integration of digital devices into daily life and the consequential effects on familial relationships and parenting practices. Modern families often find their interactions mediated by technology, which can both facilitate and hinder communication and bonding (Ogunleye, 2019). Despite the increasing reliance on digital tools, there is limited comprehensive research on how these tools specifically alter family dynamics, creating a gap in understanding the balance between beneficial and detrimental effects. Additionally, the rapid pace of technological advancement outstrips current research, necessitating updated studies to capture contemporary trends and impacts. Addressing these gaps is crucial for developing guidelines and strategies that help families navigate technology use in ways that support healthy relationships and effective parenting.

Research Questions

- 1. How does technology influence parent-child communication?
- 2. What is the impact of technology on family time?
- 3. What is the Role of Technology in Monitoring Children's Behavior?

Research Hypotheses

- 1. There is no significant difference in how technology influences parent-child communication across the genders of parents.
- 2. There is no significant difference in the impact of technology on family time across the genders of parents.

Methodology

The methodology of this study involved a quantitative approach following a descriptive survey design. A total of 108 participants were included in the study. Data collection was conducted using a structured questionnaire distributed via a Google Survey. Respondents were drawn from Nnamdi Azikiwe University (UNIZIK), Chukwuemeka Odumegwu Ojukwu University (COOU), Federal Polytechnic, Oko, and Nwafor Orizu College of Education, Nsugbe, all in Anambra State. The questionnaire was based on a 4-point Likert scale and included sections on demographic information (Age, Educational Level, and Gender), the Influence of Technology on Parent-Child Communication, the Impact of Technology on Family Time, and the Role of Technology in Monitoring Children's Behavior. The face and content validity of the instrument were determined by consulting three experts specialized in Measurement and Evaluation. The construct validity was computed using Principal Component Analysis with SPSS software version 26. Corrections were made to ensure the appropriateness of the items and language used before the final draft. The reliability of the instrument was determined using the Pearson moment correlation method, yielding an index of 0.87, which was deemed acceptable.

Descriptive statistics, including mean, standard deviation, variance, skewness, and kurtosis, provided insights into central tendency, variability, and distribution shape. The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to assess normality. The Mann-Whitney U test examined differences between independent groups when data violated normality assumptions. It calculates a U statistic, indicative of rank differences between groups, and a Z value for significance. This statistical method was applied to test the study's hypotheses, specifically to explore significant differences in the level of digital literacy and competencies between male and female students. Throughout the research process, participants were informed about the study's purpose and assured of their anonymity and confidentiality.

Results

This section provides a comprehensive overview of the study population's demographic characteristics, including educational level, gender profile and age range of the respondents.

Age	Frequency	Per cent	Valid Percent	Cumulative Percent
18-24 years	20	18.5	18.5	18.5
25-34 years	11	10.2	10.2	28.7
35-44 years	25	23.1	23.1	51.9
45-54 years	30	27.8	27.8	79.6
55-64 years	22	20.4	20.4	100.0
Sub Total	108	100.0	100.0	
Educational Level				
High School Diploma/GED	8	7.4	7.4	7.4
Bachelor's Degree	34	31.5	31.5	38.9
Master's Degree	27	25.0	25.0	63.9
Doctoral Degree	39	36.1	36.1	100.0
Sub Total	108	100.0	100.0	
Gender				
Male	23	21.3	21.3	21.3
Female	85	78.7	78.7	100.0
Sub Total	108	100.0	100.0	

3.1 Demographics

 Table 1: Educational Level, Gender profile and Age range of the respondents

Table 1 summarizes the age range, educational level, and gender profile of the respondents. The majority are aged 45-54 years (27.8%), followed by 35-44 years (23.1%) and 55-64 years (20.4%). Educationally, most respondents hold a Doctoral Degree (36.1%) or a Bachelor's Degree (31.5%), with fewer having a Master's Degree (25%) or a High School Diploma/GED (7.4%). Gender distribution is predominantly female, with 85 females (78.7%) compared to 23 males (21.3%). The total number of respondents is 108, with each demographic category summing to 100%.

3.2 Descriptive statistics

Research Question one: How does technology influence parent-child communication? **Table 2: How technology influence parent-child communication**

	Mean	Std. Deviation	Variance	Skewness		Kurt	osis
	Statistic	Statistic	Stati stic	Statistic	Std. Error	Statistic	Std. Error
hnology enables parents to set digital ndaries for their children	3.78	.585	.343	-3.340	.233	12.430	.461
S trackers help parents monitor their dren's location for safet y	3.75	.643	.414	-2.726	.233	6.963	.461
ental control software restricts access to propriate websites and content.	3.53	.971	.943	-1.982	.233	2.475	.461
rnet u sage reports show parents how ch time children spend online.	2.44	1.194	1 4 27	118	.233	-1.560	.461
ial media monitoring tools alert parents otential cyberbullying incidents.	3.27	1.082	1.170	-1.143	.233	217	.461
leo surveillance systems help parents ervise children when not home.	3.46	.999	.999	-1.728	.233	1.543	.461
ivi ty logs give insights into children's ing and app usage habits.	3.48	.826	.682	-1.513	.233	1.399	.461

Table 2 shows that parents generally agree on the positive influence of technology on parent-child communication, with high mean scores for statements about setting digital boundaries (3.78) and using GPS trackers for safety (3.75). Parental control software and video surveillance also received high mean scores (3.53 and 3.46, respectively). However, internet usage reports have a lower mean score (2.44), indicating less agreement. Skewness and kurtosis values reveal varying response distributions, with digital boundaries showing strong negative skewness (-3.340) and high kurtosis (12.430), indicating most respondents strongly agree. Conversely, internet usage reports exhibit the least skewness and kurtosis, suggesting diverse opinions.

	Mean	Std. Deviation	Variance	Skewne ss		Kui	tosis
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Technology often reduces the amount of quality family time spent together.	3.24	1.022	1.044	876	.233	753	.461
Screen time can lead to decreased physical activities among family members.	3.64	. 53 8	.289	-1.497	.233	3.509	.461
Parents and children might spend evenings on separate devices, isolating themselves.	3.36	.662	.438	751	.233	.387	.461
Technology can sometimes enhance family time through interactive gaming experiences.	2.21	1.238	1.534	.216	.233	-1.660	.461
Excessive use of technology can disrupt family routines and bonding moments.	3.23	. 87 1	.759	-1.163	.233	.883	.461
Virtual communication tools help families stay connected despite geographical distances.	3.31	.779	.607	- 717	.233	583	.461
Technology can create conflicts over screen time and device usage.	3.06	.747	.5 58	914	.233	1.357	.461

Research Question two: What is the impact of technology on family time? **Table 3: Impact of technology on family time**

Table 3 presents statistics on the impact of technology on family time. The statement "Screen time can lead to decreased physical activities among family members" has the highest mean (3.64) and low standard deviation (0.538), indicating strong agreement and low variability. "Technology often reduces the amount of quality family time spent together" (mean 3.24) and "Excessive use of technology can disrupt family routines and bonding moments" (mean 3.23) also have high means, indicating agreement. The statement "Technology can sometimes enhance family time through interactive gaming experiences" has the lowest mean (2.21) and highest standard deviation (1.238), showing disagreement and high variability. Skewness and kurtosis values indicate various levels of asymmetry and peakedness in the responses.

Research Question three: What is the Role of Technology in Monitoring Children's Behavior?

	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	St ati stic	Std. Error	Statistic	Std. Error
Monitoring software helps observe children's online interactions and social behavior.	2.92	.855	. 73 1	752	.233	.228	.461
GPS devices check children's whereabouts, influencing their outdoor behavior.	2.85	1.159	1.342	366	.233	-1.399	.461
Parental controls manage children's online content consumption and browsing behavior.	2.86	1.156	1.336	-,353	.233	-1.420	.461
Technology alerts parents to potential cyberbullying affecting children's behavior.	3.20	1.083	1.173	911	.233	718	.461
Behavior monitoring tools help detect changes in children's online behavior.	2.77	1.392	1.937	402	.233	-1.745	.461
Digital monitoring identifies deviations in children's usual online behavior patterns.	3.90	.431	. 186	-4.853	.233	25.300	.461
Educational platforms track and influence children's learning behavior and progress.	2.97	1.172	1.373	798	.233	887	.461

Table 4: Role of Technology in Monitoring Children's Behavior

Table 4 shows that respondents generally agree that technology plays a significant role in monitoring children's behavior. The highest mean score is 3.90 for "Digital monitoring identifies deviations in children's usual online behavior patterns," with a low standard deviation of 0.431, indicating strong consensus. Statements about monitoring software, GPS devices, and parental controls have moderate mean scores around 2.85 to 2.92, with standard deviations ranging from 0.855 to 1.159, reflecting moderate agreement and variability. The skewness and kurtosis values suggest varying distribution shapes, with the highest skewness (-4.853) and kurtosis (25.300) observed for digital monitoring, indicating a pronounced consensus.

Table 5: Tests of Normality

	Gender	Kolmogorov-Smirnov ^a		Shapiro-Wilk			
		Statistic	df	Sig.	Statistic	df	Sig.
Parent-child	Male	.157	23	.145	.928	23	.098
communication	Female	.203	85	.000	.868	85	.000
Family time	Male	.155	23	.159	.933	23	.130
	Female	.101	85	.031	.937	85	.000

a. Lillie fors Significance Correction

Table 5 presents the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests for normality on parentchild communication and family time across genders. For parent-child communication, the Kolmogorov-Smirnov test shows statistics of 0.157 (p=0.145) for males and 0.203 (p=0.000) for females. The Shapiro-Wilk test shows statistics of 0.928 (p=0.098) for males and 0.868 (p=0.000) for females. For family time, the Kolmogorov-Smirnov test shows statistics of 0.155 (p=0.159) for males and 0.101 (p=0.031) for females. The Shapiro-Wilk test shows statistics of 0.933 (p=0.130) for males and 0.937 (p=0.000) for females. Since the data is not normally distributed across most educational levels, non-parametric tests (Mann-Whitney U and Wilcoxon W tests) would be more appropriate for hypothesis testing.

3.3 Hypotheses Testing

Hypothesis One: There is no significant difference in how technology influences parent-child communication across the genders of parents.

 Table 6: Mann-Whitney U and Wilcoxon W tests on difference in how technology influences parentchild communication across the genders of parents

Gender	Ν	Mean Rank	Sum of Ranks
Male	23	54.09	1244.00
Female	85	54.61	4642.00
Total	108		

Mann-Whitney U=968.000, Wilcoxon W=1244.000, Z=-.072, Asymp. Sig. (2-tailed)=.943, Grouping Variable=Gender

Table 6 presents the results of the Mann-Whitney U and Wilcoxon W tests examining differences in how technology influences parent-child communication across genders of parents. With 23 males and 85 females, the mean ranks are 54.09 and 54.61, respectively. The Mann-Whitney U value is 968.000 and the Wilcoxon W value is 1244.000, with a Z score of -0.072. The asymptotic significance (2-tailed) is 0.943, indicating no statistically significant difference between genders. This suggests that gender does not significantly influence the way technology affects parent-child communication.

Hypothesis Two: There is no significant difference in the impact of technology on family time across the genders of parents.

 Table 7: Mann-Whitney U and Wilcoxon W tests on difference in the impact of technology on family time across the genders of parents.

Gender	Ν	Mean Rank	Sum of Ranks	
Male	23	43.33	996.50	_
Female	85	57.52	4889.50	
Total	108			
1				

Ţ

Table 7 presents the results of the Mann-Whitney U and Wilcoxon W tests examining the impact of technology on family time across the genders of parents. With 23 males and 85 females, the mean ranks are 43.33 and 57.52, respectively. The Mann-Whitney U value is 720.500 and the Wilcoxon W value is 996.500,

with a Z score of -1.937. The asymptotic significance (2-tailed) is 0.053. Since the p-value (0.053) is slightly above the conventional threshold of 0.05, accept the null hypothesis. Therefore, we conclude that there is no significant difference in the impact of technology on family time across the genders of parents.

Discussion of results

Research question one focused on how technology influence parent-child communication. Result indicates that technology significantly influences parent-child communication, offering both advantages and challenges. In a related study, Stewartet al, (2022) found that parental control software effectively restricts access to inappropriate websites, promoting safer online environments for children. Similarly, GPS trackers, as highlighted by Ifeoluwa and Francis (2023), help parents monitor their children's locations, enhancing their safety and providing peace of mind. These tools enable parents to set digital boundaries, fostering structured and safe internet usage. Conversely, in contrast, Rahayuet al, (2023)noted that excessive reliance on technology for supervision, such as video surveillance systems, can lead to reduced face-to-face interactions, potentially straining parent-child relationships. This finding agreed with Duarte-Torreset al, (2014), who reported that while internet usage reports and activity logs give insights into children's online behavior, they can also lead to over-monitoring, causing children to feel mistrusted and potentially fostering secrecy. Social media monitoring tools, as discussed by Reid-Chassiakoset al, 2016), alert parents to potential cyberbullying incidents, enabling timely interventions and support.

Research question two covered impact of technology on family time. It was seen that the impact of technology on family time is complex, featuring both positive and negative aspects. Technology often reduces the amount of quality family time spent together, with parents and children spending evenings on separate devices, isolating themselves. This finding agreed with the work of Nakshineet al, (2022), who noted that increased screen time leads to decreased physical activities among family members. In contrast, a study by Musicket al, (2021) found that technology can sometimes enhance family time through interactive gaming experiences, which provide shared activities that family members can enjoy together. Moreover, excessive use of technology can disrupt family routines and bonding moments, as highlighted by Ferdouset al, (2017). This can create conflicts over screen time and device usage, exacerbating household tensions. However, in a related study, Anyakohaet al, (2023)emphasized that virtual communication tools help families stay connected despite geographical distances, fostering a sense of closeness that might otherwise be unattainable. Thus, while technology can fragment family interactions, it also has the potential to unite them when used judiciously, underscoring the need for balanced and mindful use to maintain healthy family dynamics.

Research question three examined the role of technology in monitoring children's behavior. It was seen that the role of technology in monitoring children's behavior is multifaceted, providing various tools that assist parents in overseeing their children's interactions and activities. Monitoring software helps observe children's online interactions and social behavior. This finding agreed with James and Kur (2020), who noted that parental controls are effective in managing children's online content consumption and browsing behavior. In contrast, GPS devices, while useful in checking children's whereabouts, influence their outdoor behavior by making them more cautious, as highlighted by Punethaet al, (2020)pointed out that technology alerts parents to potential cyberbullying, thereby affecting children's social behavior and providing opportunities for timely intervention. This aligns with the use of behavior monitoring tools, which help detect changes in children's online behavior. Moreover, Ogunleye(2019) emphasized that educational platforms track and influence children's usual online behavior and progress, showing how digital monitoring can identify deviations in children's usual online behavior patterns and enhance their educational development. Thus, while parental controls and monitoring software manage online content and interactions, GPS devices influence physical behavior, and educational platforms track and support learning

progress, demonstrating the diverse impact of technology on monitoring children's behavior.

Conclusion

The study on the impact of technology on family dynamics and parenting styles reveals a dual-edged influence that technology exerts on modern family life. On one hand, technology can fragment family interactions by encouraging individual screen time, reducing physical activities, and causing conflicts over device usage. Parents and children often find themselves isolated, engaged in separate digital worlds, which disrupts traditional family routines and bonding moments. This is particularly evident in the decreased quality of family time and the challenges of managing screen time, as supported by multiple studies. On the other hand, technology also presents opportunities to enhance family cohesion and parenting effectiveness. Interactive gaming and educational platforms can provide shared experiences that strengthen family bonds, while virtual communication tools help maintain connections across geographical distances. Additionally, technology offers powerful tools for monitoring and guiding children's behavior, enabling parents to manage online content consumption, track physical whereabouts, and respond promptly to issues like cyberbullying. Overall, the study underscores the importance of a balanced and mindful approach to technology use within families. By leveraging the positive aspects of technology and mitigating its negative impacts, families can navigate the digital age more harmoniously, fostering both individual growth and collective well-being.

References

- Afolabi, B. A., Afolabi, M. O., Afolabi, A. A., Odewale, M. A., & Olowookere, S. A. (2013). Roles of family dynamics on adherence to highly active antiretroviral therapy among people living with HIV/AIDS at a tertiary hospital in Osogbo, south-west Nigeria. *African health sciences*, *13*(4), 920-926.
- Anyakoha, B. U., Cookey, I. T., Odenigbo Cynthia, I., & Anorue, L. I. (2023). Communication Patterns and Parent-Child Relationship Issues: A Case Study of Families Resident in University of Nigeria, Nsukka, Enugu State. *Journal of Home Economics Research*, 30(2), 2010-222.
- Duarte Torres, S., Weber, I., & Hiemstra, D. (2014). Analysis of search and browsing behavior of young users on the web. *ACM Transactions on the Web (TWEB)*, 8(2), 1-54.
- Dunu, I. V., & Ugbo, G. O. (2017). Separated household? Effects of personalized communication devices on Nigerian families' communication pattern. *New Media and Mass Communication*, 60, 28-40.
- Ewe, U. C., & Ndubueze, A. N. (2024). Acquisition Of Electronics Technology Skills Among Youths in Rivers State: A Road Map for Mitigating Youths' Migration from Nigeria. *International Journal of Social Science and Management Studies*, 3(1).
- Ferdous, H. S., Vetere, F., Davis, H., Ploderer, B., O'hara, K., Comber, R., & Farr-Wharton, G. (2017, May). Celebratory technology to orchestrate the sharing of devices and stories during family mealtimes. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 6960-6972).
- Ifeoluwa, A., & Francis, I. (2023, March). Developing a GSM-GPS Based Tracking System: Vulnerable Nigerian School Children as a Case Study. In *Future of Information and Communication Conference* (pp. 614-634). Cham: Springer Nature Switzerland.
- James, P. A., & Kur, J. T. (2020). Parental Mediation of Childrens Risky Experiences with Digital Media. *The Journal of Society and Media*, 4(2), 298-318.
- Kigbu, S. K., Obagboye, T. G., Haruna, H. L. U., & Augusta, U. (2024). Regulating Assisted Reproductive Technology in Nigeria: An Urgent Need. *Global Journal of Politics and Law Research*, 12(3), 67-80.

- Musick, G., Freeman, G., & McNeese, N. J. (2021). Gaming as family time: Digital game co-play in modern parent-child relationships. *Proceedings of the ACM on Human-Computer Interaction*, 5(CHI PLAY), 1-25.
- Nakshine, V. S., Thute, P., Khatib, M. N., & Sarkar, B. (2022). Increased screen time as a cause of declining physical, psychological health, and sleep patterns: a literary review. *Cureus*, 14(10).
- Obimakinde, A. M., & Shabir, M. (2023). The family dynamics of children on the streets of Ibadan, Southwest Nigeria. *South African Family Practice*, 65(4).
- Ogunleye, B. O. (2019). Some determinants of visibility boost for research publications among early career educational researchers in Southwest, Nigeria. *African Journal of Pedagogy*, 8(1), 93-111.
- Ohazulike, G. A. (2023). Nature, Changes, and Dynamics of Family Structures and Parenting in Nigeria: Its Implications on Children's Socialization and Marriage. *ZIK journal of multidisciplinary research*, 6(1).
- Olasanmi, O. O., Agbaje, Y. T., & Adeyemi, M. O. (2020). Prevalence and prevention strategies of cyberbullying among Nigerian students. *Open Journal of Applied Sciences*, 10(6), 351-363.
- Punetha, D., & Mehta, V. (2014, September). Protection of the child/elderly/disabled/pet by smart and intelligent GSM and GPS based automatic tracking and alert system. In *2014 International conference on advances in computing, communications and informatics (ICACCI)* (pp. 2349-2354). IEEE.
- Rahayu, A., Indriani, D. E., Mantovani, R., Firmansyah, A., Achmad, W., & Dewi, A. K. (2023). The Risks and Importance of Parental Supervision in Children's Gadget Use: Observations on Attitudes, Behavior, and Development in Fishery Neighborhood. *Journal of Survey in Fisheries Sciences*, 10(2S), 2790-2797.
- Reid Chassiakos, Y.L., Radesky, J., Christakis, D., Moreno, M.A., Cross, C., Hill, D., Ameenuddin, N., Hutchinson, J., Levine, A., Boyd, R. and Mendelson, R., 2016. Children and adolescents and digital media. *Pediatrics*, 138(5).
- Stewart, K., Brodowsky, G., & Sciglimpaglia, D. (2022). Parental supervision and control of adolescents' problematic internet use: understanding and predicting adoption of parental control software. *Young Consumers*, *23*(2), 213-232.

Utilization of ICT Skills In Teaching Business Subjects In Secondary Schools In Anambra State, Nigeria

Obinegbu Chinyere Tochukwu

Business Education Department Nwafor Orizu College of Education, Nsugbe, Anambra ,Nigeria. Chinyereobinegbu@gmail.com

Abstract

This study was carried out to determine the extent of utilization of ICT skills in teaching of business subject in secondary schools in Anambra State. To direct the study, two research questions were posed and two null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted. The population was not too large and there was no sampling, it was manageable. A5- point rating scale questionnaire was used for data collection. Cronbach Alpha method was used to establish the internal consistence of the instrument and z test was used to test the hypotheses. Findings revealed that the respondents utilize word-processing skill and internet skill at high and low extent in teaching of business subjects. Based on the findings of the study, the researcher concluded that much still needed to be done to ensure effective utilization of ICT skills by teachers of business subjects in Anambra States secondary schools. It was recommended among others that the government should sponsor the re-training of business subjects teachers on the use of ICT skills in order to effectively utilize it in teaching and learning.

Keywords: Hyperlinks, web-page, web address, highlight and text box

Introduction

Education is a prerequisite for today's knowledge-based economy and the production and use of new knowledge require a more educated population. Thus, the introduction of information and communication technology in education has undoubtedly enhanced teaching, learning and research. Information and Communication Technology (ICT) is playing a major role in the acquisition and diffusion of knowledge which are fundamental aspects of the education process. The impact of ICT on education is enormous. ICT is potentially a powerful and enabling tool for educational change and reform. When used appropriately, ICT gadgets help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by helping to make teaching and learning an engaging active process that is connected to real life.

Information and communication technology refers to the purposeful use of electronic devices in support of the learning process. It is supported by electronic hardware and software devices (Allen, 2009). According to Daniels (2013), ICT has become one of the basic building blocks of modern society. Many countries now regard the understanding of ICT and mastering of ICT skills as part of core education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICT is generally referred to computers and computing related activities. This is fortunately not the case, although computers and their applications play a significant role in modern information management. Other technologies and/or systems also make up the phenomenon that is commonly regarded as ICT. Pelgrum and Law (2003) stated that near the end of the 1980s, Although in early 1970s computers were not fully integrated in the learning of traditional subject matter, the commonly accepted rhetoric that education systems would need to prepare citizens for lifelong learning in an information society boosted interest in ICTs (Akawu, 2010). The 1990s was the decade of computer communications and information access,

particularly with the popularity and accessibility of Internet-based services such as electronic mail and the World Wide Web (WWW). At the same time, the CD-ROM became the standard for distributing packaged software (replacing the floppy disk). As a result, educators became more focused on the use of the technology to improve student learning as a rationale for investment. Any discussion about the use of ICT facilities in schools is built upon an understanding of the link between schools, learning and information technology. When the potential use of ICTs in schools was first mooted, the predominant conception was that students would be 'taught' by computers, internet, multimedia and communication facilities (Mevarech and Light, 2010).

The use of information and communication technologies in the educative process has been divided into two broad categories: ICT for Education and ICT in Education. ICT for education refers to the development of information and communications technology specifically for teaching and learning purposes. For example the development of Computer–Managed Instruction (CMI), Computer-Based Simulation (CBS) and Computer-Aided Problem Solving (CAPS) for teaching and learning. ICTs in education involve the adoption of general components of information and communication technologies in the teaching learning process. ICTs in education is the use of ICT facilities (computer, internet, multimedia and telecommunication) facilities to accelerate, enrich, deepen skills, motivate students and help students to relate school experiences to work practices. ICTs have the potentials of equipping the students with better ways of teaching and learning. The role of ICT facilities in teaching and learning has become one of the most important and widely discussed issues in contemporary education policy. ICT is an important factor in this information age so much so that when properly adopted and applied holds a great promise to improving teaching and learning in educational institutions. It is an important instructional tool to facilitate the transfer of many types of information and an effective means of communication in schools.

Information and communication technology-based instruction has been manifested in one-to-one (teacherto-student), one-to-many (teacher-to-group) and many-to-many (group -to-group) approaches to instruction (Webb, et al 2004). ICT is the application of a whole range of technologies involved in information processing and electronic communications, such as computers, Internet, e-mail, computer software, satellite, mobile communication gadgets, and other allied electronic devices for dissemination of knowledge and information. It involves the application of computer and information technology in teaching and learning. Effective application of ICT skills by teachers in teaching business subjects depends on the level of possession of ICT skills. These skills include word processing skills, hardware manipulation skills, multi-media skills, internet application skills, graphic skills, spread sheet, power point, data base application skills, and E-mail application skills. These ICT skills ought to be possessed and applied by teachers of business subjects as they have considerable impact in teaching and learning. However, Agboeze (2012) lamented that the pace of application of ICT skills by teachers of business subjects is still very low. Agboeze further observed that it appears that these ICT skills are not applied by teachers for teaching of business subjects in the secondary schools. This accounts for why business subjects teachers are not utilizing them in their teaching. This supports the earlier observations by Keengwe and Onchwari (2011) that despite rapid growth in ICT access by teachers both at home and school, and substantially improved school ICT infrastructure (connection to internet, computer labs, availability of educational software among others), most teachers are not keen in adapting and applying ICT skills during teaching. The authors stated that their ICT skills remain a challenge for them to adopt and apply efficiently the technology in classroom.

Business subjects consist of skills that help students in office occupations. Business subjects also provide orientation and basic skills with which to start a life of work for those who may not undergo further training. The Federal Republic of Nigeria (2013) defined business subjects as that aspect of subjects which lead to the acquisition of practical and applied skills as well as basic scientific knowledge. According

to Federal Repulic of Nigeria, business subjects include Financial Accounting, Economics, Commerce, Computer Studies/Keyboarding, , Office Practice and Marketing. Business subjects also include data processing, store keeping, book keeping and salesmanship which are among the 34 trade or entrepreneurship subjects newly introduced into senior secondary education curriculum (Nigeria Educational Research and Development Council (NERDC), 2013).

Business subjects teachers could utilize various ICT skills in teaching business subjects. It can help them to prepare transparences, activity sheets, study guides, lesson plan, track and analyze data and create chart. According to Hossein and Abdus in Ahmed (2013), for teachers (including business subjects teachers) to equip students with relevant skills in this 21st century, they must possess and utilize ICT skills such as ability to prepare lesson plan using word processor software, ability to use suitable commands to select range of cells in a row, ability to search for information over the internet, skills in using keyboard and other computer hardware such as printers, USB drives, projector, and scanner among others. Duff, McDonald and Mizell (2005) pointed out that ICT skills can be applied in teaching Accounting or Book keeping and Economics. Duff et al (2005) stated that business subjects students develop positive attitudes towards their teachers and learning when ICT skills are utilized by their teachers in presenting and delivering instructions. Nwaukwa (2015) averred that business teachers' utilization of ICT skills in instructional delivery can impact on the quality of teaching and learning of business subjects by making it dynamic, interactive and engaging. It can accelerate; deepen skills and motivate business subjects students to engage in learning.

Statement of the Problem

The IT revolution especially in the area of internet and computer technology has heralded the development and implementation of new and innovative curriculum delivery strategy in the education sector. Oye, et al(2012) emphasized that the growth in Internet technology and its application in education have brought great transformation which has made teaching and learning less burdensome, effective and result oriented by providing avenue for sharing idea and information. Thus, well researched and packaged teaching materials can be prepared by teachers and delivered to students using e- learning devices such as power point presentation, video tutorials, e-books, computer based training and web based training.

However, availability and utilization of these devices to the teachers when required pose a problem. In a developing country like Nigeria, availability and utilization of these ICT skills are a far cry from what obtains in other advanced societies and therefore poses a challenge to the educational sector. There is therefore the need to enrich the secondary schools e-learning program for effective teaching and learning process. The call for utilization of ICT skills in secondary education is to infuse and inject efficiency and effectiveness in curriculum implementation.

Moreever, in developing countries like Nigeria, ICT is challenged with the problem of material devices such as computer, computer laboratories, internet and e-mail facilities, videophone systems and teleconferencing devices, fax and wireless applications, digital library, digital classrooms, multimedia systems and the problem of multimedia course ware development among others (Global Information Technology Report, 2005). Other studies indicated that there is dearth of trained teachers for ICT, lack of facilities, infrastructures and equipment.(Ikemenjima,2005; Jegede & Owolabi, 2008).

Research questions

The following research questions guided this study.

- 1. To what extent do business subject teachers in Anambnra State secondary schools utilize wordprocessing skills in teaching business subjects?
- 2. To what extent do business subjects teachers in Anambra State secondary schools utilize internet skills in teaching business subjects?

Hypotheses:

- 1. There is no significant difference in the mean ratings of male and female business subject Teachers in secondary schools in Anambra State on the utilization of word-processing skills in teaching business subjects.
- 2. There is no significant difference in the mean ratings of male and female business subjects teachers in secondary schools in Anambra State on the utilization of internet skills in teaching business subjects.

Methods

Descriptive survey research design was adopted for the study. The study was a survey of secondary school business subjects teachers in Anambra State. The population of the study consisted 248 male and female business subjects teachers since the population was not large, no sampling was drawn as the entire population was studied. This is in consonance with the opinion of Agboola, (2018) stated that whenever possible, it is ideal to study the entire population. A structured questionnaire tagged Utilization of ICT Skills Questionnaire (UICTS) was constructed by the researcher, and was duly validated by three experts from faculty of education, Nnamdi Azikiwe University, Awka,. A five point response scale was adopted: Very Great Extent, Grent Extent, Moderate Extent, Low Extent and Very Low Extent. T0 determine the reliability of the instrument, 220 copies was administered to Business Subjects Teachers in public secondary schools in Orlu, Imo State. The data from the tests were analysed using Cronbach Alpha reliability coefficient of 0.59 and 0.69 respectively. Mean scores were used to answer the research questions while standard deviation helped to determine the distance or closeness of the mean ratings. The level of the rejections or acceptance of the mean rating of items and the cluster mean interpreted relative to real limits of numbers as shown below:

Response	Rating scale	Real limits of Numbers
Very Great Extent (VGE)	5	4.00-5.00
Great Extent (GE)	4	3.50-4.00
Moderate Extent (ME)	3	2.50-3.49
Low Extent (LE)	2	1.50-2.49
Very Low Extent	1	0.50-1.49

Z-test was used to test the hypotheses. A null hypotheses was rejected if the calculated Z-value is greater than or equal to the z-tablt value, otherwise the null hypotheses was not rejected.

Results

Research Question 1:To what extent do teachers in Anambra State secondary schools utilize word processing skill in teaching of business subjects?

 Table 1: Respondents' mean ratings on the utilization of word processing skills in teaching business subjects

S/N	Word Processing Skills	Mean	SD	Remarks
1	Ability to insert text	3.86	0.74	High Extent
2	Ability to highlight text	3.52	0.83	High Extent
3	Ability vary font size and style	2.67	1.14	Moderate Extent
4	Ability to create text box	3.61	1.11	High Extent
5	Ability to use of borders	3.68	0.74	High Extent
6	Ability use spell checker	3.64	0.98	High Extent
7	Ability to Format text in columns	3.59	1.29	High Extent
8	Ability to change/ margins and line spacing	3.24	1.08	Moderate Extent
9	Ability to add table to a document	3.61	1.21	High Extent
10	Use of suitable commands to edit document	4.61	1.32	High Extent
	Grand Mean	3.60		High Extent

Data in Table 1 showed that out of the 10 items on word processing skills listed, the business subjects teachers utilized eight at high extent while they applied the word processing skills at moderate extent in teaching business subjects. The grand mean score of 3.60 indicated that on the whole, business subjects teachers in the area of the study utilized word processing skills in teaching business subjects at high extent. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Research Question 2:To what extent do teachers in Anambra State secondary schools utilize internet application skill in teaching of business subjects?

S/N	Internet Application Skills	Mean	SD	Remarks
11	Ability to use prepared book marks	1.90	1.32	Low Extent
12	Ability to use hyperlinks	2.24	1.26	Low Extent
13	Ability to choose appropriate sites from a search	3.49	1.32	Moderate extent
14	Ability to interpret information from a website	1.76	1.05	Low Extent
15	Ability to cite any electronic references to information used	2.28	1.36	Low Extent
16	Ability contribute to the creation of a basic web-page	2.18	1.02	Low Extent
17	Ability to identify book marks location	1.63	0.98	Low Extent
18	Ability to determine whether information is current, accurate and reliable	3.16	1.11	Moderate Extent
19	Ability understand key features of a web-page	2.24	1.26	Low extent
20	Ability to understand purpose of a browser	3.49	1.32	Moderate Extent
21	Ability to equate URL with web address		1.24	Low Extent
22	Ability to use of general structure of a web address	3.12	1.11	Moderate Extent
	Grand mean	2.45		Low Extent

Table 2: Respondents' mean ratings on the extent Internet skills are utilized in teaching business subjects

Data in Table 2 showed that out of the 12 items on internet skills listed, the business subjects teachers utilized three at moderate extent while the remaining eight instruments are utilized at low extent. The grand mean score of 2.45 shows that on the whole, business subjects teachers in the area of the study utilized internet skills in teaching business subjects at a low extent. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Test of Hypotheses

Hypothesis 1

There is no significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent they utilize word processing skills in teaching of business subjects. This null hypothesis was tested at a 0.05 level of significance using z-test. The results are presented in Table 3.

Table 3: z-Test result of the difference in the mean ratings of male and female teachers of business subjects on their extent of utilization of Word Processing skills in teaching business subjects

Gender	Ν	X	SD	α	df	z-ca l	z-crit	Remark
Male	86	2.55	1.43	0.05	218	2.68	1.96	Rejected
Female	134	2.06	1.13					-

As shown in Table 3, the z-calculated value of 2.68 revealed greater than the z- critical of 1.96 (2.68 > 1.96) at 218 degree of freedom and 0.05 level of significance. This means that there is a significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent they utilize word processing skills in teaching of business subjects. Therefore the null hypothesis was rejected.

Hypothesis 2

There is no significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent they utilize internet skills in teaching of business subjects. This null hypothesis was tested at a 0.05 level of significance using z-test. The results are presented in Table 4. **Table4: Z-Test result of the difference in the mean ratings of male and female teachers of business subjects on the extent of utilization of internet skills in teaching business subjects**

Gender	Ν	X	SD	α	df	z-cal	z-crit	Remark
Male	86	2.87	1.1					
				0.05	218	8.51	1.96	Rejected
Female	134	2.47	1.06					

Data in Table 8 showed that the z-calculated value of 8.51 is greater than the z- critical of 1.96 (8.51 > 1.96) at 218 degree of freedom and 0.05 level of significance. This means that there is a significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent they utilize internet skills in teaching of business subjects. Therefore the null hypothesis was rejected.

Discussion of the Findings

Findings of the study revealed that teachers in secondary schools in Anambra State utilize word processing skills at high extent. The findings are in consonance with that of Tian and Correos (2014) which revealed that teachers to a large extent apply word processing skills sin carrying out their instructional delivery. Tian and Correos further stated that teachers apply ability to change and use different fonts, font styles and colors within the document. Teachers can also classify and use different fonts from series of fonts which improve their teaching tasks. That teachers (business subjects teachers) utilize word processing skills in teaching business subjects is not surprising considering the importance of word processor in enhancing the education delivery.

Furthermore, the test of second hypothesis indicated that there is significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent of utilization of word processing skills in teaching business subjects. The findings are in agreement with Jimoyiannis and Komis (2007) which revealed that male teachers are positive about ICT in school while female teachers are neutral or negative. Jimoyiannis and Komis cited female teachers low levels of ICT use due to their inadequate skills, interest and technology accessibility. However, Andoh's (2012) findings contrasted Jimoyiannis and Komis (2007) findings by disclosing that gender variable is not a forecaster of extent of utilization and use of word processing skills in secondary schools.

The result of the analysis in Table 2 shows that secondary school teachers of business subjects in Anambra State utilize internet skills at low extent in teaching business subjects. This is shown by grand mean scores 2.45 which is within the low extent category. The findings agree with Nwanewezi and Isifeh-Okpokwu (2010) which revealed that most teachers whose schools were supplied with internet facilities do not utilize the internet facilities for instructional purpose. Moreover the inability of teachers to utilize internet skills in teaching could be as a result of lack of ICT competencies by business subjects teachers,

coupled with the fact that application of ICT in secondary schools in developing nations' school curriculum is still at its infancy state. However, the importance of internet to teachers for instructional delivery cannot be overemphasized.

The result of the analysis of hypothesis 2 in table 4 shows that there is significant difference in the mean ratings of male and female teachers in secondary schools in Anambra State on the extent of utilization of internet skills in teaching business subjects. The findings of the study are in line with Adeshina et al. (2012) which showed male teachers apply internet skills than their female counterparts in teaching delivery. Adeshina et al. revealed that although, female teachers were more ICT skilled than the male teachers, nevertheless, the male teachers apply their internet skills more than the female teachers to access information from the internet for classroom delivery.

Conclusion

Maximizing the potentials of ICT in education requires that business subjects teachers actually utilize ICT skills for instructional and curriculum delivery. The findings of the study as revealed that many business subjects teachers in secondary school in Anambra state utilize ICT skills for academic purposes at low extent. This suggest that there is the need to improve on the application of ICT skills, not only because ICT brings a new mix of instructional knowledge advantages to teachers, but it is consistent with the modern education life and global practices of 21st century. In view of the above, there is the need for a content-based educational curriculum with planners that would understand the interplay and interface between ICT and mankind. Based on the findings of the study, the researcher concluded that teachers in secondary schools in Anambra State utilize ICT skills in teaching of business subjects. It was also concluded that gender affects teachers' application of ICT skills in teaching business subjects in secondary schools in Anambra State.

Recommendations

Based on the findings of this study, the following recommendations were made.

- 1. Anambra State Government should sponsor the re-training of business subjects teachers(Male and Female) on the utilization of ICT skills in education in order to update their skills and knowledge.
- 2. Business subjects curriculum planner should develop or review curricular to ensure that it emphasizes on utilization of ICT Skills in teaching by teachers.
- 3. In order to achieve the objective of business subject, vocational teachers in secondary schools should give the students opportunity to practice with computers.

References

- Adeosun, O. (2010). Quality basic education development in Nigeria: Imperative for use of ICT. *Journal of International Cooperation in Education, vol, 13* no 12 pp193-211.
- Adeshina, T. J., Udoh, A., Ndomi, B. & Aliyu, M. (2012). Impact of information technology skills of male and female secretarial teachers in Nigeria Colleges of Education on utilization of internet for effective lecture delivery. *Educational Research, vol 3* no.8, pp 632-638.
- Adesoji, F. F. (2012). Undergraduate students' perception of the effectiveness of ICT use in improving teaching and learning in Ekiti State University, Ado-Ekiti, Nigeria. *International Journal of Library and Information Science*, vol 4no.7, pp 121-130.
- Adeyemi, T. O. & Olaleye, F. O. (2010). Information and communication technology for the effective management of secondary schools for sustainable development in Ekiti State, Nigeria. American-Eurasian Journal of Scientific Research, vol 5 no.2, pp 106-113.
- Aduwa-Ogiegbaen, S. E. & Iyamu, E. O. S. (2005). Using information and communication technology in secondary schools in Nigeria: Problems and prospects. *Educational Technology & Society*,vol 8

no.1, pp 104-112.

- Agboeze, M. U. (2012). Utilization of e-learning technology resources in accounting education instructional delivery methods in Nigerian universities. *International Journal of Educational Research*, vol.12no.1, pp 26–38.
- Akawu, A. B. (2010). *Educational Communication Technology: Media & Utilization*. Calabar, Nigeria: University of Calabar Printing Press.
- Alexander, J. O. (1999). Collaborative design, constructivist learning, information technology bfimmersion, & electronic communities: a case study. *Interpersonal Computing and Technology*: An Electronic Journal for the 21st Century No.7, Pp; 1–2.
- Lim, C. P. & Chai, C.S. (2004), An activity-theoretical approach to research of ICT integration in Singapore schools: Orienting activities and learner autonomy. *Computers & Education, vol.* 43, no.3,pp 215-236.
- Meverech, A. R. & Light, P. H. (11992). Peer-based interaction at the computer; looking backward, looking forward. *Learning and Instruction*, *2*, 257-280
- Mooij, T. (2007). Design of educational and ICT conditions to integrate differences in learning: Contextual learning theory and a first transformation step in early education. *Computers in Human Behaviour, vol.* 23 no.3 pp 1499-1530.
- Niederhauser, D. S. & Stoddart, T. (2001). Teachers' instructional perspectives and use of educational software. *Teaching and teacher education*, *17*, 15-31.
- Norris, C., T., Sullivan, J., Poirot. & Soloway, E. (2003). No access, no use, no impact: Snapshot surveys of educational technology in K-12. *Journal of Research on Technology in Education*, *36*(1), 15-27.
- Nwaukwa, F. C. (2015). Extent of integration of information and communication technology In instructional delivery by secondary school business subjects teachers in Abia State. (unpublished masters thesis). Nnamdi Azikiwe University, Awka.
- Nwosu, A. A. (2009). Integrating ICT into STM classroom: Status and implications, proceedings of the 44th STAN conference.
- Okebukola, P. (1997). Old, new and current technology in education. UNESCO Africa vol., 14 no.15, pp 7-18.
- Okoroh L. (2006). Information and communication technology Lagos: Macmillan publishers.
- .Olakulehin, F. K. (2007). Information and communications technologies in teachers training and professional development in Nigeria. *Turkish Journal of Distance Education (TODJE)*.

Determinants of Yam Farmers Credit Utilization In Anambra West LGA, Anambra

Okeke, Daniel C. Ph. D

Department of Agricultural Education, Nwafor Orizu College of Education, Nsugbe, Anambra State okeke.daniel@nocen.edu.ng, 0806 067 1944

Abstract

The study analyzed the determinants of yam farmers credit utilization in Anambra West L.G.A. Multistage sampling technique was employed, ten (10) communities were selected out of the eleven (11) communities in the area while, purposive sampling was used to select twelve (12) farmers from the ten communities to give a sample size of 120 respondents. Both primary and secondary data were used for the study. The data collected were analyzed using statistical tools such as means, frequency and percentage for the socioeconomic characteristics of the respondents while, Logit regression was employed to analyze the determinants of the yam farmers' decision to utilize credit. The result showed among others that, majority of the farmers utilize more of non institutional credit in their farming activities as against those using institutional credit; there are more male farmers in the study area and, education played a pivotal role in the institutional credit assessment by the respondents. Again, Logit regression analysis revealed that education, occupation and experience exhibited positive and significant relationship with the farmers institutional credit utilization. It was recommended therefore that, institutional credit assessment conditions should be liberalized to make it more accessible for the farmers. Also, more women should be encouraged to venture into yam farming in the area.

Keywords: Yam, Farmers, Credit, Utilization, Anambra

Introduction

Yam (*Dioscorea* spp.) is the common name for a monocotyledonous tuber-producing vine plant with several species (approximately 600) (Mondo et al., 2020). It is widely cultivated as a staple food in Africa, Asia, South America, the West Indies, and the Pacific Islands (Obidiegwu and Akpabio, 2017). Among the cultivated species, the white yam (*Dioscorea rotundata*) is popularly grown in West Africa, while the water yam (*Dioscorea alata*) has a global production outlook (Darkwa et al., 2020).

Beyond its food and nutritious values, the ownership and cultivation of yam have many cultural, religious, and social meanings, which may vary between specific ethnic groups and regional areas. It is one of the most important food crops in tropical climates, especially in areas with moderate rainfall. The cultivation of yam complements food security. Yam is a major source of calories for millions of the world's tropical and subtropical populations and provides some nutritional benefits in the form of protein and micronutrients, while contributing to shaping the cultural fabric and social relations of most African societies

There is geographically wide-scale domestication, cultivation, and use of yam across the western, eastern, southern, and middle regions of Nigeria, especially among the Yorubas, Igbos, Ibibios, Efiks, Tivs and other smaller ethnic groups. These ethnic groups are geographically between the southern Guinea savannah and humid forest. Recent estimates of the Food and Agriculture Organization of the United Nations (FAO) indicate that Nigeria is the leading producer of yams, and contributes approximately 66% to the global production.

Yam serves as a major source of food and income for many people along the yam value chain (Scott et al, 2000; Maikasuma and Ala, 2013; Agre et al, 2023).

Yam has cultural, social, economic and religious value in most African societies (Obidiegwu and Akpabio, 2017), as well as in most therapeutic potentials (Obidiegwu et al, 2020). Millions of people depend on yam as a major source of calories and nutrition (Degras, 1993; Asiedu and Sartie, 2010). Nigeria ranks as the leading producer of white yam in the world, accounting for 66% (approximately 50.1 million tons) annual global production (FAO, 2021).

Farming in Nigeria is characterized by smallholder farmers, who typically practice subsistence farming. The major producers of yam carry it out on parcellated plots using crude implements (Nahanga and Vera, 2015; Oseni et al, 2014). While population growth is significantly high, the amount of yam produced per hectare has remained stagnant or is declining (Nahanga and Vera, 2015). The rate of annual increase in yam production has been slowing compared to ealier dramatic increases associated with area expansion (Barlagne et al, 2017). The productivity of yam continues to fall as most farmers are getting about 10 tons/ha when compared to potential yield of 50 tons/ha in some cultivars (Frossard et al, 2017; Neina, 2021). It is obvious that yam production under the current extensive agricultural practices of expanding into new lands that Nigeria has enjoyed sometimes is not sustainable. It has been predicted that this decrease could be catastrophic unless steps are taken soon to change the situation (Manyong and Nokoe, 2001).

This past pattern needs to be reversed to satisfy a growing demand by yam value chain actors. The decline in productivity is partly associated with shortened fallow periods and deteriorating soil fertility, degeneration of popular varieties, increasing levels of field and storage pests and diseases (e.g. nematodes, mealy bugs, scales, anthracnose, and viruses), high tuber losses in storage, high cost of labour, scarcity and high cost of clean (pest free) planting materials. Demand for yam is also prone to demand–supply chain issues related to the limited number of its processed products and poor market linkages.

Agricultural credit refers to one of several credit vehicles used to finance agricultural transactions such as a loan, note, bill of exchange, or a banker's acceptance. Studies show that growth rate of investment in agriculture is less than other economic sectors (Kohansal & Monsoori, 2009). Therefore in order to promote Commercial Agriculture in Nigeria, the Commercial Agricultural Credit Scheme (CACS) was introduced in 2009. The key agricultural commodities to be covered under the scheme are cultivation of target crops (rice, cassava, cotton, oil palm, wheat, rubber, sugar cane, jatropha carcus, fruits and vegetable), livestock (dairy, poultry, and piggery), and fisheries. Credit support to the target commodities shall be administered along the entire value chain of production, storage, processing, market and enterprise development. In Nigeria, credit has been recognized as an essential tool for promoting Small and Medium Enterprises (SMEs) and about 70 per cent of the population is engaged in the informal sector or in agricultural production (Olaitan, 2001).

As part of its developmental role, the Central Bank of Nigeria (CBN), in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA&WR), established the Commercial Agriculture Credit Scheme (CACS) in 2009 to provide finance for the country's agricultural value chain (production, processing, storage and marketing). Increased production arising from the intervention would moderate inflationary pressures and assist the Bank to achieve its goal of price stability in the country. The primary objectives of the Scheme are to:

- Fast-track the development of the agricultural sector of the Nigerian economy by providing credit facilities to large-scale commercial farmers at a single digit interest rate;
- Enhance national food security by increasing food supply and effecting lower agricultural produce and products prices, thereby promoting low food inflation;
- Reduce the cost of credit in agricultural production to enable farmers exploit the untapped potentials of the sector; and

• Increase output, generate employment, diversify Nigeria's revenue base, raise the level of foreign exchange earnings and provide input for manufacturing and processing on a sustainable basis.

The crucial role of credit in the development of the agricultural sector is not in doubt. Agriculture has been unable to meet with its traditional roles such as provision of food for the generality of the populace, supply of raw materials, foreign exchange earnings and provision of gainful employment (Olatunji in Coker & Audu, 2015). Agriculture, as a sector, depends more on credit than any other sector of the economy because of the seasonal variations in the farmer's returns and a changing trend from subsistence to commercial farming (Mahmood, Khalid & kouser, 2009). This is in view of the fact that credit plays an important role in enhancing agricultural productivity, especially in developing countries (Iqbal, Munir & Abbas, 2003).

There are two sources of credit available to small scale farmers which comprised of institutional and non institutional sources. The difficulty and delay in obtaining loan from banks and other formal financial institutions has constrained the smallholder farmers especially in Anambra East LGA to, more often, revert to informal credit sources from individual and group money lenders with the exorbitantly exploitative interest rates. Ojo (2005) observed that, the institutional credit system has failed to meet the objective for which they were set up. It therefore becomes necessary to determine farmer's socioeconomic characteristics, their level of institutional and non institutional credit utilization, as well as the credit sources available to these yam farmers in Anambra East LGA of Anambra state.

Methodology

This research study was carried out in Anambra West LGA of Anambra state. Anambra West is a local government area in the northwestern part of Anambra state, Nigeria with the headquarters at Nzam. The local government lies on the latitude 6.33N and longitude 6.83E. (www.digplanetet.com/wiki/AnambraWest). The estimated population of the local government in the last population census is 167,303 (NPC, 2006).

In this study, simple random sampling technique was used to select ten (10) communities out of the eleven communities that make up the local government. These communities, Mmiata Anam, Umuoba-Abegbu Anam, Umuenwelum Anam, Oroma-Etiti, Umueze Anam, Umudora Anam, Inoma-Akator, Nzam, Igbedor and Umuikwu Anam were selected due to the large number of yam farmers in the area. Out of the 10 communities, 12 farmers were purposively selected, 6 were those using institutional (formal) credit, while 6 were those using non institutional (non formal) credit. This gave a total sample size of 120 farmers for the study.

Analytical Technique

Descriptive statistical tools such as means, frequencies and percentages were employed in analyzing the socio-economic characteristics of the yam farmers, the various sources of credit available to the yam farmers and, the level of institutional and non institutional credit available to the yam farmers. Logit regression was used to analyze the determinants of yam farmer's decision to utilize credit. The model is expressed as:

$$Y_{1} = \log \frac{P_{1}}{1-P_{1}} = \beta_{0} + \beta_{1} X_{1} + \gamma_{1}$$

Where:

- $Y_i = Credit$ use decision of the ith yam farmer (1 = if acquired credit, 0 = if otherwise)
- $X_1 = Gender (1 = Male, 0 = Female)$
- $X_2 = Age (years)$
- $X_3 = Marital status dummy$

- X_4 = Household size (number)
- X_5 = Level of education in years
- $X_6 = Main occupation$
 - (1 = Farming, 0 = otherwise)
- $X_7 =$ Source of credit (dummy)
- $X_8 = Credit use experience (years)$
- X_9 = Annual farm income in Naira
- X_{10} = Amount borrowed in Naira
- $U_1 = Error term$

Results and Discussion

Socioeconomic characteristics of the respondents

The distribution of the respondents based on their socioeconomic characteristics of age, sex, education, occupation and experience in the study area is explained in Table 1. The result shows the level of institutional and non institutional credit assessment by the different age groups. Farmers of average age groups of 30, 40, 50, and 60 years old, obtained 13.33%, 16.67%, 6.67% and 1.66% institutional credit and; 20.00%, 26.67%, 10.83% and 4.17% of non institutional credit respectively. The result indicates that majority of the farmers of various ages 74 (61.67) were not able to secure institutional credit or, not aware of its availability; as against the 46(38.33) institutional credit beneficiaries. Further analysis indicated that farmers within more the active production average age range of 30 to 40 years were able to secure both formal and informal credit more than the old aged farmers. This agrees with Ifenkwe and Ume (2014) that active age of farmers is a positive factor to sustainable food production and poverty alleviation. Also, according to literature, financial institutions consider older farmers as high-risk borrowers due to their limited working years and potential health issues. Again, limited financial literacy and education among older farmers can make it harder for them to navigate the credit application process.

The study result also revealed that more male farmers, 25%, secured institutional credit as against 13% female farmers. Again, 41% male and 20% female, secured non institutional credit, indicating that more male farmer's engage in yam farming in the study area.

It could also be seen from the result that education has great impact on the farmer's use of institutional credit. While 40 (86.96) of those who benefited from formal credit acquired primary, secondary and, tertiary education, only 6(5.00) has no formal education. Again, majority of those who secured non institutional credit 13 (25.83) were those with no formal education as against 14(11.67) and 3(2.50) with secondary and tertiary education respectively. It is a priori expected that education is a significant determinant of institutional credit access among farmers. Shiladilya et al, (2022), in their study on determinants of institutional agricultural credit access and its linkage with farmers satisfaction, stated in their Probit model's result finding that education is one of the variables that affect institutional credit adoption across the small holder farmers.

On occupation, it was noted that out of the 38.33% that obtained institutional credit, civil servants were the highest with 15%, followed by traders 12%, while those who took farming as their main occupation topped in non institutional credit utilization, 36 (30.00).

The result of this study again shows that farmers with 11 to 20 years farming experience in yam production in the study area benefited more from both institutional and non institutional credit as they formed 67% of the entire respondents. This finding is in line with the report of the study by Moahid and Maharjan (2020), that experience has a positive correlation with formal credit acquisition as it is a significant predictor of credit worthiness influencing lenders decisions to approve credit applications.

Variables	Institutional	credit users	Non Institutional	credit users
	Frequency	Percentage	Frequency	Percentage
Age	^	~	^ ·	
25 - 34	16	33.3	24	20.00
35 - 44	20	16.67	32	26.67
45 - 55	8	6.67	13	10.83
Above 55	2	1.66	5	4.17
Total	46	38.33	74	61.67
Sex				
Male	30	25.00	50	41.67
Female	16	13.33	24	20.00
Total	46	38.33	74	61.67
Education				
No formal Edu	6	5.00	31	25.83
Primary	11	9.17	26	21.67
Secondary	22	18.33	14	11.67
Tertiary	7	5.83	3	2.50
Total	46	38.33	74	61.67
Occupation				
Farming	5	2.50	36	30.00
Civil servant	18	5.83	22	18.33
Trading	12	10.00	11	9.17
Others	11	9.17	5	4.17
Total	46	38.33	74	61.67
Experience				
1 – 5	3	2.50	6	5.00
6 – 10	7	5.83	12	10.00
11 – 15	12	10.00	22	18.33
16 - 20	15	12.50	26	21.67
Above 20	9	7.50	8	6.67
Total	46	38.33	74	61.67

Table 1: Socioeconomic characteristics of the sampled yam farmers in the study area

Source : Field Survey, 2023. (Figures in bracket are the percentage equivalents)

Analysis of the various institutional and non institutional credit sources for the farmers in the study area.

Sources	Institutional	Percentage	Non Institutional	Percentage
Personal savings			31	25.83
Friends/Relations			8	6.67
Groups:			11	9.17
(Cooperatives ,age grade	es etc)			
Money lenders			24	20.00
Micro finance banks	18	15.00		
Bank of Agriculture	21	17.50		
Commercialbanks	7	5.83		
Total	46	38.33	74	61.67

Result from Table 2 indicated that Bank of Agriculture (17.50), and Micro Finance bank (15.00) are the major sources of institutional credit for the farmers in the study area. Again, personal savings (25.83) and money lenders (20.00) are the major sources on non institutional credit in the study area. These findings corroborated Ahamefule, et al (2020), who noted that personal savings formed 63% of the poultry financing in Abia state, Nigeria

Credit Source	Frequency	Percentage
Institutio nal	46	38.33
Non institutional	74	61.67
Total	120	100

Level of institutional and non institutional credit utilization by the yam farmers
Table 3: Result of the distribution of farmers according to credit utilization source.

Source: field survey, 2023

The result in Table 3 shows that majority of the 120 sampled yam farmers, 74 (61.67) used non institutional credit credit while 46 (38.33) utilized institutional credit in their farming activity. This could be as a result of stringent credit requirement and draw down conditions of the lending institutions such as provision of collaterals, application processes, disbursement delays, repayment schedules etc; as against the non institutional credit sources characterised by informal arrangements, flexible repayment terms and limited documentations. Again, there are sometimes administrative bottlenecks that often leads to late disbursement of these institutional credits.

Parameter	Estimate	Standard Error	Z - Value
Age	-0.044	.30	-3.025*
Sex	-0.034	.426	-1.537***
Educational level	0.526	.351	3.174*
Occupation	0.467	.283	5.326**
Experience	0.341	.467	6.211*
*** = P ? 0.01			
* = Significant at 1%			
** = Significant at 5%			

Table 4. The logit regr	ession estimate	s of determinant	tsof the vam fai	mers credit utilization
Table 7. The logic regi	coston commate	s of acter minan	isor inc yann iar	mers er curt utilization

Source: Field survey, 2023

The result in Table 4 established that the coefficient of age was significant at 1% level and exhibited a negative relationship with the farmer's credit utilization. The implication is that, the older the farmer, the less they were able to utilize credit. This is in agreement with Ifenkwe and Umeh (2014). The coefficient of education was significant at1% and has a positive relationship with formal credit access. This shows that educated farmers access institutional credit more than uneducated farmers. Also, occupation positively and significantly (P ? 0.5) affect farmers access to formal credit as civil servant farmers who has education access institutional credit more than the illiterate farmers whose correlation to non institutional credit was positive and significant at 1% level. Finally, the analysis of the factors indicated that experience was positive

and significant at 1% level, showing that increase in farmers experience positively correlates with increase in credit utilization.

Conclusion

Majority of the yam farmers in the study area carry out their farming making more use of non institutional credit. This has resulted in the continuous low productivity of the farmers. This is consequent upon the exorbitant and exploitative interest rate charged by the informal credit lenders except of course for personal savings. It is pertinent therefore to, not only encourage farmer's formal education but also, for the banks to reduce the vigorous administrative processes involved in processing of the institutional credit for the illiterate farmers. More women should be encouraged to participation more in yam farming in the study. Again, for a consistent and meaningful increase in yam production in the study area and other areas, there is need to liberalize institutional production credit to make it more accessible to the small holder farmers who incidentally are the major producers of this all important crop.

References

- Agre, P; Edmond, A; Obidiegwu, J.E; Adebola, P.O; Asiedu, R; and Asfaw,A; (2023). Variability and genetic merits of white guinea yam landraces in Nigeria. *Front Plant Sci.* 14:1051840.doi: 10.3389/fpls.2023.1051840
- Ahamefule, B.A; Offor, E.I; and Okafor, U.A; (2017). Determinants of poultry farmers decision to utilize credit: A case study of Abia state, Nigeria. *The Nigerian Agricultural journal* 48(1)159–166.
- Asiedu, R; and Sartie.A (2010).Crops that feed the worldyams:yams for income and food security. *Food* Secur. 2,305-315.doi:10.1007/s12571-010-0085-0
- Barlagne, C; Cornetz, D; Blazy, J.M; Diman, J.L; and Ozier-Lafntaine,H; (2017). Consumers' preferences for fresh yam: a focus group study. *Food Sci. Nutri*. 5:1. Doi: 10.1002/fsn3.364
- Darkwa, K; Olasanmi, B; Asiedu, R; and Asfaw, A; (2020). Review of imperical and emerging breeding methods and tools for yam (Dioscorea spp.) improvement: status and prospects. *Zeitschrift Pflanzenzuchtung* 130,474–497. Doi: 10.1111/pbr.12783
- Degras, L. (1993). The yam: A tropical root crop. London, United Kingdom: Mac.Millian Press Ltd.
- FAO; (2021). Food and Agricultural Organization of the United Nations. Rome: *FAOSTAT statistical database*.
- Frossard, E; Aighewi, B.A; Ake, S; Barjolle, D; Baumann, P; Bernet, T; et al. (2017). The challenge of improving soil fertility in yam cropping systems in West Africa. Front. *Plant Sci. 8, 1953 – 1963. doi: 10.3389/fpls.2017.01953*
- Ifenekwe, G.E; and Umeh, O.I; (2014). Socioeconomic factors influencing performance of farmers in Imo state, Nigeria. *International journal of Applied Research and technology*. 3(3) 11–19.
- Igbal, M; Munir, A, Abbas, K' & Mustafa, K. (2003). The Impact of Institutional credit on Agricultural Production in Pakistan. *The Pakistan Development Review*, 42(4), 469–485.
- Mahmood, A.N., Khalid, M. & kouser, S. (2009). The role of agricultural credit in the growth of livestock sector: A case study of Faisalabad. *Pakistan Veterinary Journal*,29(2): 81-84. Retrieved online from http://www.pvj.com.pk/pdf-files/29_2/81-84.pdf on.
- Manyong, V.M; and Nokoe, S.K. (2001). Modelling of yam production for effective policy formulation. 8th symposium of the International Society of Tropical Root Crops (ISTRC), Ibadan, Nigeria, 48–51.
- Moahid, M; and Maharjan, K.L; (2020). Factors affecting farmers'access to formal and informal credit. Evidence from rural Afghanistan, *MDPI journals 2020* 12 (3) 1268.
- Mondo, J.M; Agre, P.A; Edemodu, A; Adebola, P; Asiedu, R; Akoroda, M.O; et al (2020). Floral biology and

pollination efficiency in yam (Dioscorea Spp.). Agri 10:560. doi: 10.3390/agriculture10110560

- Nahanga, V., and Vera, B. (2015). An analysis of yam production in Nigeria. *Acta Univ. Agric. Silvic. Mendeliane Brun.* 63, 659–665.
- Nahanga, V; and Vera, B; (2014). Yam production as a piller of food security in Logo local government area of Benue state, Nigeria. *European Sci. Journal*. 10, 27–42. doi: 10.11118/actun201563020659
- Nahanga, V; and Vera, B; (2015). An analysis of yam production in Nigeria. *Acta Univ. Agric. Silvic. Mendeliane Brun.*63, 659–665.
- Neina, D; (2021). Ecological and edaphic drivers of yam production in West Africa. *Appl. Environ. Soil Sci.* 1–13 doi: 10.1155/2021/5019481
- Obidiegwu, J. E; and Akpabio, M.E; (2017). The geography of yam cultivation in southern Nigeria: exploring its social meanings and cultural functions. *J. Ethn Food* 4, 28 35 doi: 10.1016/jef.2017.02.004.
- Obidiegwu, J.E; Lyons, J.B; and Chilaka, C.A; (2020). The Dioscorea genus (yam) an appraisal of nutritional and therapeutic potentials. *Foods* 9:1304. Doi:10.3390/foods9091304
- Olaitan, M.A. (2001). Finance for Small and Medium Enterprises: Nigeria's Agricultural Credit Guarantee Scheme Fund. *Journal of International Farm Management*, 3(2), 30-39.
- Oseni, G; Corral, P; Goldstein, M; and WINTERS, P; (2014). Explaining gender differentials in agricultural production in Nigeria. Policy Research working paper.6819, 59.
- Scott,G.J; Best, R; Rosegrant, M; and Bokanga, M; (2000). Root and tuber in the global food system. *A vision statement for the year 2020.* International Potato centre, Lima, Peru. 2000.
- Shiladytya, D; Piyush, K.S; and Magha, D.M;(2022). Determinants of institutional agricultural credit access and its linkage with farmer satisfaction in India:a moderated mediation analysis. *Emerald insight Discover journals*. (83)2.

The Effectiveness of Integration of ICT - Based Instruction In Information Literacy Instruction In A University library.

¹Igbasi Wilson Obinna Ph.D and ²Nwabueze Rose N.

¹Computer Science Department, ² College Library, Nwafor Orizu Collge of Education, Nsugbe. ¹signorw2020@gmail.com and ²rose7@gmail.com

Abstract

This empirical research paper aims to investigate the effectiveness of integration of ICT-based instruction in information literacy instruction in a university library. The study adopted a case study approach and collected data from students who participated in information literacy instruction. A purposive sampling technique was used to select 150 students who enrolled in library studies in UNIZIK, Awka. Data was gathered via a 21-item questionnaire, validated by experts in library studies and ICT at UNIZIK and Measurement and Evaluation at NOCEN. The data collected were analyzed using mean statistics, and the results showed that the integration of ICT in information literacy instruction had a positive impact on students' engagement, motivation, and self-efficacy in information literacy skills.

Keywords: ICT-Based Instruction, Information Literacy, Integration of ICT, University Library,

Introduction

Libraries in the 21st century have evolved into multifaceted institutions, aiming to provide advanced services to users (Gul and Bano, 2019). They serve as technological habitats that offer innovative solutions to meet the changing needs of patrons. The concept of the library as a place has been extensively explored, emphasizing its roles and functions within the community (Kawamoto and Koizumi, 2022). This conceptual model highlights symbolic infrastructures such as Wisdom, Heritage, and Community, along with categories like Intelligence, Creativity, and Sociability, showcasing the diverse aspects that libraries encompass.

Moreover, the idea of the library as a place extends beyond physical boundaries, as seen in practices in Norway that position public libraries at the heart of communities, ensuring accessibility to all individuals (Kawamoto, 2023). Additionally, the concept of green libraries and green librarianship has emerged, focusing on environmental sustainability within library operations and services (Fedorowicz-Kruszewska, 2020). This approach defines green librarianship as a set of skills essential for achieving environmental objectives within library settings.

Furthermore, environmental education in libraries plays a crucial role in promoting sustainable development and raising awareness about environmental issues (Fedorowicz-Kruszewska, 2020). By integrating environmental education into library activities, including people, artifacts, and processes, libraries can contribute significantly to educating the public on environmental concerns.

In essence, libraries today are multifaceted institutions that not only provide information but also serve as community hubs, promote sustainability, and offer innovative services to meet the diverse needs of users.

Information literacy is an essential skill for individuals in today's digital world, and the integration of Information and Communication Technology (ICT) has become a crucial aspect of information literacy instruction. The use of ICT-based instruction in information literacy is expected to enhance the effectiveness of teaching and learning. This study aims to examine the effectiveness of ICT-based instruction in

information literacy by investigating the impact of ICT in information literacy instruction in a university library.

The integration of Information and Communication Technology (ICT) in information literacy instruction within university libraries has been a subject of interest in educational research. Several studies have explored the effectiveness of ICT-based interventions in various domains, shedding light on the potential benefits and challenges associated with such approaches.

Morr and Layal (2020) conducted a systematic review on the effectiveness of ICT-based intimate partner violence interventions. Their findings highlighted the effectiveness of ICT-based interventions in screening, disclosure, and prevention. This suggests that ICT can play a significant role in facilitating specific outcomes within intervention programs.

Brandt, A.. Jensen, M., Andersen, S., and Sund, T., (2020) focused on ICT-based assistive technology for individuals with impaired cognition in everyday life. Their systematic review emphasized the evaluation of ICT-based assistive technologies' effectiveness in improving activity and participation for individuals with cognitive impairments. This underscores the potential of ICT to enhance cognitive functions and daily living activities.

Christiansen, P., Skjøth, M., Rothmann, M., Vinter, C., Lamont, R., & Draborg, E. (2019), discussed lifestyle interventions for maternal weight loss post-birth, noting the integration of ICT into people's lives and its potential in disease prevention. This highlights the pervasive nature of ICT and its applicability in promoting health-related behaviors.

Schneider and Preckel (2017) conducted a systematic review on variables associated with achievement in higher education. They found that instruction and communication technology had comparably weak effect sizes that did not increase over time. This suggests that while ICT plays a role in education, its impact may not be as substantial as expected.

In the context of coaching methodologies, Chatterjee, A., Gerdes, M., Prinz, A., & Martínez, S (2021) explored human coaching methodologies for eCoaching using ICT. They discussed integrating knowledge into eCoaching processes for healthy lifestyle management through ICT. This indicates the potential of ICT in supporting coaching practices for behavior change.

Webb, L., Clough, J., O'Reilly, D., Wilmott, D., & Witham, G. (2017) conducted a systematic review on the utility and impact of ICT for pre-registration nurse education. They highlighted a trade-off between the effectiveness of specific ICT methods and their practical adoption in the classroom. This trade-off underscores the importance of considering both effectiveness and feasibility when implementing ICT in educational settings.

In conclusion, the synthesis of these studies suggests that ICT can be effective in various domains, including health interventions, education, and coaching. While ICT shows promise in enhancing outcomes and facilitating interventions, considerations such as effectiveness, practical adoption, and impact on achievement need to be carefully evaluated when integrating ICT into instructional practices.

Purpose of the Study:

The purpose of this study was to investigate the effectiveness of ICT-based instruction in information literacy instruction in a university library. The study aimed to explore the impact of the integration of ICT in information literacy instruction on students' learning outcomes.

Statement of the Problem:

The problem addressed by this study is the need to improve information literacy instruction in higher education. With the increasing availability of digital resources and the growing importance of information literacy skills in the workforce, there is a need to explore new approaches to information literacy instruction.

This study addresses this problem by investigating the effectiveness of ICT-based instruction in information literacy instruction and its impact on students' learning outcomes.

Significance of the Study:

The study is significant because it adds to the growing body of literature on the integration of ICT in information literacy instruction. It provides insights into the experiences of students with ICT-based instruction and highlights the benefits and challenges associated with the use of digital tools and platforms in information literacy instruction. The study also underscores the importance of faculty support in the integration of ICT in information literacy instruction.

Scope of the Study:

This study focused on the effectiveness of ICT-based instruction in information literacy instruction in a university library. The study was limited to undergraduate students at Nnamdi Azikiwe University, (UNIZIK), Awka who were enrolled in courses that included information literacy instruction.

Research Questions

Three research questions guided the study

- 1. What is the Impact of integrating ICT in information literacy instruction on students' engagement in learning?
- 2. What is the Impact of integrating ICT in information literacy instruction on students' motivation to learn?
- 3. What is the impact of ICT in Information literacy on student self- efficacy?

Literature Review

Information literacy is the ability to find, evaluate, and use information effectively and ethically. Information literacy instruction is essential in equipping individuals with these skills, and it is usually provided in academic libraries. With the advent of ICT, information literacy instruction has been transformed, making it possible to deliver instruction online or through a combination of face-to-face and online methods. This has made it possible for libraries to reach more users and provide more personalized and flexible instruction.

Studies have shown that the integration of ICT in information literacy instruction has a positive impact on the effectiveness of teaching and learning.

Integrating Information and Communication Technology (ICT) in information literacy instruction has shown to have a significant impact on students' engagement in learning. Several studies have highlighted the advantages of incorporating ICT in education, such as increased flexibility in learning, rapid access to information, and deeper engagement leading to enhanced learning outcomes (Webb, L., Clough, J., O'Reilly, D., Wilmott, D., & Witham, G. 2017). However, there are also challenges associated with ICT integration, including technical issues for students and staff, the need for staff development to enhance ICT skills, and the time constraints faced by educators in developing and implementing ICT-based learning materials (Webb et al., 2017).

Research has indicated that the use of ICT in education, particularly in health sciences, has become widespread and can improve learning outcomes by increasing students' engagement and convenience (Fontaine, G., Cossette, S., Maheu-Cadotte, M., Mailhot, T., Deschênes, M., Mathieu-Dupuis, G., ... and Dubé, V.2019). Studies have emphasized the importance of interaction and collaboration between learners and facilitators, learner motivation, user-friendly technology, and learner-centered pedagogy in enhancing e-learning experiences (Regmi & Jones, 2020). Additionally, the engagement of teachers in the digital

learning environment has been found to strongly influence collaborative learning, highlighting the significance of user-friendly and informative learning environments (Männistö, M., Mikkonen, K., Kuivila, H., Virtanen, M., Kyngäs, H., & Kääriäinen, M. (2019).

Moreover, blended learning models, which combine traditional face-to-face instruction with online learning, have been shown to increase students' flexibility, convenience, learning outcomes, and overall engagement in the learning process (Alammary, 2019). Synchronous distance education, where students can interact with teachers in real-time, has been found to enhance student engagement and motivation for learning (He, L., Yang, N., Xu, L., Ping, F., Li, W., Sun, Q., ... & Zhang, H. 2020). These findings suggest that incorporating various forms of ICT in education can positively impact student engagement and learning outcomes.

Furthermore, the integration of ICT in information literacy instruction plays a crucial role in enhancing students' engagement in learning. By addressing the advantages and challenges associated with ICT integration, focusing on user-friendly technology, promoting collaborative learning environments, and utilizing blended learning approaches, educators can create more engaging and effective learning experiences for students.

Integrating Information and Communication Technologies (ICT) into information literacy instruction has a significant impact on students' motivation to learn. Research has shown that the effective integration of ICT in education can enhance students' acquisition of functional and critical thinking skills, including information literacy (Aslan and Zhu, 2016). When ICT is integrated into literacy instruction, it progresses from acquiring digital technology to empowering students, which can transform instruction and lead to the adoption of new instructional goals consistent with modern forms of reading and writing (Hutchison and Reinking, 2011).

Studies have indicated that students' ICT experience, usage, and attitude can influence their information literacy, and teachers' support and intervention can change students' motivation beliefs, including self-efficacy (Chen and Ying, 2022). Furthermore, ICT-related motivational constructs play a crucial role in the development of ICT literacy among students (Senkbeil, 2021). The integration of ICT, including the internet, as a learning tool, effectively enhances students' information literacy and ICT literacy competence (Resita and Ertikanto, 2018).

Moreover, integrating ICT in education from an early stage can equip students with ICT literacy for future global competition (Handayani, N., Rosana, D., Wilujeng, I., Sari, M., Nofianti, E., Az-Zahro, S., and Ramadhanti, D 2022). It has been found that ICT integration promotes student-centered instruction, collaboration, real-life connections with concepts, improved retention, multiple representations of concepts, and motivation for learning (Mensah and Nabie, 2021). Additionally, using electronic static infographics to support learning can enhance students' comprehension of instructional design concepts and ICT literacy, aligning with visual learning theory (Alsaadoun, 2021).

Integrating Information and Communication Technology (ICT) into information literacy instruction can have a significant impact on students' self-efficacy in information literacy skills. Self-efficacy, which refers to an individual's belief in their ability to succeed in specific situations or accomplish a task, plays a crucial role in academic achievement and learning outcomes (Schneider and Preckel, 2017). Students with high achievement are often characterized by high self-efficacy, indicating that fostering self-efficacy can lead to improved performance (Schneider and Preckel, 2017).

Studies have shown that interventions utilizing ICT can positively influence self-efficacy in various contexts. For instance, interventions using ICT have been found to enhance self-efficacy in health literacy, leading to improved health-promoting behaviors (Sany, S., Doosti, H., Mahdizadeh, M., Orooji, A., & Peyman, N., 2021). Similarly, technology-based coaching interventions have been effective in enhancing self-efficacy, particularly in the aging population (Bevilacqua, R., Casaccia, S., Cortellessa, G., Astell, A.,

Lattanzio, F., Corsonello, A., ... &

Maranesi, E., 2020). Moreover, web-based interventions targeting behavior change have successfully integrated behavior change techniques to enhance self-efficacy (Humphreys et al., 2021).

In the realm of education, the use of ICT has been associated with increased self-efficacy. For example, physical activity or sport-based interventions utilizing technology have been shown to increase self-efficacy in adults with intellectual disabilities (Bondár, R., Fronso, S., Bortoli, L., Robazza, C., Metsios, G., & Bertollo, M. 2019). Additionally, peer-to-peer online support groups leveraging ICT have been effective in enhancing self-management behavior and health literacy (Maclachlan, L., Mills, K., Lawford, B., Egerton, T., Setchell, J., Hall, L., ... & Bennell, K., 2020).

Furthermore, health literacy, which is closely related to information literacy, has been found to be a mediator between self-efficacy and health behavior (Cudjoe, J., Delva, S., Cajita, M., & Han, H., 2020). Studies have highlighted the importance of health literacy in influencing self-management behaviors, emphasizing the role of cognitive and social skills in promoting good health (Dahal and Hosseinzadeh, 2019). Additionally, health literacy interventions have led to improvements in knowledge, behavioral skills, and e-Health literacy, indicating a positive impact on self-efficacy (Perazzo, J., Reyes, D., & Webel, A., 2016).

In conclusion, integrating ICT in information literacy instruction positively influences students' motivation to learn by enhancing their skills, providing engaging learning experiences, and empowering them to navigate the digital age effectively. This integration not only improves information literacy but also fosters critical thinking, problem-solving, and communication skills essential for success in the 21st century.

Methodology

This study employed a survey research design, which allows for an in-depth investigation with a real life contrast. The population of the study is made up of 1,346 students of Nnamdi Azikiwe University who were enrolled in Library Studies. Using Purposive sampling technique, 150 students were sampled for the study in 2023. The instrument used for data collection was the questionnaire which had 21 items. The instrument has two sections; section A and B. Section A contains the introductory letter detailing the major theme and researchers involved, while section B contains the respondents' personal data, instruction and response guide. It contained items on a four point scale of strongly agree (SA=4 points), Agree (A=3 points), Disagree (D=2 points) and strongly disagree (SD=1 point). The instrument was first validated by an expert in Library study at UNIZIK, Awka and an expert in measurement and evaluation at Nwafor Orizu College of education, Nsugbe, both in Anambra State. The reliability of the research instrument was determined through the measure of internal consistency of 0.70. This measure is high enough for the instrument to be considered to be reliable. For the data analysis, the questions were analyzed using mean. The formulae for calculation of the mean scores of the respondents are as follows: Mean = $\bar{x} = \frac{?fx}{N}$. Any mean of 2.5 and above was considered to be high and accepted, and those below 2.5 were said to be low and unaccepted.

Results

Research Question One:

What is the Impact of integrating ICT in information literacy instruction on students' engagement in learning?

S/N	ITEMS	SA 4	A 3	D 2	SD 1	TOTAL	\overline{x}	REMARKS
1.	helps one stay focused during class.	100	10	20	20	490	3.27	Agreed
2.	Encourages active participation in learning activities	60	20	40	30	410	2.73	Agreed
3.	Helps in understanding complex concepts more easily	100	20	10	20	500	3.33	Agreed
4.	Increases my engagement with course materials	50	60	30	10	450	3.00	Agreed
5.	More motivation to learn when ICT tools are incorporated into information literacy instruction	100	30	15	5	525	3.50	Agreed
6.	ICT integration in information literacy instruction makes learning more enjoyable.	50	60	10	30	430	2.87	Agreed
7.	ICT integration in information literacy instruction enhances overall learning experience	100	15	15	20	495	3.30	Agreed

Table One: Mean rating scores on the impact of integrating ICT in information literacy instruction on students' engagement in learning.

The results presented in table one shows that items 1 to 7 were rated high by the respondents. This was clearly shown from their respective mean scores of 3.27, 2.73, 3.33, 3.00, 3.50, 2.87 and 3.30 which were above the criterion of acceptance fixed at 2.5 and above. They were therefore accepted. it means that the respondents are in agreement that the concepts stated above are some of the impact of ICT in information literacy on student engagement.

Research Question Two: What is the Impact of integrating ICT in information literacy instruction on students' motivation to learn?

Table 2:Mean rating scores on the impact of integrating ICT in information literacy instruction on
students' motivation to learn.

S/N	ITEMS	SA	A 3	D 2	SD	TOTAL	x	REMARKS
_		4	-		<u> </u>			
8.	inspires one to set higher academic goals	100	10	30	10	500	3.33	Agreed
9.	boosts my confidence in my ability to learn new skills	100	30	10	10	520	3.47	Agreed
10.	Increases willingness to take on challenges in studies.	70	40	30	10	470	3.13	Agreed
11.	Increases motivation to participate in class activities.	50	50	25	15	415	2.77	Agreed
12.	Enhances desire to achieve academic success	80	30	25	15	475	3.16	Agreed
13.	The use of ICT tools in information literacy instruction makes people more interested in exploring new topics.	50	70	25	5	465	3.10	Agreed
14.	more motivation to study and learn when ICT is integrated into information literacy instruction	90	40	15	5	515	3.43	Agreed

The results presented in table two shows that items 8 to 14 were rated high by the respondents. This was clearly shown from their respective mean scores of 3.33, 3.47, 3.13, 2.97, 3.16, 3.10 and 3.43 which were above the criterion of acceptance fixed at 2.5 and above. They were therefore accepted. It means that the respondents are in agreement that the concepts stated above are some of the impact of ICT in information literacy on student motivation.

S/N	ITEMS	SA	Α	D	SD	TOTAL	x ⁻	REMARKS
		4	3	2	1			
15.	Improves my self-assurance in my ability to communicate information effectively.	70	40	30	10	470	3.13	Agræd
16.	Increases confidence in one's ability to find and evaluate information effectively.	50	70	25	5	465	3.10	Agræd
17.	Enhances my belief in my capacity to use information ethically.	80	30	25	15	475	3.16	Agreed
18.	Using ICT in information literacy instruction boosts my confidence in my ability to navigate digital resources efficiently.	65	55	20	10	476	3.16	Agreed
19.	Does not enhance my belief in my capacity to use information ethically.	5	20	25	100	230	1.53	Disagreed
20.	Does not increase my confidence in my ability to find and evaluate information effectively.	5	25	100	20	315	2.10	Disagreed
21.	I do not feel more confident in my ability to critically analyze information when ICT is integrated into information literacy instruction	10	10	30	100	230	1.53	Disa greed

Research Question Three: What is the impact of ICT in Information literacy on Student Self- efficacy? **Table 3: Mean rating scores on the impact of ICT in information literacy on student self-efficacy.**

The results presented in table three shows that items 15 to 18 were rated high by the respondents. This was clearly shown from their respective mean scores of 3.13, 3.10, 3.16 and 3.16 which are above the criterion of acceptance fixed at 2.5 and above. It means that the respondents are in agreement that the concepts stated above are some of the impact of ICT in information literacy on student self-efficacy. Items 19, 20 and 21 were rated low by the respondents. This was clearly indicated from their respective mean scores of 1.53, 2.10 and 1.53. which were below the criterion of acceptance fixed at 2.5 and there was rejected. It means that the respondents disagree that the concepts stated above are not among the impact of ICT in information literacy on student self-efficacy.

Discussion of Findings

The result of the analysis of research question one, indicates that some of the impacts of ICT in information literacy on student engagement are as follows; students stay focused during class, active participation in

learning activities are highly encouraged, complex concepts are easily understood, there is an increase in engagement with course materials, increase in motivation to learn, makes learning more enjoyable and it enhances overall learning experience.

This is in line with the findings of kurz and Gelfand, 2014 who observed that the use of ICT-based instruction in information literacy increases students' engagement, motivation and information literacy.

The result of the analysis of research question two shows that the impact of ICT in information literacy on student motivation are as follows; it inspires students to set higher academic goals, boosts students confidence in their ability to learn new skills, increases their willingness to take on challenges in their studies, enhances desire to achieve academic success, makes them more interested in exploring new topics and finally, it gives them more motivation to study and learn.

This is in agreement with the findings of Ashlan and Zhu, 2016 who observed that the effective integration of ICT in education can enhance students acquisition of functional and critical thinking skills, including information literacy.

The result of the analysis of research question three shows that the impact of ICT in information literacy on student self-efficacy are as follows; improves self-assurance in their ability to communicate effectively, increases confidence in their ability to find and evaluate information effectively, enhances their capacity to use information ethically and it boosts their confidence in their ability to navigate digital resources effectively.

This is line with the findings of Bawden et al, 2009 and that of Schneiden et al 2017. Bawden et al found that the use of ICT in information literacy instruction improves student self-efficacy, which is an essential component of information literacy. Schneiden et al observed that students, with high achievement are often characterized by high self-efficacy, indicating that fostering self-efficacy can lead to improved performance.

Summary

This study investigated the effectiveness of integration of ICT-based instruction in information literacy instruction within a university library setting. Through a comprehensive analysis, several key findings have emerged, providing valuable insights into the integration of ICT in information literacy instruction.

Firstly, the concept of digital literacy was underscored as a crucial component in today's educational landscape. The proliferation of digital resources necessitates that students not only access information but also critically evaluate and utilize it effectively. ICT-based instruction has proven to be an instrumental method in fostering these skills, aligning with the demands of the digital age.

Empirical evidence from literature reviewed showed that ICT integration in the university library significantly enhanced students' information literacy skills. The findings revealed that students who received ICT-based instruction showed improved abilities in searching, evaluating, and applying information. This improvement was attributed to the interactive nature of ICT tools, which made the learning process more engaging and effective. However, challenges such as the need for continuous professional development for library staff and adequate technological infrastructure were also identified.

Conclusion

This study confirms that ICT-based instruction is an effective strategy for improving information literacy in university libraries. The integration of ICT tools not only aligns with contemporary educational theories but also demonstrates tangible benefits in practice.

Recommendations

Based on the findings of this study, the following recommendations are suggested:

1. University administrations should implement continuous professional development to ensure staffs

are proficient with the latest ICT tools and instructional methods.

- 2. University administrations and government bodies should allocate budgets for modernizing library facilities with up-to-date computers, software, and high-speed internet to support ICT-based instruction.
- 3. Universities should create multimedia-rich content like interactive tutorials and videos to make learning more engaging and effective.
- 4. Universities should use ICT tools to facilitate collaborative projects, online discussions, and personalized learning experiences to boost student engagement and motivation.
- 5. Universities should establish a system for ongoing evaluation and feedback to continually refine and improve ICT-based instructional methods and materials.

References

- Alammary, A. (2019). Blended learning models for introductory programming courses: a systematic review. Plos One, 14(9), e0221765. https://doi.org/10.1371/journal.pone.0221765
- Alsaadoun, A. (2021). The effect of employing electronic static infographic technology on developing university students' comprehension of instructional design concepts and ict literacy. International Journal of Education and Literacy Studies, 9(1), 54. https://doi.org/10.7575/aiac.ijels.v.9n.1p.54
- Arantes, M., Arantes, J., & Ferreira, M. (2018). Tools and resources for neuroanatomy education: a systematic review. BMC Medical Education, 18(1). https://doi.org/10.1186/s12909-018-1210-6
- Aslan, A., & Zhu, C. (2016). Investigating variables predicting Turkish pre-service teachers' integration of ict into teaching practices. British Journal of Educational Technology, 48(2), 552-570. https://doi.org/10.1111/bjet.12437
- Bevilacqua, R., Casaccia, S., Cortellessa, G., Astell, A., Lattanzio, F., Corsonello, A., ... & Maranesi, E. (2020). Coaching through technology: a systematic review into efficacy and effectiveness for the ageing population. International Journal of Environmental Research and Public Health, 17(16), 5930. https://doi.org/10.3390/ijerph17165930
- Bondár, R., Fronso, S., Bortoli, L., Robazza, C., Metsios, G., & Bertollo, M. (2019). The effects of physical activity or sport-based interventions on psychological factors in adults with intellectual disabilities: a systematic review. Journal of Intellectual Disability Research, 64(2), 69-92. https://doi.org/10.1111/jir.12699
- Brandt, Å., Jensen, M., Søberg, M., Andersen, S., & Sund, T. (2020). Information and communication technology-based assistive technology to compensate for impaired cognition in everyday life: a systematic review. Disability and Rehabilitation Assistive Technology, 15(7), 810-824. https://doi.org/10.1080/17483107.2020.1765032
- Chatterjee, A., Gerdes, M., Prinz, A., & Martínez, S. (2021). Human coaching methodologies for automatic electronic coaching (ecoaching) as behavioral interventions with information and communication technology: systematic review. Journal of Medical Internet Research, 23(3), e23533. https://doi.org/10.2196/23533
- Chen, Q., & Ying, M. (2022). The influence of teacher support on vocational college students' information literacy: the mediating role of network perceived usefulness and information and communication technology self-efficacy. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.1032791
- Christiansen, P., Skjøth, M., Rothmann, M., Vinter, C., Lamont, R., & Draborg, E. (2019). Lifestyle interventions to maternal weight loss after birth: a systematic review. Systematic Reviews, 8(1). https://doi.org/10.1186/s13643-019-1186-2
- Cudjoe, J., Delva, S., Cajita, M., & Han, H. (2020). Empirically tested health literacy frameworks. HLRP

Health Literacy Research and Practice, 4(1). https://doi.org/10.3928/24748307-20191025-01

- Dahal, P., & Hosseinzadeh, H. (2019). Association of health literacy and diabetes self-management: a systematic review. Australian Journal of Primary Health, 25(6), 526. https://doi.org/10.1071/py19007
- Fedorowicz-Kruszewska, M. (2020). Environmental education in libraries theoretical foundations and practical implementation. Library Management, 41(4/5), 279-293. https://doi.org/10.1108/lm-12-2019-0087
- Fedorowicz-Kruszewska, M. (2020). Green libraries and green librarianship towards conceptualization. Journal of Librarianship and Information Science, 53(4), 645-654. https://doi.org/10.1177/0961000620980830
- Fontaine, G., Cossette, S., Maheu-Cadotte, M., Mailhot, T., Deschênes, M., Mathieu-Dupuis, G., ... & Dubé, V. (2019). Efficacy of adaptive e-learning for health professionals and students: a systematic review and meta-analysis. BMJ Open, 9(8), e025252. https://doi.org/10.1136/bmjopen-2018-025252
- Gul, S., & Bano, S. (2019). Smart libraries: An emerging and innovative technological habitat of the 21st century. The Electronic Library, 37(5), 764-783. https://doi.org/10.1108/el-02-2019-0052
- Handayani, N., Rosana, D., Wilujeng, I., Sari, M., Nofianti, E., Az-Zahro, S., ... & Ramadhanti, D. (2022). ICT literacy analysis of junior high school students through environmental learning on green consumerism using Padlet. Jurnal Penelitian Pendidikan IPA, 8(3), 1049-1054. https://doi.org/10.29303/jppipa.v8i3.1254
- He, L., Yang, N., Xu, L., Ping, F., Li, W., Sun, Q., ... & Zhang, H. (2020). Synchronous distance education vs traditional education for health science students: a systematic review and meta-analysis. Medical Education, 55(3), 293-308. https://doi.org/10.1111/medu.14364
- Humphreys, G., Evans, R., Makin, H., Cooke, R., & Jones, A. (2021). Identification of behavior change techniques from successful web-based interventions targeting alcohol consumption, binge eating, and gambling: systematic review. Journal of Medical Internet Research, 23(2), e22694. https://doi.org/10.2196/22694
- Hutchison, A., & Reinking, D. (2011). Teachers' perceptions of integrating information and communication technologies into literacy instruction: a national survey in the United States. Reading Research Quarterly, 46(4), 312-333. https://doi.org/10.1002/rrq.002
- Kawamoto, M. (2023). Practices of the "library as place" in Norway. Proceedings of the Association for Information Science and Technology, 60(1), 615-619. https://doi.org/10.1002/pra2.826
- Kawamoto, M., & Koizumi, M. (2022). Library as place: Conceptual model for public libraries and their transition. Journal of Documentation, 79(2), 376-397. https://doi.org/10.1108/jd-02-2022-0046
- Maclachlan, L., Mills, K., Lawford, B., Egerton, T., Setchell, J., Hall, L., ... & Bennell, K. (2020). Design, delivery, maintenance, and outcomes of peer-to-peer online support groups for people with chronic musculoskeletal disorders: systematic review. Journal of Medical Internet Research, 22(4), e15822. https://doi.org/10.2196/15822
- Männistö, M., Mikkonen, K., Kuivila, H., Virtanen, M., Kyngäs, H., & Kääriäinen, M. (2019). Digital collaborative learning in nursing education: a systematic review. Scandinavian Journal of Caring Sciences, 34(2), 280-292. https://doi.org/10.1111/scs.12743
- Mensah, J., & Nabie, M. (2021). The effect of PowerPoint instruction on high school students' achievement and motivation to learn geometry. International Journal of Technology in Education, 331-350. https://doi.org/10.46328/ijte.55

- Morr, C., & Layal, M. (2020). Effectiveness of ict-based intimate partner violence interventions: a systematic review. BMC Public Health, 20(1). https://doi.org/10.1186/s12889-020-09408-8
- Perazzo, J., Reyes, D., & Webel, A. (2016). A systematic review of health literacy interventions for people living with HIV. AIDS and Behavior, 21(3), 812-821. https://doi.org/10.1007/s10461-016-1329-6
- Regmi, K., & Jones, L. (2020). A systematic review of the factors enablers and barriers affecting elearning in health sciences education. BMC Medical Education, 20(1). https://doi.org/10.1186/s12909-020-02007-6
- Resita, I., & Ertikanto, C. (2018). Designing electronic module based on learning content development system in fostering students' multi-representation skills. Journal of Physics Conference Series, 1022, 012025. https://doi.org/10.1088/1742-6596/1022/1/012025
- Sany, S., Doosti, H., Mahdizadeh, M., Orooji, A., & Peyman, N. (2021). The health literacy status and its role in interventions in Iran: a systematic and meta-analysis. International Journal of Environmental Research and Public Health, 18(8), 4260. https://doi.org/10.3390/ijerph18084260
- Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: a systematic review of meta-analyses. Psychological Bulletin, 143(6), 565-600. https://doi.org/10.1037/bul0000098
- Senkbeil, M. (2021). Ict-related variables as predictors of ict literacy beyond intelligence and prior achievement. Education and Information Technologies, 27(3), 3595-3622. https://doi.org/10.1007/s10639-021-10759-x
- Webb, L., Clough, J., O'Reilly, D., Wilmott, D., & Witham, G. (2017). The utility and impact of information communication technology (ict) for pre-registration nurse education: a narrative synthesis systematic review. Nurse Education Today, 48, 160-171. https://doi.org/10.1016/j.nedt.2016.10.007
- Zhang, X., AlMekhled, D., & Choate, J. (2021). Are virtual physiology laboratories effective for student learning? a systematic review. Ajp Advances in Physiology Education, 45(3), 467-480. https://doi.org/10.1152/advan.00016.2021

La Linguistique Appliquée Un Véhicule Pour La Traduction

Akabogu, Damian K. Department of French Nwafor Orizu College of Education, Nsugbe akabogu.damian.kenechukwu@nocen.edu.ng, +2347033035547

Résumé

Cette étude explore la linguistique appliquée comme un véhicule pour la traduction, en analysant ses concepts fondamentaux, ses méthodologies et ses applications dans domaines divers. La recherche commence par une vue d'ensemble de la linguistique appliquée, définissant son champ d'application et son évolution, et mettant en évidence l'intersection avec la traduction. Les concepts clés tels que l'acquisition du langage, la sociolinguistique, la psycholinguistique et l'analyse du discours sont examinés, en soulignant leur pertinence pour la théorie et la pratique de la traduction. L'étude approfondit le processus de traduction, y compris l'analyse du texte source, la production du texte cible, les stratégies, les défis et les solutions. En outre, elle discute des méthodes de la linguistique appliquée comme la linguistique de corpus, l'analyse contrastive, l'analyse des erreurs et la pragmatique en traduction. Les avancées technologiques en matière de traduction automatique, d'outils assistés par ordinateur et d'intelligence artificielle sont examinées, suivies d'une exploration des applications de la traduction dans les domaines littéraire, technique, juridique et médical. L'étude conclut par une analyse de la traduction dans l'enseignement des langues, de ses avantages et inconvénients, et de son intégration dans les programmes linguistiques. Enfin, elle identifie les défis actuels dans le domaine, les tendances émergentes et les orientations futures de la linguistique appliquée en traduction, soulignant son rôle crucial dans la facilitation de la communication et de la compréhension interculturelles dans un monde globalisé.

Mots-clés: linguistique appliquée, études de traduction, acquisition du langage, traduction automatique, communication interculturelle, enseignement des langues

Introduction

La linguistique appliquée offre des avantages significatifs à la société nigériane contemporaine. Elle améliore la communication efficace à travers le paysage linguistique diversifié du Nigeria en promouvant l'éducation et la littératie multilingues. La linguistique appliquée aide au développement de politiques linguistiques qui respectent et intègrent les nombreuses langues du Nigeria, favorisant ainsi la cohésion sociale. Elle soutient également les services de traduction et d'interprétation, cruciaux pour surmonter les barrières linguistiques dans les contextes juridiques, médicaux et gouvernementaux. Selon Nemmich, (2016), à l'ère numérique, elle sous-tend les avancées technologiques en matière de langue, comme le traitement du langage naturel, facilitant une communication et une accessibilité numérique améliorées. La linguistique appliquée est donc un domaine dynamique axé sur l'application pratique des théories, méthodes et résultats linguistiques pour résoudre des problèmes concrets liés à la langue. D'après Beukelman et Mirenda (2017), elle englobe un large éventail de questions linguistiques, allant au-delà de la linguistique théorique pour aborder des préoccupations pratiques dans divers domaines tels que l'éducation linguistique, la politique linguistique et la communication pratique, en employant des approches interdisciplinaires pour traiter des questions telles que l'acquisition du langage, les troubles du langage, la sociolinguistique et, de

manière importante, la traduction.

Le champ de la linguistique appliquée comprend l'analyse de l'utilisation de la langue, la planification et la politique linguistiques, l'évaluation et les tests linguistiques, et le développement de matériels éducatifs. Selon Manço et al (2022), il s'intéresse fondamentalement aux manières dont la langue influence et est influencée par des facteurs sociaux, culturels, psychologiques et éducatifs. La linguistique appliquée ne se limite à aucun cadre théorie unique ; elle est plutôt éclectique, tirant des perspectives de diverses traditions linguistiques pour aborder des problèmes spécifiques liés à la langue. Siham et Laeticia (2023), a dit que cette orientation pragmatique la rend particulièrement bien adaptée pour aborder les complexités impliquées dans la traduction, où l'exactitude linguistique et la sensibilité culturelle sont primordiales. La linguistique appliquée informe le développement de technologies de traduction, telles que la traduction automatique et les outils assistés par ordinateur, améliorant ainsi l'efficacité et la fiabilité. D' après Ladha et al (2018), en intégrant la recherche linguistique et les applications pratiques, la linguistique appliquée garantit que les traductions maintiennent la fidélité au matériel source tout en résonnant avec le public cible, facilitant ainsi une communication interculturelle efficace.

La traduction est le processus de conversion de textes ou de discours d'une langue à une autre tout en préservant le sens, le ton et le contexte originaux. Elle implique la compréhension des langues source et cible, assurant une communication précise et culturellement appropriée entre les locuteurs de différentes langues. A propos de Perreault-Corbeil (2023), la traduction joue un rôle crucial au sein de la linguistique appliquée, servant d'application pratique des principes linguistiques. La traduction implique la conversion de textes ou de discours d'une langue à une autre tout en maintenant le sens, le ton et le contexte. Léon (2015), a dit que ce processus nécessite une compréhension approfondie des langues source et cible, ainsi que des nuances culturelles, en faisant un domaine essentiel de l'étude linguistique appliquée. La traduction non seulement facilite la communication interculturelle mais contribue également à la préservation et à la diffusion des connaissances à travers les frontières linguistiques.

La linguistique appliquée fournit les bases théoriques et les outils méthodologiques nécessaires à une traduction efficace. Par exemple, la connaissance de la syntaxe, de la sémantique, de la pragmatique et de la sociolinguistique est essentielle pour interpréter et rendre avec précision le sens dans une autre langue. Remvikos (2020), a dit de plus, les études de traduction, un sous-domaine de la linguistique appliquée, examinent les processus cognitifs impliqués dans la traduction, les facteurs socioculturels qui influencent les décisions de traduction et les considérations éthiques dans la pratique de la traduction. En appliquant ces principes linguistiques, les traducteurs peuvent produire des traductions plus précises et culturellement appropriées, améliorant la compréhension mutuelle entre les locuteurs de langues différentes.

Le domaine de la linguistique appliquée a évolué de manière significative depuis son établissement formel au milieu du XXe siècle. Selon Yvon (2023), initialement axé sur l'enseignement et l'apprentissage des langues, il s'est étendu pour incorporer un large éventail d'applications linguistiques, y compris la traduction. Cette évolution reflète la reconnaissance croissante de l'importance de l'expertise linguistique pour aborder des problèmes pratiques dans un monde globalisé. D' après Znaidi (2016), le développement de sous-domaines tels que la linguistique judiciaire, la linguistique computationnelle et la linguistique médicale illustre encore la diversification et la pertinence du domaine. La trajectoire historique de la linguistique appliquée montre un passage d'un focus principalement éducatif à un engagement plus large avec les enjeux sociétaux où la langue joue un rôle crucial. Cette perspective plus large a conduit à des recherches et des méthodologies innovantes qui abordent des défis linguistiques complexes dans divers contextes professionnels et sociaux. Lignereux (2016), par exemple a dit que l'utilisation de l'analyse linguistique dans les contextes juridiques pour comprendre le discours judiciaire ou dans les soins de santé pour améliorer la communication entre médecins et patients illustre l'extension du champ d'application de la linguistique appliquée. L'intégration de la technologie, en particulier dans des domaines comme le

traitement du langage naturel et la traduction automatique, a encore propulsé la croissance et la pertinence du domaine dans la société contemporaine.

La traduction et la linguistique appliquée se croisent de diverses manières, reflétant leur influence mutuelle et leurs objectifs communs. La linguistique appliquée fournit les fondations théoriques et les outils méthodologiques essentiels pour une pratique de la traduction efficace. Laviosa et Liu (2021), par exemple, a dit que la linguistique de corpus, un sous-domaine de la linguistique appliquée, offre des ressources et des techniques précieuses pour analyser les modèles linguistique de corpus implique l'étude de la langue telle qu'elle est exprimée dans des corpus textuels réels (ensembles de textes vastes et structurés). Cette approche permet aux traducteurs d'accéder à et d'analyser l'utilisation authentique de la langue, les aidant à prendre des décisions éclairées sur le choix des mots, les collocations et la phraséologie dans la langue cible. Laviosa (2021), a dit de plus, les études de traduction, une discipline au sein de la linguistique appliquée, explorent les complexités des processus de traduction et développent des stratégies pour relever des défis tels que l'équivalence culturelle et les expressions idiomatiques.

D' après Dault et Collins (2016), les études de traduction s'appuient sur des perspectives de la sociolinguistique, de la psycholinguistique et de l'analyse du discours pour améliorer la compréhension des traducteurs de l'utilisation de la langue dans différents contextes. En examinant comment la langue fonctionne dans divers contextes sociaux et psychologiques, les études de traduction aident les traducteurs à naviguer les nuances de sens et de contexte essentielles pour une traduction efficace. Cette approche interdisciplinaire garantit que les traductions sont non seulement linguistiquement précises mais aussi culturellement et contextuellement appropriées, facilitant une communication efficace à travers les langues et les cultures. La littérature récente souligne l'intégration continue des avancées technologiques dans la traduction et la linguistique appliquée. Selon Peraldi et al (2021), la traduction automatique (TA) et les outils de traduction assistée par ordinateur (TAO) ont transformé le paysage, rendant la traduction plus efficace et accessible.

L'étude actuelle est d'une importance capitale dans le monde globalisé d'aujourd'hui, car l'interconnexion des sociétés par la technologie, la migration et les relations internationales a amplifié la demande de traductions précises et culturellement sensibles. La linguistique appliquée, avec son approche interdisciplinaire, fournit des outils essentiels et des perspectives théoriques pour répondre à cette demande. Hélot (2015), Cette étude est cruciale pour améliorer la communication interculturelle, promouvoir la compréhension mutuelle et préserver la diversité linguistique. L'urgence de cette étude découle de la dépendance croissante à la traduction dans divers domaines critiques, y compris les affaires internationales, la diplomatie, les soins de santé et l'éducation. Les erreurs de communication dans ces domaines peuvent entraîner des conséquences significatives, telles que des malentendus diplomatiques, des soins aux patients compromis et des résultats éducatifs inefficaces. D' après Boukrous (2023) l'avancement rapide de la technologie, en particulier dans la traduction automatique et le traitement du langage naturel, souligne également la nécessité de la recherche en linguistique appliquée pour affiner ces outils, garantissant qu'ils produisent des traductions précises et contextuellement appropriées.

De plus, il existe des lacunes notables dans les pratiques de traduction actuelles que la linguistique appliquée peut combler. Salon Al-Khatib (2022), par exemple, de nombreux systèmes de traduction automatique ont du mal avec les expressions idiomatiques, les références culturelles et les significations spécifiques au contexte, entraînant des inexactitudes. La recherche en linguistique appliquée peut combler ces lacunes en fournissant des insights plus profonds sur l'utilisation de la langue, les nuances culturelles et les stratégies de traduction efficaces. Ainsi, étudier la linguistique appliquée comme un véhicule pour la traduction est essentiel pour répondre aux besoins croissants et évolutifs de la communication globale, favoriser une meilleure compréhension et améliorer l'efficacité des technologies de traduction.

Concepts Clés en Linguistique Appliquée

La linguistique appliquée offre des perspectives et des outils cruciaux qui améliorent considérablement la pratique de la traduction en s'appuyant sur divers sous-domaines, notamment l'acquisition du langage, la sociolinguistique, la psycholinguistique et l'analyse du discours, comme résumé dans la Figure 1. La recherche sur l'acquisition du langage informe la traduction en mettant en lumière la manière dont les apprenants perçoivent et produisent le langage. Comprendre les principes de l'acquisition de la langue maternelle (ALM) aide les traducteurs à saisir les structures linguistiques innées partagées par tous les humains, ce qui peut aider à créer des traductions naturellement compréhensibles pour les locuteurs natifs. Bouhon (2022), a dit queles théories de l'acquisition d'une deuxième langue (ADL), telles que l'hypothèse de l'entrée de Krashen, soulignent l'importance de fournir des traductions qui soient non seulement précises mais aussi accessibles et légèrement stimulantes, facilitant une meilleure compréhension et un meilleur apprentissage pour les locuteurs non natifs.

La sociolinguistique est vitale en traduction car elle explore comment la langue varie et change selon les différents contextes sociaux. Les traducteurs doivent être conscients des pratiques de changement de code, des dialectes régionaux et des sociolectes pour produire des traductions qui résonnent avec des publics spécifiques. St-Hilaire (2022), aussi a dit queles perspectives sociolinguistiques garantissent que les traductions reflètent l'identité sociale, les normes et les nuances culturelles de la communauté de la langue cible. De plus, comprendre les attitudes et les politiques linguistiques peut aider les traducteurs à naviguer les implications politiques et culturelles de leur travail, garantissant que les traductions ne marginalisent ni n'offensent involontairement aucun groupe.

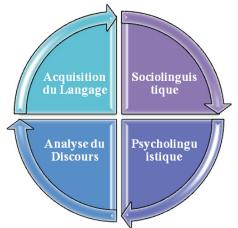


Figure 1: Concepts clés en linguistique appliquee dans la pratique de la traduction

La psycholinguistique contribue à la traduction en élucidant les processus cognitifs impliqués dans la compréhension et la production du langage. D' après Lan et al (2023), les connaissances sur la manière dont le cerveau traite et décode le langage aident les traducteurs à créer des textes qui s'alignent sur les schémas cognitifs du public cible, améliorant ainsi la lisibilité et la comprehension. La recherche sur le bilinguisme et les troubles du langage informe les traducteurs des éventuels défis cognitifs et des stratégies pour les surmonter, garantissant que les traductions soient à la fois linguistiquement précises et cognitivement accessibles.

L'analyse du discours est essentielle pour la traduction car elle examine comment le sens et la cohérence sont construits dans les textes et les interactions. Delisle (2021), a dit que les traducteurs utilisent l'analyse du discours pour comprendre la structure et la fonction de différents types de textes, garantissant

que les traductions maintiennent la cohérence et l'intention communicative de l'original. Les techniques d'analyse de la conversation aident les traducteurs à gérer les dialogues et les éléments de langage parlé, préservant le flux naturel et les normes conversationnelles de la langue cible. Selon Whitfield (2014), l'analyse critique du discours (ACD) permet aux traducteurs de reconnaître et d'aborder les dynamiques de pouvoir et les biais idéologiques dans les textes, produisant des traductions qui sont non seulement précises mais aussi socialement et politiquement sensibles.

Le Processus de Traduction

Le processus de traduction implique plusieurs étapes et une variété de stratégies pour transmettre efficacement le sens du texte source (TS) au texte cible (TC). Les composantes clés de ce processus comprennent l'analyse du texte source, la production du texte cible, les stratégies de traduction telles que capturées dans la Figure 2. L'analyse du texte source est la première étape cruciale du processus de traduction. Elle implique une compréhension approfondie du contenu, de la structure et du contexte du texte source. Cette étape demande aux traducteurs de considérer le but du texte, son genre et son public, ainsi que ses nuances linguistiques et culturelles. Selon Vianin (2016), comprendre ces aspects aide à identifier les difficultés potentielles et à déterminer l'approche de traduction appropriée. L'analyse linguistique se concentre sur la syntaxe, la sémantique et le lexique, garantissant que les traducteurs comprennent avec précision le sens du texte source. L'analyse culturelle implique de comprendre les références culturelles, les idiomes et les éléments spécifiques au contexte qui peuvent ne pas avoir d'équivalents directs dans la langue cible. D' après Saldanha (2021), par exemple, les expressions idiomatiques posent souvent des défis importants en raison de leurs significations culturellement ancrées.

La production du texte cible est l'étape où la traduction effective se produit. Cela implique de rendre le texte source dans la langue cible tout en maintenant son sens, sa tonalité et ses caractéristiques stylistiques. Berman et Venuti (2021), ont dit que les traducteurs doivent équilibrer la fidélité au texte source avec la lisibilité et la fluidité dans la langue cible. Cette étape comprend plusieurs sous-processus tels que la rédaction, la révision et la correction. La phase de rédaction est la première traduction, où les traducteurs visent à produire une version cohérente du texte dans la langue cible. La révision implique de passer en revue et de peaufiner la traduction pour assurer précision et cohérence. Selon Smith (2010), la correction se concentre sur le polissage du texte final, en traitant les problèmes linguistiques ou stylistiques et en s'assurant qu'il répond aux normes requises.



Les stratégies de traduction sont les méthodes et techniques utilisées par les traducteurs pour surmonter les différents défis de traduction. Les stratégies courantes comprennent:

- 1. Traduction Littérale: Schumacher (2020), a dit que traduire mot à mot à partir du texte source, souvent utilisée pour des textes techniques ou hautement spécifiques où la précision est primordiale.
- 2. Adaptation: selon Si-Ammour (2020), modifier le texte pour qu'il corresponde aux normes culturelles et contextuelles de la langue cible, ce qui est crucial pour la littérature, les documents marketing et autres textes sensibles sur le plan culturel.

- 3. Emprunt: d'après Cebuc (2021), incorporer des mots ou des phrases de la langue source dans le texte cible sans traduction, souvent utilisé pour des termes sans équivalent direct.
- 4. Modulation: Dumas (2022), a dit que changer la forme du message tout en conservant le même sens, utile pour traduire des expressions idiomatiques ou des références culturellement spécifiques.

Méthodes de Linguistique Appliquée en Traduction

La linguistique appliquée offre une gamme de méthodes qui améliorent significativement les pratiques de traduction. Parmi celles-ci, on trouve notamment la linguistique de corpus, l'analyse contrastive, l'analyse d'erreur et la pragmatique. Chaque méthode apporte des perspectives uniques et des outils qui aident les traducteurs à produire des traductions précises, appropriées sur le plan contextuel et sensibles sur le plan culturel. La linguistique de corpus implique l'utilisation de vastes collections de textes (corpus) pour étudier les schémas et l'usage du langage. En traduction, la linguistique de corpus fournit des données empiriques qui peuvent éclairer les décisions de traduction. Les traducteurs utilisent des corpus parallèles, qui contiennent des textes et leurs traductions, pour analyser comment des phrases et des structures spécifiques sont rendues dans les langues différentes.

Cette méthode aide à identifier les équivalents de traduction courants et les préférences stylistiques dans la langue cible (Deniaud et al, 2020). La linguistique de corpus aide également à développer des ressources de traduction telles que des dictionnaires, des glossaires et des systèmes de mémoire de traduction. En analysant les modèles de fréquence et de collocation, les traducteurs peuvent s'assurer que leurs traductions sont non seulement précises, mais reflètent également l'usage naturel de la langue dans la langue cible. D' après Lenart et Leclercq (2021), de plus, les corpus peuvent révéler des variations dans l'usage de la langue à travers différents genres et registres, guidant ainsi les traducteurs dans l'adaptation de leur style de manière appropriée.



Figure 3: Méthodes de Linguistique Appliquée en Traduction

L'analyse contrastive compare les structures linguistiques entre deux ou plusieurs langues pour identifier les similitudes et les différences. Cette méthode est particulièrement utile en traduction car elle met en évidence les domaines où une traduction directe pourrait entraîner des erreurs ou des malentendus. Selon Cavanagh et Lavoie (2023), en comprenant les différences structurelles entre les langues source et cible, les traducteurs peuvent anticiper les éventuels pièges et appliquer des stratégies pour les surmonter. Par exemple, l'analyse contrastive peut révéler des différences dans les structures syntaxiques, telles que l'ordre des mots ou l'utilisation de la voix passive, qui pourraient nécessiter des ajustements en traduction. Elle aide également à comprendre comment différentes langues expriment des catégories grammaticales spécifiques, telles que le temps, l'aspect et la modalité. Drolet (2021), a dit que cette connaissance permet aux traducteurs

de choisir des structures équivalentes dans la langue cible qui préservent le sens et l'intention originaux.

L'analyse d'erreur consiste à examiner les erreurs commises dans les traductions pour identifier les motifs et les causes sous-jacentes. Cette méthode est précieuse pour améliorer la qualité de la traduction et former les traducteurs. Selon St-Hilaire (2022), en analysant les erreurs, les traducteurs peuvent cibler les problèmes courants, tels que l'interférence de la langue source, la généralisation excessive des règles de la langue cible ou le manque de connaissance culturelle. L'analyse des erreurs fournit des informations sur les domaines où les traducteurs ont besoin d'une formation ou de ressources supplémentaires. Par exemple, des erreurs récurrentes dans la traduction d'expressions idiomatiques pourraient indiquer un besoin de meilleure éducation culturelle ou d'accès à des dictionnaires d'expressions idiomatiques complets. Tahiri (2020), a dit de plus, l'analyse des erreurs peut informer le développement de logiciels de traduction en mettant en évidence les pièges courants que les systèmes automatisés doivent résoudre.

La pragmatique étudie comment le contexte influence l'interprétation du sens. En traduction, la pragmatique est cruciale pour transmettre non seulement le sens littéral du texte source, mais aussi ses significations implicites, ses intentions et ses nuances culturelles. D' après MacKay et al (2024), les traducteurs doivent prendre en compte des facteurs tels que les actes de parole, les stratégies de politesse et les implicatures conversationnelles pour produire des traductions qui sont contextuellement appropriées et efficaces. Par exemple, traduire des actes de parole comme des demandes, des excuses ou des compliments nécessite une compréhension des normes culturelles et des attentes dans la langue cible. Une traduction directe pourrait entraîner une phrase qui est linguistiquement correcte mais pragmatiquement inappropriée. Selon Honová (2016), la pragmatique implique également de reconnaître et de préserver le ton voulu, le niveau de formalité et les nuances du texte source, qui sont essentiels pour atteindre une équivalence fonctionnelle en traduction.

Avancées Technologiques dans la Traduction

Les avancées technologiques ont profondément transformé le domaine de la traduction, améliorant l'efficacité, la précision et l'accessibilité. Cette section explore les principaux domaines d'innovation : la traduction automatique (TA), les outils de traduction assistée par ordinateur (TAO) et le rôle de l'intelligence artificielle (IA) dans la traduction, comme le montre la Figure 4. Chacune de ces avancées a contribué de manière unique à l'évolution des pratiques de traduction, offrant à la fois des opportunités et des défis. La traduction automatique (TA) désigne le processus automatisé de traduction de texte d'une langue à une autre à l'aide de logiciels. Les premiers systèmes de TA reposaient sur des approches basées sur des règles, qui impliquaient un codage étendu des règles linguistiques. Cependant, ces systèmes produisaient souvent des traductions maladroites et inexactes. Selon Gahbiche-Braham (2013), l'avènement de la traduction automatique (TAS) a marqué une amélioration significative, en utilisant de vastes corpus bilingues pour prédire des traductions basées sur des modèles de probabilité.

Le développement le plus transformateur dans la TA a été l'introduction de la traduction automatique neuronale (TAN). La TAN utilise des algorithmes d'apprentissage en profondeur pour modéliser la traduction de langues comme un problème de reconnaissance de motifs complexe. Des systèmes comme Google Translate et DeepL emploient la TAN, offrant des traductions plus fluides et contextuellement précises par rapport aux modèles précédents. D'après Dumas (2014), les systèmes de TAN apprennent à partir de vastes quantités de données textuelles bilingues, ce qui leur permet de comprendre le contexte et de produire des traductions au son plus naturel. Malgré ces avancées, la TAN rencontre toujours des difficultés avec les expressions idiomatiques, les nuances culturelles et les paires de langues moins courantes, nécessitant une surveillance humaine pour les traductions à haut enjeu. Les outils de traduction assistée par ordinateur (TAO) sont des applications logicielles qui aident les traducteurs humains en automatisant les tâches répétitives et en gérant de grands projets de traduction. Les composants clés des outils de TAO

comprennent la mémoire de traduction (MT), la gestion de la terminologie et les outils d'alignement. Chiasson (2019), a dit que la mémoire de traduction stocke les segments précédemment traduits et les suggère lorsque des segments similaires apparaissent, favorisant la cohérence et économisant du temps.



Figure 4: Avancées Technologiques dans la Traduction

Les outils de gestion de la terminologie aident les traducteurs à maintenir une utilisation cohérente des termes spécialisés, ce qui est crucial dans les traductions techniques et juridiques. Ces outils stockent des glossaires et des bases de données terminologiques qui peuvent être automatiquement consultés pendant le processus de traduction. Les outils d'alignement alignent les textes sources et cibles, créant des corpus bilingues qui peuvent être utilisés pour construire et affiner les mémoires de traduction. Selon Remvikos (2020), des outils de TA populaires comme SDL Trados, memoQ et Wordfast intègrent ces fonctionnalités, permettant aux traducteurs de travailler de manière plus efficace et précise. Les outils de TA améliorent non seulement la productivité, mais aussi la qualité des traductions en fournissant des ressources et des suggestions qui réduisent la probabilité d'erreurs. Ils sont particulièrement précieux pour la gestion de projets à grande échelle nécessitant la collaboration entre plusieurs traducteurs, assurant ainsi la cohérence et la cohésion du produit final.

L'intelligence artificielle (IA) joue un rôle essentiel dans l'avancement de la technologie de traduction. Au-delà de l'alimentation des systèmes de TAN, l'IA contribue à divers aspects du processus de traduction. Yvon (2023), a dit que les algorithmes d'apprentissage automatique analysent de vastes ensembles de données pour améliorer la qualité des traductions, s'adapter à de nouveaux schémas linguistiques et traiter les expressions idiomatiques de manière plus efficace. Les outils pilotés par l'IA peuvent effectuer des tâches de pré-édition et de post-édition, améliorant la qualité des traductions générées par machine et humaines. La pré-édition consiste à préparer le texte source pour le rendre plus convivial pour la traduction automatique, tandis que la post-édition se concentre sur l'affinement du texte traduit par machine pour garantir qu'il réponde aux normes de qualité requises. Selon Znaidi (2016), les algorithmes d'IA peuvent identifier et corriger les erreurs, suggérer des améliorations et s'adapter au style et aux préférences du traducteur au fil du temps.

De plus, l'IA facilite les services de traduction et d'interprétation en temps réel, rendant la communication interlinguistique plus accessible. D' après Lignereux 2016), les technologies de reconnaissance vocale et de synthèse vocale, alimentées par l'IA, permettent des traductions de la parole au texte et du texte à la parole en temps réel, comme on peut le voir dans des applications telles que Skype Translator et Google Assistant. Ces innovations sont particulièrement bénéfiques dans les réunions multilingues, les conférences et les environnements de service client, où la communication immédiate est cruciale.

Applications de la Traduction dans Divers Domaines

La traduction est une discipline multifacette avec des applications qui couvrent de nombreux domaines. Chaque domaine - traduction littéraire, technique, juridique et médicale - présente des défis uniques et nécessite des compétences spécialisées. La traduction littéraire implique de traduire des romans, des poèmes, des pièces de théâtre et d'autres formes de littérature. Le défi principal en traduction littéraire est de préserver les qualités artistiques du texte source, y compris son style, son ton et ses significations nuancées. Selon Laviosa et Liu (2021), les traducteurs doivent capturer la voix de l'auteur et transmettre les contextes culturels et émotionnels, ce qui nécessite souvent des compétences créatives et interprétatives.

Un des aspects clés de la traduction littéraire est de traiter le langage figuré, tel que les métaphores, les comparaisons et les idiomes. Ces éléments sont souvent profondément enracinés dans la culture source et peuvent ne pas avoir d'équivalents directs dans la langue cible. Dault et Collins (2016), ont dit que les traducteurs littéraires utilisent toute une gamme de stratégies, y compris l'adaptation et l'explication, pour rendre ces éléments accessibles au public cible tout en préservant l'impact esthétique et émotif de l'original. La visibilité et l'influence du traducteur sont également importantes en traduction littéraire. Selon Peraldi et al (2013), Comme le soutient Lawrence Venuti, les traducteurs jouent un rôle crucial dans la façon dont la littérature traduite est reçue, négociant souvent entre des approches de domestication et de foreignisation pour soit familiariser, soit exotiser le texte source pour le cible publique

La traduction technique concerne les textes nécessitant des connaissances spécialisées, tels que les manuels, les rapports techniques et les articles scientifiques. Selon Hansen (2021), la précision et la clarté sont primordiales en traduction technique, car ces textes contiennent souvent des informations précises cruciales pour l'utilisation prévue, telles que le fonctionnement de machines ou la compréhension de recherches scientifiques. Les traducteurs techniques doivent avoir une expertise dans le domaine concerné pour s'assurer que les termes et concepts techniques sont correctement traduits. Cela implique souvent des recherches approfondies et des consultations avec des experts du domaine. Grégoire et al (2016), ont dit de plus que les traducteurs techniques utilisent des outils tels que les bases de données terminologiques et les mémoires de traduction pour maintenir la cohérence et l'efficacité. La complexité croissante des documents techniques, associée aux avancées technologiques rapides, oblige les traducteurs à mettre continuellement à jour leurs connaissances et à s'adapter aux nouveaux termes et pratiques. Prawelska-Skrzypek et Wiekiera-Michou, (2016), ont dit que cette nature dynamique de la traduction technique souligne l'importance du développement professionnel continu et de l'apprentissage tout au long de la vie dans le domaine.

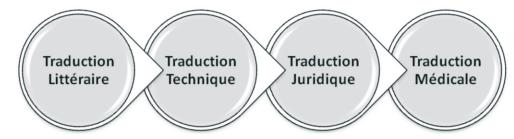


Figure 5: Avancées Technologiques dans la Traduction

La traduction juridique implique la traduction de documents juridiques tels que contrats, lois, brevets et décisions de justice. Selon Hélot (2015), le principal défi de la traduction juridique est de garantir que le texte traduit reflète fidèlement les concepts juridiques et les termes du texte source tout en étant compatible avec le système juridique de la langue cible. Le langage juridique est très spécialisé et varie souvent considérablement entre les systèmes juridiques. Les traducteurs juridiques doivent être familiers avec la terminologie juridique et les conventions des deux langues sources et cibles. D' après Boukrous (2023), ils

doivent également comprendre les implications juridiques de leurs traductions, car des inexactitudes peuvent entraîner des conséquences graves, telles que des litiges ou des violations de contrat. Un aspect critique de la traduction juridique est de maintenir la nature formelle et précise des textes juridiques. Les traducteurs utilisent souvent une approche de traduction littérale pour préserver la formulation et la structure originales, garantissant que le sens juridique n'est pas altéré. Cependant, selon Al-Khatib (2022) ils doivent également adapter certains éléments pour correspondre au contexte juridique cible, ce qui nécessite une compréhension approfondie des deux systèmes juridiques impliqués.

La traduction médicale englobe la traduction de documents médicaux tels que les dossiers de patients, les rapports d'essais cliniques, les instructions pharmaceutiques et les articles de recherche médicale. Selon St-Hilaire (2022), le principal défi de la traduction médicale est de garantir que les traductions soient précises et claires, car elles ont un impact direct sur les soins et la sécurité des patients. Les traducteurs médicaux ont besoin d'une compréhension approfondie de la terminologie médicale et des concepts. Ils collaborent souvent avec des professionnels de la santé pour garantir que les traductions médicales, même de petites erreurs peuvent avoir des conséquences graves, ce qui rend l'attention aux détails et la précision cruciales. La confidentialité est un autre aspect important de la traduction médicale. Les traducteurs doivent respecter des directives éthiques strictes pour protéger la confidentialité des patients et se conformer à des réglementations telles que la HIPAA aux États-Unis ou le RGPD en Europe. Berman et Venuti (2021), ont dit que cette dimension éthique souligne la nécessité d'intégrité professionnelle et de discrétion dans la traduction médicale.

Traduction et enseignement des langues comme formes de linguistique appliquée.

La traduction et l'enseignement des langues sont des disciplines interdépendantes au sein de la linguistique appliquée, offrant des méthodes complémentaires pour améliorer l'apprentissage et la maîtrise des langues. La traduction a longtemps été utilisée comme outil pédagogique dans l'enseignement des langues. Historiquement, la méthode de traduction grammaticale dominait l'éducation linguistique, en se concentrant sur la traduction directe de textes pour enseigner les règles grammaticales et le vocabulaire. Selon Si-Ammour (2020), Bien que cette méthode soit tombée en désuétude avec l'avènement de l'enseignement communicatif des langues, ces dernières années ont vu une résurgence de l'utilisation de la traduction aident les élèves à comprendre la relation complexe entre les langues et les cultures. En tradusant des textes, les apprenants s'engagent dans une analyse linguistique approfondie, améliorant leur compréhension de la grammaire, de la syntaxe et du lexique dans les langues sources et cibles. D' après Dumas (2022), ce processus aide également à développer des compétences cognitives, telles que la pensée critique et la résolution de problèmes, car les élèves doivent naviguer dans les différences linguistiques et culturelles pour produire des traductions précises.

Les avantages de l'utilisation de la traduction dans l'enseignement des langues sont nombreux. Tout d'abord, elle favorise une meilleure compréhension de la structure et du vocabulaire de la langue cible. Les exercices de traduction obligent les élèves à tenir compte du contexte, du registre et de la nuance, favorisant une compréhension plus complète de l'utilisation de la langue. De plus, Boukrous (2023), a dit que la traduction encourage la précision linguistique et l'attention aux détails, car même de petites erreurs peuvent modifier considérablement le sens d'un texte. De plus, la traduction aide les apprenants à développer des compétences interculturelles. En traduisant des textes culturellement riches, les élèves acquièrent des connaissances sur les coutumes, les valeurs et les modes de pensée des locuteurs de la langue cible. Selon Cebuc (2021), cette sensibilisation culturelle est essentielle pour atteindre la fluidité et la communication efficace dans une seconde langue.

L'intégration de la traduction dans les programmes d'études linguistiques implique de trouver un

équilibre entre les activités de traduction et d'autres méthodes d'apprentissage des langues. Les approches récentes préconisent d'utiliser la traduction aux côtés des méthodes communicatives et basées sur les tâches pour créer une expérience d'apprentissage holistique. Selon Deniaud et al (2020), par exemple, la traduction peut être utilisée pour renforcer les leçons de vocabulaire et de grammaire, suivie d'activités communicatives où les élèves utilisent les nouvelles compétences linguistiques dans un contexte. Les concepteurs de programmes insistent également sur l'importance de sélectionner des textes appropriés pour les exercices de traduction. Les textes doivent être pertinents pour le niveau de compétence et les intérêts des apprenants, garantissant que les tâches de traduction soient à la fois stimulantes et engageantes. Selon Nemmich (2016), L'incorporation de matériaux authentiques, tels que des articles de presse, des extraits littéraires et des dialogues de films, peut rendre les exercices de traduction plus dynamiques et applicables à l'utilisation réelle de la langue.

L'utilisation de la traduction dans l'enseignement des langues offre de nombreux avantages mais présente également certains inconvénients. Le principal avantage est l'amélioration de la compréhension linguistique et culturelle. Les exercices de traduction obligent les apprenants à s'engager profondément avec le texte, améliorant leur compréhension des structures grammaticales, du vocabulaire et des contextes culturels. Selon Beukelman et Mirenda (2017), cet engagement favorise une compréhension plus profonde et nuancée de la langue cible. Cependant, les inconvénients incluent le risque de renforcer l'interférence de la langue maternelle et la focalisation limitée sur les compétences en communication orale. Une surutilisation de la traduction peut amener les élèves à dépendre de leur langue maternelle pour la compréhension et la production, ce qui peut entraver le développement des processus de pensée directe dans la langue cible. De plus, Manço et al (2022) ont dit que les exercices de traduction développent principalement les compétences en lecture et en écriture, ce qui peut ne pas préparer pleinement les élèves à la maîtrise de la conversation dans la langue cible.

Défis et orientations futures

Le domaine de la linguistique appliquée dans la traduction est confronté à de nombreux défis tout en observant également l'émergence de tendances qui façonnent sa direction future. L'un des principaux défis de la traduction est d'atteindre la précision et de maintenir les nuances du texte source dans la langue cible. Cette problématique est exacerbée par les différences linguistiques et culturelles, qui peuvent entraîner des malentendus ou une perte de sens. Selon Siham et Laeticia (2023), les traducteurs ont souvent du mal avec les expressions idiomatiques, les références culturelles et les termes spécifiques au contexte qui n'ont pas d'équivalents directs dans la langue cible. Un autre défi majeur est l'avancement rapide de la technologie. Alors que la traduction automatique (TA) et les outils de traduction assistée par ordinateur (TAO) ont amélioré l'efficacité, ils posent également des risques tels que la dépendance excessive à la technologie et le risque d'erreurs. D' après Perreault-Corbeil (2023), les systèmes de TA, malgré les progrès de la traduction neuronale automatique (TNA), ont encore du mal avec les structures linguistiques complexes et les nuances de sens, nécessitant une supervision humaine.

Les questions juridiques, éthiques et de confidentialité représentent une autre couche de complexité, en particulier dans des domaines tels que la traduction juridique et médicale. Selon Léon (2015), les traducteurs doivent garantir la précision tout en respectant des accords de confidentialité stricts et des lignes directrices éthiques, ce qui peut être particulièrement difficile dans un monde de plus en plus numérique et interconnecté. Les tendances émergentes dans les études de traduction reflètent un intérêt croissant pour l'intégration de la technologie, les approches interdisciplinaires et l'accent mis sur la compétence culturelle. L'utilisation de l'IA et de l'apprentissage automatique dans la traduction se développe, les chercheurs explorant des moyens d'améliorer la précision et la compréhension contextuelle des systèmes de TA. Selon Yvon (2023), ces technologies sont également intégrées aux outils de TAO pour améliorer l'ensemble du processus de traduction.

La recherche interdisciplinaire devient de plus en plus importante, reliant les études de traduction aux sciences cognitives, à la sociolinguistique et à la pragmatique. D' après Laviosa et Liu (2021), cette approche aide à mieux comprendre les processus cognitifs impliqués dans la traduction et les facteurs sociaux et culturels qui influent sur les pratiques de traduction. La compétence culturelle gagne en importance alors que la mondialisation accroît le besoin de traductions qui sont non seulement linguistiquement précises mais aussi culturellement appropriées. Selon Dault et Collins (2016), les futures recherches sont susceptibles de se concentrer sur le développement de cadres et d'outils pour évaluer et améliorer la compétence culturelle des traducteurs. L'avenir de la linguistique appliquée dans la traduction sera probablement façonné par les avancées technologiques et la nécessité de pratiques de traduction plus sophistiquées et culturellement sensibles. L'IA et l'apprentissage automatique continueront de jouer un rôle crucial, avec des recherches en cours visant à améliorer les systèmes de TNA pour gérer des nuances linguistiques et culturelles plus complexes. Selon Peraldi et al 2013), l'intégration de ces technologies aux outils de TAO entraînera probablement des flux de travail de traduction plus efficaces et précis.

Une autre orientation importante est le développement de programmes de formation plus robustes pour les traducteurs mettant l'accent à la fois sur les compétences linguistiques et la compétence culturelle. Selon Grégoire et al (2016), ces programmes intègreront probablement des outils technologiques avancés et des connaissances interdisciplinaires, préparant les traducteurs à répondre aux exigences d'un monde mondialisé. Les considérations éthiques deviendront également plus importantes, en particulier en ce qui concerne l'utilisation de l'IA dans la traduction. D' après Boukrous (2023), garantir la confidentialité des données, maintenir la confidentialité et traiter les biais dans les algorithmes d'IA sont des domaines critiques qui nécessiteront une attention continue. De plus, le domaine verra probablement un accent accru sur l'évaluation de la qualité de la traduction. Selon St-Hilaire (2022), développer des méthodes normalisées pour évaluer la qualité des traductions, en particulier celles produites par des systèmes de TA, sera crucial pour garantir que les traductions répondent aux normes requises.

Conclusion

En conclusion, la linguistique appliquée constitue un cadre solide à travers lequel la théorie et la pratique de la traduction sont explorées, développées et enrichies. Cette étude a plongé dans le rôle multifacette de la linguistique appliquée dans la traduction, mettant en lumière sa définition, son champ d'application, son évolution et son intersection avec divers domaines. À travers la synthèse de la linguistique de corpus, l'analyse contrastive, l'analyse des erreurs et la pragmatique, qui améliorent considérablement les pratiques de traduction en assurant la précision, la sensibilité culturelle et l'adéquation linguistique. La traduction, en tant que composante essentielle de la linguistique appliquée, remplit diverses fonctions dans différents domaines, notamment littéraire, technique, juridique et médical. Chacun de ces domaines présente des défis uniques et demande des connaissances et des compétences spécialisées. De plus, l'intégration de la traduction dans l'enseignement des langues offre un outil pédagogique qui améliore la compréhension et la maîtrise linguistique des apprenants.

En regardant vers l'avenir, le futur de la linguistique appliquée dans la traduction semble prometteur mais complexe. Les avancées technologiques, telles que la traduction automatique et l'intelligence artificielle, continuent de remodeler les pratiques de traduction, offrant de nouvelles opportunités tout en posant également des défis liés à la précision, aux considérations éthiques et au rôle des traducteurs humains. En tant que tel, les futures recherches en linguistique appliquée se concentreront probablement sur le perfectionnement de ces technologies, l'amélioration de l'évaluation de la qualité de la traduction et le renforcement de la compétence culturelle des traducteurs. En conclusion, la linguistique appliquée reste

essentielle à l'étude et à la pratique de la traduction, évoluant continuellement pour répondre aux exigences d'un monde globalisé. En adoptant des approches interdisciplinaires, en intégrant de manière responsable les innovations technologiques et en favorisant la sensibilité culturelle, la linguistique appliquée continuera de jouer un rôle pivot dans la facilitation de la communication et de la compréhension interculturelles efficaces.

Références

- Al-Khatib, J. (2022). Les gestes professionnels des médiateurs culturels lors d'une séquence de médiation (Doctoral dissertation, HESAM Université).
- Berman, A., & Venuti, L. (2021). Translation and the Trials of the Foreign. In *The translation studies reader* (pp. 247-260). Routledge.
- Beukelman, D. R., & Mirenda, P. (2017). Communication alternative et améliorée: Aider les enfants et les adultes avec des difficultés de communication. De Boeck Superieur.
- Bouhon, M. (2022). Stimulation dichotique ou musicale pour l'aide aux apprenants de l'anglais L2, dyslexiques ou non: conception et validation d'un programme d'entraînement informatisé (Doctoral dissertation, Université de Lyon).
- Boukrous, S. (2023). Le rôle de la traduction automatique et ses limites dans le service du traducteur,exemples de Google traduction-. *Journal of Languages and Translation*, 3(1), 61-70.
- Cavanagh, M., & Lavoie, É. (2023). Un modèle d'enseignement axé sur les stratégies d'écriture et adapté pour favoriser une pratique culturellement durable. *The Canadian Modern Language Review*, 79(4), 256-280.
- Cebuc, L. (2021). Effets polyphoniques de l'emprunt et leur transfert dans la version en roumain de l'oeuvre de F. Beigbeder. *Etudes Interdisciplinaires en Sciences humaines (EISH)*, (8), 292-307.
- Chiasson, M. (2019). Etude des caracteristiques de l'espace d'apprentissage favorisant le processus de la pensée informatique chez les eleves de l'ecole intermediaire. Universite de Moncton (Canada).
- Dault, C., & Collins, L. (2016). L'utilisation des langues connues des apprenants en classe de français langue seconde. *Canadian Modern Language Review*, 72(4), 504-529.
- Delisle, J. (2021). Notions d'histoire de la traduction. Presses de l'Université Laval.
- Deniaud, I., Marmier, F., & Michalak, J. L. (2020). Méthodologie et outil de diagnostic 4.0: définir sa stratégie de transition 4.0 pour le management de la chaîne logistique. *Logistique & Management*, 28(1), 4-17.
- Drolet, V. (2021). Implication de l'infirmière dans les discussions sur les soins de fin de vie aux soins intensifs: étude des déterminants de l'intention (Doctoral dissertation, Université Laval).
- Dumas, F. (2022). Quelques réflexions sur la traduction en langue française de l'Acathiste du Buisson Ardent. *Philologica Jassyensia*, 18(2(36)), 199-212.
- Dumas, L. (2014). Le sous-titrage: une pratique à la marge de la traduction. *ELIS-Echanges de linguistique en Sorbonne*, *2*, 129-144.
- Gahbiche-Braham, S. (2013). Amélioration des systèmes de traduction par analyse linguistique et thématique: application à la traduction depuis l'arabe (Doctoral dissertation, Université Paris Sud-Paris XI).
- Grégoire, S., Lachance, L., Bouffard, T., Hontoy, L. M., & De Mondehare, L. (2016). L'efficacité de l'approche d'acceptation et d'engagement en regard de la santé psychologique et de l'engagement scolaire des étudiants universitaires. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 48(3), 222.
- Hansen, D. (2021). Défis et pertinence de la traduction littéraire assistée par ordinateur. La main de Thôt, 9.
- Hélot, C. (2015). La Diversité linguistique à l'école. Éveil aux langues ou pédagogie «critique» du plurilinguisme?». Cahiers de linguistique. Revue de sociolinguistique et de sociologie de la langue française, 41(2), 15-40.

- Honová, Z. (2016). L'équivalence fonctionnelle–une stratégie pour la traduction juridique?. Études romanes *de Brno*, *37*(2), 163-176.
- Ladha, T., Zubairi, M., Hunter, A., Audcent, T., & Johnstone, J. (2018). Les communications interculturelles-des outils pour travailler auprès des familles et des enfants. *Paediatrics & Child Health*, 23(1), 70-73.
- Lan, R., Galieri, A. C., Catherine, J. H., & Tardivo, D. (2023). Le cancer oral: état des lieux et perspectives de santé publique. *Santé Publique*, (1), 93-105.
- Laviosa, S. (2021). Corpus-based translation studies: Theory, findings, applications (Vol. 17). Brill.
- Laviosa, S., & Liu, K. (2021). The pervasiveness of corpora in translation studies. *Translation Quarterly*, (101).
- Lenart, E., & Leclercq, P. (2021). Chapitre 11. L'acquisition de la compétence discursive et l'organisation informationnelle. In *Introduction à l'acquisition des langues étrangères* (pp. 195-210). De Boeck Supérieur.
- Léon, J. (2015). Linguistique appliquée et traitement automatique des langues. Etude historique et comparative. *Recherches en didactique des langues et des cultures. Les cahiers de l'Acedle*, *12*(12-3).
- Lignereux, C. (2016). L'art épistolaire de l'âge classique comme champ d'application du savoir rhétorique. *Exercices de rhétorique*, (6).
- MacKay, M., McAlpine, D., Worte, H., Grant, L. E., Papadopoulos, A., & McWhirter, J. E. (2024). Recherche originale par méthodes mixtes Offres de perfectionnement professionnel en communication en santé publique et correspondance avec les compétences essentielles: analyse contextuelle et analyse de contenu. *Promotion de la santé et prévention des maladies chroniques au Canada*, 6.
- Manço, A., Crutzen, C., & Scheurette, L. (2022). Pratiques socio-éducatives et sportives comme facteur de résilience: leçons pour une politique d'inclusion de mineurs étrangers non accompagnés. *Études de l'IRFAM*.
- Nemmich, M. A. (2016). *L'accessibilité numérique pour les personnes souffrant d'un handicap visuel* (Doctoral dissertation, Université Mustapha Stambouli de Mascara, Algérie).
- Peraldi, S., Bellamy, M., Chesné, M., Lehmann, C., & Prost, A. (2013, January). Comparatif traduction automatique, traduction assistée par ordinateur et traduction humaine dans le domaine de la finance. Session 3-TA et Biotraduction. In *Tralogy II. Trouver le sens: où sont nos manques et nos besoins respectifs?* (p. 23p).
- Perreault-Corbeil, É. (2023). Réception et usages des principes du droit romain par les officiers royaux français: réflexions autour de la justice pénale sous Charles VI (1380-1422).
- Prawelska-Skrzypek, G., & Wiekiera-Michou, M. (2016). Réseaux pour l'apprentissage tout au long de la vie en tant que forme de coordination d'activités des politique publiques au niveau régional dans ce domaine. *Comparaison plurielle: formation et développement*, *1*, 79-94.
- Remvikos, Y. (2020). Science et décision ou le difficile problème de la traduction: Des considérations pour une éthique scientifique. *Environnement, Risques & Santé, 19*(3), 190-193.
- Saldanha, G. (2021). The translator: literary or performance artist?. *Translation and Interpreting Studies*, *16*(1), 61-79.
- Schumacher, P. (2020). La traduction automatique neuronale: technologie révolutionnaire ou poudre de perlimpinpin? Compte rendu d'une expérience pédagogique. *Al-Kīmiyā*, (18), 67-89.
- Si-Ammour, S. (2020). L'adaptation des émotions dans la traduction de la publicité de l'arabe vers le français: étude analytique et comparative de plusieurs extraits publicitaires de domaines différents (Doctoral dissertation, Université Mouloud Mammeri Tizi-Ouzou).
- Siham, H. A. S. S. A. N. I., & Laeticia, H. A. M. I. (2023). Essai de traduction de l'ouvrage de Mouloud Feraoun du français vers le Berbere, extrait de «l'anniversaire»«Lettre à Albert Camus» (Doctoral

dissertation, Université Mouloud Mammeri).

- Smith, G. (2010). *Interactions entre normes publiques et normes privées dans la filière alimentaire*. OECD Publishing.
- St-Hilaire, R. (2022). Le potentiel des projets intergénérationnels sur le développement des compétences numérique, interculturelle et langagière d'apprenants de langue et de locuteurs de la langue cible (Doctoral dissertation, Université Laval).
- Tahiri, I. (2020). Contribution à la conception d'une commande reconfigurable et tolérante aux fautes pour les Systèmes Automatisés de Production (Doctoral dissertation, Reims).
- Vianin, P. (2016). Comment développer un processus d'aide pour les élèves en difficulté?. De Boeck supérieur.
- Whitfield, A. (2014). Le défi du rythme dans la traduction d'essais littéraires: quelques exemples canadiens et québécois. *Palimpsestes. Revue de traduction*, (27), 103-127.
- Yvon, F. (2023). La traduction multilingue: analyse d'une prouesse technologique. *Mediazioni. Rivista* online du studi interdisciplinari su lingue e culture, 39, A17-A34.
- Znaidi, E. (2016). Contribution à l'analyse et l'évaluation des requêtes expertes: cas du domaine médical (Doctoral dissertation, Université Paul Sabatier-Toulouse III).

Effects of Appraisal On The Quality of Business Education Programme In Colleges of Education In Anambra State, Nigeria

Umelue Ogochukwu Gloria Ph.D

Department Of Business Education Nwafor Orizu College Of Education, Nsugbe, Anambra State, Nigeria. cedar 4christ3@gmail.com

Abstract

The study was conducted to ascertain the effect of appraisal on the quality of business education programme in colleges of education in Anambra State, Nigeria. Three research questions and three null hypotheses were developed to guide the study. Descriptive survey design was used in the study. A 4-point scale type of selfstructured questionnaire titled: Teacher Questionnaire on Appraisal of Business Education Programme in Colleges of Education (TOABEPCE) was used for data collection. The instrument was tested for reliability using Cronbach Alpha and it yielded a reliability coefficient of 0.79. The sample of the study comprised of 135 Business Educations teachers: 63 males and 72 femaleteachers in two colleges of education in Anambra State, Nigeria. Mean and standard deviation were used to find answers to the research questions, the findings revealed that appraisal of business teacher education programme in colleges of education in the Anambra State, Nigeria has positive effect on the quality of business educators, availability of instructional facilities and the quality of graduates. Also, it was found that there is no significant gender difference in the mean responses of teachers in federal and state colleges of education on the effect of the appraisal of business teacher education programme on the availability of instructional facilities and there is no significant difference in the mean responses of male and female business education teachers on effect of appraisal of business teacher education programme in colleges of education on the quality of graduates. Based on the findings it was recommended that performance appraisal should be regularly conducted in colleges of education in Anambra state, Nigeria.

Introduction

Teacher education is a broad concept that comprise the policies, procedures, and provision put in place to provide the knowledge, experience, skills, attitudes and behaviors, required by teachers to function effectively, particularly in the classroom and generally in school environment, and in the society at large. It could be seen as the professional training that teachers receive for them to be classified as professionals. According to Ogunyika, Okeke, and Adedotin (2015), teacher education refers to professional education of teachers towards attainment of attitudes, skills and knowledge considered desirable so as to make them efficient and effective in their work, in accordance with the need of a given society at any point in time. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. Teacher education is therefore, to function by equipping teachers with the wherewithal; both ethical, intellectual competencies and skills, dispositions, emotional and so forth, that will enable them develop and imbue in their students the requisite educational and societal dispositions (Jibril, 2007).

Teacher education could be considered as a purposive programme designed to equip the would-be teachers with the necessary knowledge, experience, skills, attitudes, and character needed at the initial stage and the continuing professional development at the later stage in order to function competently in the teaching profession. From this view, teacher education basically has two main components: pre-service teacher education and in-service teacher education.

The pre-service teacher education basically take place in the school. It is the training to qualify a student to enter into the teaching profession. This aligned with the view of Wedell (2017) that pre-service teacher education is the education and training a student receives before they take up employment as a

teacher. He further stressed that pre-service teacher education covers subject content knowledge; pedagogic content knowledge (such as teaching methodology and assessing learning) understanding how children learn (both in cognitive and social development); and teaching practice. Teachers often value their pre-service training as it can instill confidence, raise their awareness of what is involved in being a teacher and give them a new discourse in which to successfully enter the teaching profession (Wedell, 2017)

In- service teacher education is geared towards competencies development while at work. It may better be understood as the continuing education a qualified teacher receives to function more effectively in the teaching task. In- service teacher education may take the forms of classroom observations, school visits, refresher courses, workshops, seminars, symposiums and conferences.

Teacher education has the objectives which the Federal Republic of Nigeria (2013:28) captured as:

- Provide highly motivated, conscientious and efficient classroom teacher for all level of the educational system.
- Further encourage the spirit of enquiry and creativity in teachers;
- Help teachers fit into the social life of the community and the society at large and enhance their commitment to national goals;
- Provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to changes situation; and
- Enhance teachers' commitment to the teaching profession

The importance of teacher education is enormous. effective teacher education programme can instill and support the concept of the teacher as a continuous learner; provide a platform for them to share their experiences and successes; increase motivation and retention of teaching staff, and improve learning outcomes (Wedell, 2017). Educational change depends largely on what teachers do and think (Fullan in Wedell, 2017); to have a remarkable change in the educational system therefoe, teacher education must be taken seriously. A Tertiary institution like college of education is only as good as the quality of its teaching staff, they are the heart of the institution that produces its graduates, its research products , and its service to the institution, community and nation (Obadara and Alaka, 2013); hence, their education is vital.

Business teacher education is an aspect of the teacher education programme that need great attention, especially as it champions entrepreneurial drive of the nation. It is the education that provides the teacher with the pedagogical and business competences necessary to teach learners the skills, knowledge and business attitudes for vocational usage, and to function as rational consumers. Business teacher education focuses on the certification of teacher to teach business courses in high school, colleges of education, polytechnics and universities (Petrick, 2017). The business education teachers cover topics such as business communications, business Law, computer literacy, marketing and basic accounting. In the opinion of Ezeani (2012), business education acquire skills in three aspects (marketing, office technology, and management & accounting) of business teacher education, there is need to effectively manage the programme.

The management of business teacher education programme is a managerial procedure undertaken to maintain standard in institutions running the programme. The essence of the management of business teacher education is to ensure the effectiveness and efficient of programmes in line with the objective to produce quality business teachers to train graduates needed for national development. Suffice to say, the National commission for colleges of education (NCCE) Play key role in the inspection of Colleges of Education. As Jibril (2007) noted, to effectively monitor, supervise and enhance the quality of a uniformly standardized teacher education programme at the NCE level in colleges of education in Nigeria, the National commission for colleges of education (NCCE) was established in 1989. One instrument used by NCCE in the management of colleges of education is the accreditation and re-accreditation of programmes.

Accreditation and re-accreditation gives a better way to manage programmes in higher institutions including the colleges of education. In the assertion of Hunt, (2015), accreditation is believed by many colleges and universities to be valuable in improving their "Brand" and thus enabling them to better attract students and to help in placement upon graduation. Accreditation is a way of inspecting an institution and its programme as a quality control measure. It tells wheter or not an institution of higher learning has met or not, or exceeded the set standards, and whether such institution should be allowed to operate and receive

patronage or not.

Accreditation is a way of appraising the level of performance of an institution, its faculties and departments; and its human capital with the objective of ensuring improvement. Appraisal is an impartial analysis and evaluation conducted to ensure compliance with set standard. Onwe (2015) noted that appraisal implies the making of value judgement about a phenomenon in relation to specific objectives. Appraisal as described by Elliott (2015)involve formative aspects that focus on developing performance (such as career development, professional learning and feedback) and summative aspects, on the other hand, which evaluate performance for career progression, possible promotion or demotion and termination purposes.

The objectives of appraisal are to identify the training and development needs of institutions in order to find ways for improvement. Appraisal involves a self-evaluation, peer review and a site visit (Obadara and Alaka, 2013) self-evaluation as the name implies is conducted by the institution, internally by its Quality Assurance (QA) unit. According to the Federal Republic of Nigeria (2012), the institutions self-evaluation may be undertaken as many times as the institution can afford before the external accreditation visit. The Federal Republic of Nigeria (2012) further identified five key areas to be considered during accreditation visit to include leadership, management and organization; curriculum organization and implementation; infrastructure and learning resources; assessment and evaluation; and students support and progression. These key areas centered on the quality of the teacher, the availability of facilities for teaching, and the quality of graduates' outcome. These three are the focus of the study.

Statement of the Problem

It remains a truism that teacher's quality contributes immensely to the quality of graduates; this truth cannot be over-emphasized. Consequently, a lot of planning and resources has been spent for improving the quality of teacher education; new technologies have been introduced in the field of education, and still our teacher –education could not raise up- to the expected level (Jamwal, 2012).

In recent times, the teacher has been under pressure by the government, employers of labor, the society and the global community to raise the standard of teaching to meet the need of today's world. Hence, the implementation process of educational goal in the country requires a holistic scrutiny especially in colleges of education where teachers are trained. It is in this view that the study is necessitated to ascertain the effect of appraisal of business teacher education programme in colleges of education in the Anambra state, Nigeria.

Purpose of the Study

The main purpose of the study is to examine the effect of appraisal on the business education programme in colleges of education, in Anambra State, Nigeria and specifically the study aims to examine:

- 1. the effect of appraisal of male and female teachers of business education programme in colleges of education in the Anambra State, Nigeria on the quality of teachers of business education programme.
- 2. the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the availability of instructional facilities
- 3. the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced

Research questions

The following research questions guided the study

- 1. What is the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programmes?.
- 2. What is the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the availability of instructional facilities?
- 3. What is the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced?.

Research Hypotheses

The following research hypotheses were formulated to guide the study; and were tested at 0.05 level of significance.

- 1. There is no significant difference in the mean response of male and female business education teachers on the effect of appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programme
- 2. There is no significant difference in the mean response of male and female business education teachers on the effect of appraisal of business education programme in colleges of education in Anambra State, Nigeria on the availability of instructional facilities
- 3. There is no significant difference in the mean response of male and female business education teachers on the effect of appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced.

Method

Descriptive survey design was used in the study. A four point scale of self-structured questionnaire titled: Teacher Questionnaire on appraisal of the management of Business Teacher Education Programme in Colleges of Education (TQAMBEPCE) was used for data collection. The instrument was validated by experts and was further subjected to internal consistency testing using Cronbach Alpha which yielded a reliability coefficient of 0.79. the population of the study is 900Business education teachers and a sampling techniques was used to get a sample size of 135 which comprised of 63 males and 72 females of business education teachers in 2 colleges of education in Anambra State. Mean and standard deviation were used to answers the research questions, while t-test was used to test the research hypotheses. For any of the research question to be accepted, its grand mean must not be less than 2.50. similarly, for any of the null hypothesis to be accepted, the calculated t-value must be less than the critical t-value otherwise it will be rejected.

Results

Results from the data analysis of the research questions and hypotheses that guided the study are presented here as follows:

Research Questions 1: What is the effect of the appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programme?

Table 1: mean responses on the effect of the appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programmes

S/N	Appraisal ensures that business education teachers	X	SD	DECISION
	possess:			
1	The right certification	3.525	0.501	Strongly Agree
2	Knowledge in subject content	3.348	0.775	Agree
3	The ability to deliver instructions competently	3.637	0.512	Strongly Agree
4	The skills to use instructional materials appropriately	3.422	0.640	Agree
5	The ability to use suitable instructional methods	3.377	0.571	Agree
6	Self-management quality	3.311	0.539	Agree
7	Problem solving ability	3.385	0.657	Agree
8	Interpersonal relationship	3.503	0.501	Strongly Agree
9	The ability to evaluate students and keep proper records	3.437	0.606	Agree
10	The ability to carry out research work and contribute to			C C
	knowledge	3.325	0.544	Agree
	Grand Mean	3.427		Agree

The result of research question 1 presented in Table 1 shows that the grand mean of 3.427 was greater than the midpoint value of 2.50. This suggest that appraisal of teachers of business education programme in colleges of education in Anambra State, Nigeria has effect on the quality of business education programmes.

Research question 2: What is the effect of the appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the availability of instructional facilities? Table 2: the mean responses on the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the availability of instructional facilities

S/N	Appraisal ensures the availability of:	Х	SD	DECISION
11	Computers for instructional purposes	3.511	0.584	Strongly Agree
12	Typing pool	3.466	0.596	Agree
13	Library	3.400	0.714	Agree
14	Resource room	3.296	0.573	Agree
15	Lecture halls	3.296	0.623	Agree
	Grand Mean	3.394		Agree

The grand mean of 3.394 in Table 2 agreed to question 2 that appraisal of teachers of business education programme in colleges of education in Anambra State affect the availability of instructional facilities.

Question 3: What is the effect of the appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced. **Table 3:** the mean responses on the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced education graduates produced.

S/N	Appraisal enables business education graduates produced to possess	X	SD	DECISION
16	The knowledge for and about business	3.377	0.596	Agree
17	The ability to transfer knowledge	3.414	0.578	Agree
18	Employable skills	3.466	0.583	Agree
19	Professional ethics and character reformation	3.437	0.618	Agree
20	The ability to meet up academic requirements			
	for graduation	3.340	0.587	Agree
	Grand Mean	3.394		Agree

In Table 3, the grand mean of 3.07 was greater than the midpoint value of 2.50. This indicate that the appraisal of teachers of business education programme in colleges of education in Anambra State, Nigeria has effect on the quality of graduates.

Research hypotheses

Research hypothesis 1: There is no significant difference in the mean responses of male and female teachers of business education on the effect of appraisal of teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programmes.

ITEM	Gend er	Ν	Mean	Std.	t-calculated	Symb	ol t-critic	al Decision
1	Male	63	3.555	0.500	0.641	<	1.976	Accept
2	Female	72	3.500	0.503	0.7874	<	1.976	Accept
	Male	63	3.285	0.811				-
3	Female	72	3.402	0.744	0.717	<	1.976	Accept
	Male	63	3.603	0.554				-
4	Female	72	3.666	0.474	0.916	<	1.976	Accept
	Male	63	3.476	0.618				-
5	Female	72	3.375	0.659	0.060	<	1.976	Accept
	Male	63	3.381	0.50				
6	Female	72	3.375	0.567	3.830	>	1.976	Reject
	Male	63	3.492	0.535				
7	Female	72	3.152	0.493	1.511	<	1.976	Accept
	Male	63	3.476	0.618				-
8	Female	72	3.305	0.684	3.304	>	1.976	Reject
	Male	63	3.650	0.480				-
9	Female	72	3.375	0.487	0.987	<	1.976	Accept
	Male	63	3.492	0.564				-
10	Female	72	3.388	0.640	2.410	>	1.976	Reject
	Male	63	3.444	0.589				
	Female	72	3.222	0.41				
Grand	l Mean				1.524	< 1	1.976 A	ccept

Table 4: t-t analysis on the mean responses of male and female teachers of business education programmes on the effect of appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programmes

The grand mean value of the calculated -t 1.524 in Table 4 was found less (<) than the critical-t value of 1.97 Based on the criteria to accept the null hypothesis if the calculated value is less than the critical value. It was accepted that there is no significant difference in the mean responses of male and female teachers of business education on the effect of appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of teachers of business education programmes.

Research hypothesis 2: There is no significant difference in the mean responses of male and female teachers of business education programmein colleges of education in Anambra State, Nigeria on the effect of the appraisal of business education programmes on the availability of instructional facilities.

Table 5 t-test analysis on the mean responses of male and female teachers of business education in colleges of education in Anambra State, Nigeria on the effect of the appraisal of business education programmes on the availability of instructional facilities

Item	Institution	Ν	Mean	STD	t-Calculated	Symbol	t-Critical	Decision
11	Federal	53	3.603	0.599	1.488	<	1.976	Accept
	State	82	3.451	0.569				
12	Federal	53	3.509	0.608	0.669	<	1.976	Accept
	State	82	3.439	0.589				
13.	Federal	53	3.358	0.736	0.541	<	1.976	Accept
	State	82	3.426	0.703				-
14	Federal	53	3.263	0.600	0.215	<	1.976	Accept
	State	82	3.304	0.559				
15	Federal	53	3.471	0.575	2.687	>	1.976	Reject
	State	82	3.182	0.631				-
Gran	d Mean				1.120	<	1.976	Accept

The result of research hypothesis 2 presented in Table 5 show that the grand mean of the calculated t-value 0f 1.976. Based on this, the null hypothesis 2 was accepted and concluded that there is no significant difference in the mean responses of male and female teachers of business education in colleges of education in Anambra State, Nigeria on the effect of the appraisal of business education programme on the availability of instructional facilities.

Research hypothesis 3: There is no significant difference in the mean responses of male and female teachers of business education on the effect of the appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced.

Table 6: t-t analysis on the mean responses of male and female teachers of business education on the effect of the appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced.

Item	Gender	Ν	Mean	Std.	t-calculated	Symbol	t-critical	Decision
16	Male	63	3.412	0.585	0.634	<	1.976	Accept
	Female	72	3.347	0.608				
17	Male	63	3.285	0.580	2.473	>	1.976	Reject
	Female	72	3.527	0.555				
18	Male	63	3.539	0.590	1.365	<	1.976	Accept
	Female	72	3.402	0.573				
19	Male	63	3.412	0.612	0.427	<	1.976	Accept
	Female	72	3.458	0.626				
20	Male	63	3.333	0.538	0.136	<	1.976	Accept
	Female	72	3.347	0.631				-
Gran	d Mean				1.007	<	1.976	Accept

In Table 6, the result of the t-test analysis of research hypothesis 3 shows that the calculated t-value 0f 1.007 was less than the critical t-value 0f 1.976. Based on the t-test decision rule, the null hypothesis 3 was accepted and concluded that there is no significant difference in the mean responses of male and femaleteachers of business education on the effect of appraisal of business educationprogrammes in Colleges of Education In Anambra State, Nigeria On the Quality of business education Graduates produced.

Discussion

In Table 1 it was revealed that appraisal of male and female teachers of business education programme in colleges of education in Anambra State, Nigeria has effect on the quality of business education programmes. Appraising the management of college of education help to ascertain the performance level of the management; and the performance of management is no doubt the reflection, most importantly of its human component. The quality of teachers therefore, speaks volume about the quality of education provided by a college of education. As Iraki (2013) agreed, appraisal has positive impact towards teaching and learning processes in schools and acted as an intervention strategy which has benefitted both the individual and the school in pursuit of quality education if well implemented.

Similarly, the t-test result in Table 4 suggested that there is no significant difference in the mean responses of male and female teachers of business education on the effect of appraisal of business teacher education programmein colleges of education in Anambra State , Nigeria on the quality of business education programmes. This implies that both male and female teachers of business education believe that appraisal strengthens the quality of teachers in colleges of education. This aligned with the study of Iraki (2013) that both male and female teachers did not differ significantly in their responses of performance appraisal.

The result in Table 2 agreed to the question 2 that appraisal of business education teachers in colleges of

education in Anambra State affect the availability of instructional facilities. Facilities, according to Ehiametalor in Onwe (2015) are operational inputs of every institutional programme. Facilities need to be available to guarantee the accreditation of programmes in all colleges of education. The findings agrees with Onwe (2015) that the availability of facilities is therefore a prerequisite for establishing and accrediting a college of education in Nigeria.

Furthermore, the result of research hypothesis 2 presented in Table 5 indicate that there is no significant difference in the mean responses of male and female teachers of business education in colleges of education in Anambra State, Nigeria on the effect of the appraisal of business education programme on the availability of instructional facilities. This means that both male and female teachers of business education understand the relevance of instructional facilities for instructional delivery in business education. The finding agrees with directive of the National Commission for Colleges of Education (NCCE) in Onwe (2015) that it is compulsory for all lecturers and students (irrespective of the college of education) to make effective use of the facilities in their colleges. The findings is in agreement with George (2016) who found no significant difference between Federal College of Education and state owned college of education on the impact of available laboratory facilities for instructional delivery.

The mean responses in Table 3 indicated that the appraisal of male and female teachers of business educationprogramme in colleges of education in Anambra State, Nigeria has effect on the quality of graduates produced. This agree with Shattock in Agasisti (2017), that when institutions behave strategically (that is defining their own priorities, within the set of rules and incentives defined by a national or regional public authority), the role of management is pivotal in determining their performance; which is showcase in the institution itself, facilities and departments and individuals including the graduates of the institution. Also, Ebisine (2013) agreed that appraisal ensures that the products of colleges of education are of high quality and ensure the right person is awarded the right grade at the successful completion of a programme.

The null hypothesis 3 was accepted and concluded that there is no significant difference in the mean responses of male and female teachers of business education on the effect of the appraisal of business education programme in colleges of education in Anambra State, Nigeria on the quality of business education graduates produced. In this finding, both male and female teachers of business education acknowledged that appraisal is a useful tool to approve teaching and learning. This is so because appraisal aim at improving all components in the teaching-learning process to meet set standard. The finding aligned with Momanyi (2019), that the improvements in teacher education are frequently suggested as solutions to educational problems.

Conclusion

The professional training that teachers receive for them to be classified as professionals and to function effectively in the teaching profession is very important. To ensure that quality is maintained in those colleges of education preparing the teachers, its management performance has to be regularly appraised. Appraisal is a quality control procedure often undertaken by relevant bodies to ensure that standards are maintained.

The appraisal of colleges of education programme can be done internally by the management of the schools. The management ensures that programmes run smoothly the way they should and comply with all quality standards to remain accredited. This study examined some aspects of quality standards observed by the management of business teacher education programme of colleges of education in Anambra State, Nigeria to include the employment of quality business educators, available of facilities for instructional delivery and the quality of graduates produced by the colleges of education. Appraisal set the standards, but the implementation of education goal is carried out by the teachers. The teachers are more effective in their task of rendering quality teaching if relevant facilities are available to aid them do their job. Consequently, the outcome of effective teaching using instructional facilities is the quality of the graduates produced by the school.

Recommendations

Based on the findings, the following recommendations were made:

- 1. Regular appraisals should be carried out to ensure the quality of business educators both males and females equally.
- 2. Regular appraisals should be carried out to ensure the availability of instructional facilities in both federal and state colleges of education.
- 3. Regular appraisals should be carried out to ensure the quality of graduates.

References

- Agasisti, T. (2017). Management of higher education institutions and the evaluation of their efficiency and performance. *European Higher Education Society Tertiary Education and Management*, 23(3) 187-190. Retrieved from://doi.org/10.1080/13583883.2017.1336250
- Ebisine, S. S. (2013). Academic quality assurance in the colleges of education: challenges and ways forward for future development. *International Letters of Social and Humanistic Sciences* 2013 (13), 1-9. doi:10.18052/www.scipress.com/ILSHS.13.1
- Elliott, K. (2015). Teacher performance appraisal: more about performance or development? *Australian Journal* of *Teacher Education* 40 (9), 102-116
- Ezeani, N. S. (2012). The teacher and skills acquisition at business education: from the perspective of accounting skills. *Arabian Journal of Business and Management* 2 (4), 25-36
- Federal Republic of Nigeria (2012). *Guidelines to NCCE accreditation toolkit (12th Ed)*. Garki Abuja: National Commission for Colleges of Education.
- George, E. D. (2016). Influence of availability of instructional facilities and teachers' instructional methods on students' academic performance in shorthand in colleges of education. [A Master Degree Dissertation] Ahmadu Bello University, Zaria
- Hunt, S. C. (2015). Research on the value of AACSB business accreditation in selected areas: A review and synthesis. *American Journal of Business Education*, 8 (1), 23-30
- Iraki, M. W. (2013). Teachers' perceptions of the role of performance appraisal in enhancing teaching and learning: a case of public secondary schools in Kiambu county, Kenya. [A master degree project]Kenyatta University retrieved from https://pdfs.semanticscholar.org/5ada/0b10c1894 fed74e8f0dc 4292edd9 1f721596.pdf
- Jamal, B. S. (2012). Teacher education: issues and their remedies. *International Journal of Educational Planning & Administration*. 2 (2), 85-90
- Jibril, M. O. (2007). Teacher education in Nigeria: an overview. African Research Review 1(2), 30-140. DOI:
- Momanyi, M. (2019). Enhancing quality teacher education programs in developing countries. Retrieved from: https://www.researchgate.net/publication/307040922
- Obadara, O. E., & Alaka, A. A. (2013). Accreditation and quality assurance in Nigerian Universities. Journal of Education and Practice, 4 (8), 34-41.
- Ogunyinka E.K, Okeke T.I., & Adedoyin, R. C (2015), Teacher education and development in Nigeria an analysis of reforms, challenges and prospects. Education Journal, 4 (3), 111-122. doi: 10.1164ijedu20150403.
- Olatunde, AdebolaMorenike (2021) Influence of appraisal on the quality of Business Education programme in colleges of Education, Southwest, Nigeria. Nigeria Journal of Education, 8(1), 70-78.
- Onwe E.I (2015) Appraisal of the management of physical facilities in public and private colleges of education in South East Nigeria (Doctor of Philosophy thesis). University of Nigeria Nsukka.
- Petrick, J. (2017) Role of a business education teacher. Retrieved from https:/careertend.com/schoolcounselorsalary-vs-teacher-salary-38366.html
- University of Mumbai Concept of teacher education. Retrieved from ttp:archivemu.ac.in/myweb test/ma%20edu/Teacher%20Education%20-%20IV.pdf
- Wedell.M. (2017). Teacher education planning handbook (1stEd). New Delh, India: British Council

Biosynthesis And Characterization of Silver Nanoparticles Using Methanolic Extract of Wild Lettuce – Lactuca taraxacifolia

Ofoegbunam Chimee Bibian

Department of Microbiology University of Ibadan, Ibadan Nigeria chimecyn@gmail.com +234-08035665229

Abstract

Wide range of studies and researches in the field of nanotechnology have rapidly been improved throughout the world. Extraction was carried out using standard methods and the biosynthesis of silver nanoparticle was done using wild lettuce methanolic extract. Silver nanoparticle was biosynthesized and characterized. The extract was able to bio-reduced silver nitrate for silver nanoparticle production. Using a mixture of spectroscopic and analytical methods, including Ultraviolet- visible spectroscopy (UV-Vis), Scanning Electron Microscopy (SEM), Fourier Transform Infrared (FTIR) spectroscopy, Transmission Electron microscopy (TEM), X-Ray Diffraction (XRD), Thermogravimetry (TGA), and Energy Dispersive X-ray (EDX), the characterisation of LT-AgNPs was carried out. The characteristic UV peak was obtained at 500 nm. The SEM images showed that the size of the nanoparticle ranges from 9.0-11.9 nm. The biosynthesized LTSNPs' FTIR spectra revealed 16 main bands, which indicated the presence of the different functional groups like Hydroxyl group, Carboxyl group, etc. The TEM result showed that the particles are rather fine and spherical in shape. The XRD analysis confirmed that the biosynthesized nanoparticles were crystalline in nature. The temperature range between 450°C and 650°C was where AgNPs of Lactuca taraxacifolia extract lost the majority of their weight. It was stable up to 800°C, as shown in TGA result. EDX showed that the biosynthesized LT-AgNPs was able to withstand heat. The aim of this work is to biosynthesize and characterize silver nanoparticle (AgNPs) using methanolic extract of wild lettuce- Lactuca taraxacifolia. The safe production of nanoparticle with non toxic and cheap substrates is essential. Due to its many components or compositions, this plant should be domesticated since it may be utilized as a health food.

Keywords: Wild lettuce, Methanolic extract, Silver Nanoparticles, Biosynthesis, Characterization.

Introduction

Wide range of studies and researches in the field of nanotechnology have rapidly been improved throughout the world. The desire of nanotechnology in producing eco-friendly nanoparticles that is different from the previous ones are said to have given rise to the biosynthesis of nanoparticles (Massironi *et al.*, 2019).

Nanoparticles do have new characteristics that rely on their scale, form, and appearance and allow them to interact with microorganisms, vegetation, and vertebrates (Husen and Siddiq., 2014; Siddiqi *et al.*, 2016, Siddiqi and Husen, 2016; Siddiqi and Husen, 2017). According to Edhaya Naveena and Prakash (2013), nanotechnology entails the synthesis, characterisation, design, and deployment of devices, components, and systems by manipulating size and shape at the nanoscale level (Madhuri *et al.*, 2012).

Nanotechnology also includes creating nanoparticles with sizes between one and 100 nm (Eu 2011). More specifically, a new category of nanotechnology called as bio-nanotechnology emerged. It combines biological ideas with chemical and physical processes to create nanoparticles with particular functionalities (kathiresan *et al.*, 2009; Roduner, 2006).

The leafy vegetable known as wild lettuce (*Latuca taraxacifora*), which is green in color, is mostly consumed in western Nigeria. Most African nations consume this vegetable, wild lettuce, either raw or cooked (Arawande *et al.*, 2013). *Lactuca taraxacifora* has been used in ethno-medical purposes.

Additionally, it has been shown that some Nigerian societies do use a mixture made from its leaves to certain body parts (Oluwasesan *et al.*, 2018). *Latuca taraxacifolia* requires minimum or small input for its growth under direct sunlight (Ayodele 2005). The plant wild lettuce is called various names in Nigeria and West African countries. In Nigeria, the Yoruba tribe calls it "Efoyanrin" and "Odundunodo" while the Hausa tribe calls it "Namijindayii", NonanBarya and "Noman barewa". It is also called "agbloke"in Ghana, "Kissi and bekuhoa-pomboe" in Sierra Leone. This plant, known as wild lettuce, is consumed in several African nations. The use of plant extract in synthesizing nanoparticles is considered a promising alternatives to chemical based synthesis of nanoparticles.

The aim of this work is to biosynthesize and characterize silver nanoparticle (AgNPs) using methanolic extract of wild lettuce-*Lactuca taraxacifolia*. The safe production of nanoparticle with non toxic and cheap substrates is essential.

Materials and Methods

2.1. Collection of samples

The leaves of Wild lettuce, *Lactuca taraxacifolia* (*Efo yarin*) were obtained from Ajegunle market Oyo town, Oyo state, Nigeria and were authenticated at the Department of Pharmacy, University of Ibadan, Ibadan, Nigeria.

2.2. Extract Preparation

The leaves were cleaned under running water, and then allowed to air dry for a week. The powdered dry leaves were placed in a glass container after being pounded into a fine powder. When put on a weighing balance scale, the initial weight of the dried powdered leaves weighed 188.1g. Two liters of pure methanol was added, mixed every two hours and left to extract for 72 hours. The extract was collected using muslin bag. For a second extraction, 2 more liters of ethanol were added. Whatman filter paper with a 1mm size was used to further filter the mixed filtrates. Using a rotary vacuum evaporator set at 40°C, the filtrates were concentrated. The crude extract was further concentrated in a vacuum oven with a pressure of 700 MmHg and a temperature of 40 °C.

The weight of the crude extract was obtained and percentage yield calculated as follows:

Weight of extract

% Yield = $\frac{1}{\text{Weight of plant material}}$ x 100

Following that, the extract was kept in a refrigerator in an airtight container until usage.

2.3. Biosynthesis of silver Nanoparticles.

Production of silver nanoparticles was done using silver nitrate solution which was produced by reacting 169.8 mg of AgNO₃ with 1000 mL of water (AgNPs). 100 mL of distilled water were used to dilute 2g of plant extract, which was then stirred. 100 mL of freshly made 0.01 m AgNO₃ were added to the mixture in a tube to start the reaction. The synthesized nanoparticles were labeled - *Lactuca taraxacifolia* Silver nanoparticles (AgNPs).

2.4 Characterization of Silver Nanoparticle.

Using a mixture of spectroscopic and analytical methods, including Ultraviolet- visible spectroscopy (UV-Vis), Scanning Electron Microscopy (SEM), Fourier Transform Infrared (FTIR) spectroscopy, Transmission Electron microscopy (TEM), X-Ray Diffraction (XRD), Thermogravimetry (TGA), and Energy Dispersive X-ray (EDX), the characterisation of LT-AgNPs was carried out. (Bhaskara *et al.*, 2010; Parathasarathy *et al.* 2017)

2.4.1 Ultraviolet- visible spectroscopy.

UV-Vis spectroscopy on a Jenway 6405 uv/vis Spectrophotometer was used to determine the optical characteristics of the AgNPs from *L. taraxacifolia*. By taking a small aliquot from the reaction mixture and measuring the wavelength with the greatest absorbency every 24 hours, 42 hours, and 72 hours, the wavelength with the highest absorbance was disseminated in a quartz cuvette with a 1 cm optical path. The wavelength ranged from 200 to 900 nanometers.

2.4.2 Scanning Electron Microscopy (SEM)

Using an ultra plus FEGSEM from Carl Zeiss (ZEISS EVO-MA 10, Oberkochen, Germany), *L. taraxacifolia* nanoparticles were seen, and smart SEM ver. 5 software was used to estimate the form and size of the NPs (Carl zeiss Germany). The biosynthesized silver nanoparticles in the colloidal solution were adequately discharged after 15 minutes of centrifugation at 4000 rpm. The supernatants were centrifuged once more for 30 minutes at 25,900 rpm. After appropriately discarding the supernatants, the pellets were dissolved in 0.1 mL of deionized water. The pellets were well combined, put delicately on a glass cover slip, and allowed to air dry. SEM was used to get the nanoparticle pictures.

2.4.3 Fourier Transform Infrared spectroscopy (FTIR)

The functional groups found in the methanol extract of *L. taraxacifolia* are in charge of the synthesized's capping and effective stability. A Shimadzu FTIR model IR8400s Spectrophotometer is used to measure AgNPs. The solutions were thoroughly dried at 75°C, and the dried powders were identified using the KBR pellet technique in the range of 4000–40 cm⁻¹. It provides a clue as to the probable chemical substance found in wild lettuce that is responsible for reducing the Ag+ ions to elemental Ag⁰.

2.4.4 Transmission Electron Microscopy (TEM)

The shape and size of the AgNPs produced by the plant were displayed using the TEM method. The sample was first sonicated for 15 minutes using a Vibronics VS 80. This solution was dropped over copper grids coated with carbon before the solvents were allowed to evaporate for roughly 30 minutes while illuminated by infrared light. Images of the final product were taken using a TEM (JEOL type JEM 2100 equipment), which was run at a 200 kV accelerating voltage.

2.4.5 X-ray Diffraction of AgNPs (XRD)

AgNPs underwent XRD analysis in order to assess its size, purity, and crystalline structure. According to (JCPDS file.Sg21.ASC), the crystallographic planes 220, 111, 200, 220, and 311 of the face-centered cubic (fcc) structure of the silver powder sample are associated to the diffraction peaks of 2? = 40, 50, 55, 70, and 80. Without reporting any extra diffraction peaks, the distinctive peak of the silver structure was reported by highlighting the purity feature of the produced silver nanoparticle.

2.4.6 Thermogravimetry (TGA)

The thermal stability of the biosynthesised silver nanoparticles was evaluated using the thermogravimetry (TGA) method. The LT-AgNPs' predominant weight loss was observed.

2.4.7 Energy Dispersive X-ray (EDX) analysis

The weight percentage of silver was calculated using the EDX spectrum method. The thermograph demonstrated the nanoparticle's relative thermal weight. The biosynthesized LT-AgNPs was able to withstand heat.

Results and Analysis

3.1 Biosynthesis of Silver Nanoparticles

The visual observation of the nanoparticle biosynthesized using methanol extract of *Lactuca taraxacifolia* leaveas is shown in Figure 3.1. Silver nanoparticle production was clearly identified by a colour change. Changes in colour from light green to brown indicates nanoparticles biosynthesis.

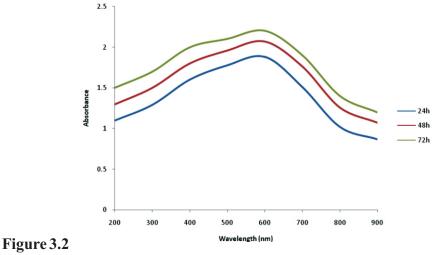


Figure 3.1. Visual observation of a.) Silver Nitrate solution b.) AgNO₃ and extract, and c.) *Lactuca taraxacifolia* nanoparticle

3.2 Characterization of Biosynthesized LTSNPs

3.2.1 UV visible Spectrophotometer

The UV-Vis spectrophotometer was used to characterize the biosynthesized LTSNps at various incubation times. UV-Vis spectra of the biosynthesized LTSNps at various incubation times is shown in Figure 3.2. A Surface Plasmon Resonance (SPR) peak was observed at 500 nm and a broad spectrum ranged from 200 - 900 nm were both seen at various incubation times. Results from the UV-Vis spectra and SPR at 500 nm indicate the production of silver nanoparticle.



arious incubation times.

3.2.2 Scanning Electron Microscopy (SEM).

Scanning electron microscopy was carried out for the morphological identification of biosynthesized silver nanoparticles. It was observed that the biosynthesized extract were spherical. Figure 3.3a shows the Scanning Electron Micrograph of LTSNPs, while figure 3.3b shows the 3D image of the nanoparticle. The size of the nanoparticle ranges from 9.0-11.9 nm.

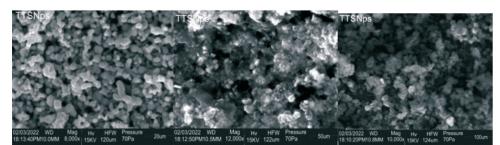


Figure 3.3a: Scanning Electron Micrograph of LTSNPs

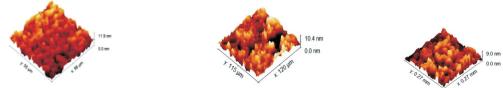
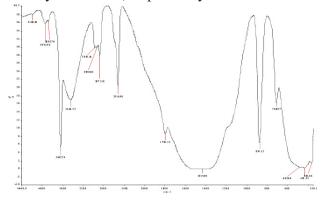


Figure 3.3b: 3D Image of the biosynthesized LTSNPs

3.2.3 Fourier Transform Infrared (FTIR)

The FTIR analysis was performed in order to identify any organic functional groups, such as C=O or OH, attached to the nanoparticle's surface. The FTIR spectra of LTSNps is shown in Figure 3.4. The biosynthesized LTSNPs' FTIR spectra revealed 16 main bands, which indicated the presence of the different functional groups present. It demonstrates:

The absorption peak at 4189.50 cm⁻¹, 3942.50 cm⁻¹, 3883.70 cm⁻¹ and 3642.74 cm⁻¹, 3446.33 cm⁻¹ indicates the existence of hydroxyl(-OH) stretching in alcohols and phenolics with strong bonds of hydrogen or results from stretching the -NH band of amino groups. The absorption peak at 2970.24 cm⁻¹, 2930.24 cm⁻¹ and 2871.58 cm⁻¹ show the C-H stretching CH₂. The absorption peaks at 2516.90 cm⁻¹ shows the presence of carboxyl acid. A band at 1796.12 cm⁻¹ demonstrates the presence of CaCO₃, an aldehyde's carbonyl group. A significant signal was discovered at 1435 cm⁻¹ in the fingerprint area as, indicating the presence of nitrosamine, an aromatic ring. Furthermore, the absorption bands in the range of 874 cm⁻¹, 708.97 cm⁻¹, 485 cm⁻¹, 435.53 cm⁻¹ and 366.66 cm⁻¹ are related to bending -C=O inorganic carbonate, Halogen compound (C-C1), polysulfides and Aryl disulfides, respectively.



x

Figure 3.4: FTIR of LTSNPs

3.2.4 Transmission Electron Microscopy (TEM)

On the basis of a Transmission Electron Micrograph picture, it was discovered that the nanoparticles were spherical along with the layer and had two distinct parts in nature that were different in color, a dark portion and a lighter part. The lighter or less dark portion creates the adhering or connected layer, while the darker portion stands in for the nanoparticles. The TEM pictures showed that the particles are rather fine and spherical in shape (Figure 3.5).

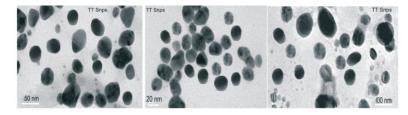


Figure 3.5: Transmission Electron Micrograph of LTSNPs

3.2.5 X-ray Diffraction of AgNPs (XRD)

By using X-ray diffraction, the AgNPs' size, crystalline makeup, and quality were assessed. The obtained results show an X-ray diffractogram (XRD) pattern for AgNPs made from *Lactuca taraxacifolia* leaf extract; the diffraction highs 2? = 40.0, 50.0, 55.0, 70.0, and 80.0 are related to 220, 111, 200, and 311, respectively. The biosynthesized nanoparticles were crystalline in nature. (Figure 3.6).

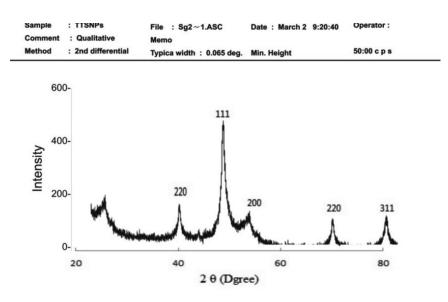


Figure 3.6: X-ray Diffraction of the biosynthesized LTSNPs.

3.2.6 Thermogravimetry (TGA).

Using thermogravimetry, the thermal stability of AgNPs in relation to its weight was evaluated. The heat decomposition-related mass loss is shown by the TGA curve (Figure 3.7). Analysis revealed that the temperature range between 450°C and 650°C was where AgNPs of *Lactuca taraxacifolia* extract lost the majority of their weight. It was stable up to 800°C.

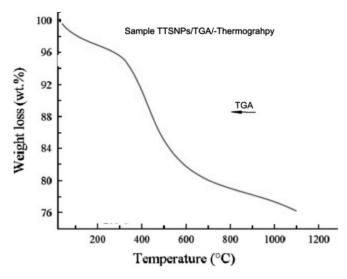
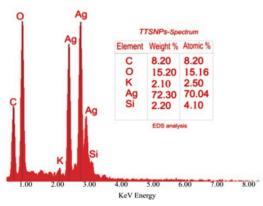


Figure 3.7: TGA of the biosynthesized LTSNPs

3.2.7 Energy Dispersive Spectroscopy (EDX) analysis

The elemental analysis of the bio-produced AgNPs nanoparticles is revealed by the EDX examination. The findings of the EDX examination show that the silver (Ag) atoms present have a significant signal; further peaks that were seen include: The capping on the surface of these nanoparticles is done by biomolecules made of silicon (Si), carbon (C), oxygen (O), potassium (K), and silver (Ag) (Figure 3.8). From the result, silver (Ag) has the highest intensity (72.30%) which signifies the purity of the LTSNPs.





Discussion and Conclusion

4.1 Discussion

The attempt to synthesize nanoparticles from aqueous *L. taraxacifolia* was successful. The change in color shows that nanoparticle was formed. The translucent $AgNO_3$ solution turned to a brown color when a specified amount of plant extract was added. This was also reported by Rajeshkumar *et al.*, (2017), who observed colour change in the reaction mixture during silver nanoparticles formation biosynthesized from *Padina tetrastromatica*.

Although, the colour change can indicate the presence of nanoparticles in the solution, some analysis such as UV spectroscopy, FTIR, SEM, TEM etc, can be carried out for an accurate result.

Similar to the findings, ALQahtani *et al.*, (2017) identified the surface plasmon resonance of AgNPs at 468.5 nm using UV spectroscopy. Futhermore, the reaction mechanism's absorption spectra for AgNPs showed that they absorbed at their highest levels between 425 and 475 nm due to their surface plasmon resonance (Banerjee *et al.*, 2014).

In SEM analysis, it was observed that the biosynthesized extract were spherically shaped.

The size ranges from 9.0-11.9 nm. Similar to the study, the size and morphological properties of AgNPs in study carried out by Swamy *et al.* (2015) are consistent with the findings of this study. Additionally, when the study's findings were compared with those of Kotakadi *et al.* (2013), it was discovered that AgNPs had a spherical form and that their diameters range from 27 to 50 nm.

The particle size was also established by TEM. The synthesized AgNPS's TEM micrograph revealed that the NPs were spherical in shape

The XRD pattern from the XRD analysis revealed diffraction peaks at 2? = 40, 50, 55, 70, and 80. AgNP was produced by Krishnaraj *et al.* (2010) using *Acalyplaindica* leaf extracts, and its average size was close to 35 nm. The nanoparticles made from *Cymbopogon citronella* and *Solanum verbascifolium* were around 36 and 41 nm in size, respectively (Phatak and Hendre, 2015). Apart from the assigned peaks for AgNPs, any additional peaks may be caused by metalloproteinase or by the bioorganic crystalline compounds that may be present in the leaf extract.

TGA analysis indicates the mass loss due to thermal decomposition (Baran 2017). The TGA data revealed the mass loss of the AgNPs synthesized for the research ranged between 450°C and 650°C. When the TGA curve of AGNPs was extensively analyzed in a related work, it was shown that there was a consistent mass loss in the temperature range of 50-800°C, and that this loss was caused by the desorption of bioorganic substances (Ali *et al.*, 2015).

In EDX analysis, the EDX spectrum of AgNP revealed the presence of silver (Ag). The presence carbon (C), oxygen (O), silicon (S), and potassium, were also observed which may be due to presence of plant extract.

In FTIR analysis, variety of inferences to be drawn, such that the analyzed material under study has triple and double bonds, hydrates, or hydroxyl components. Similar to the work, Shah *et al.*, (2017) produced AgNPs by interacting AgNO₃ with an aqueous solution containing *Xanthorrhoea glauca* leaf extract and found that the peak of amide and carboxy groups occurred at 1642 cm⁻¹, 1556 cm⁻¹, and 1536 cm⁻¹. They reported that the AgNPs demonstrated varying degrees of antibacterial activity against *staphylococcus epidermiss and Escherichia coli, with Staphylococcus epidermis showing* a layer zone of inhibition (11nm). Furthermore, the FTIR spectrum measurements of AgNPs synthesized by Singh *et al* (2017) showed that the –OH stretch at 3430 cm⁻¹ and also the binding takes place on these two functional groups.

4.2 Conclusion

By employing the methanol extract of the *Lactuca taraxacifolia* species, the research has been able to biosynthesize silver nanoparticles in an eco-benign and friendly environment. Due to its many components or compositions, this plant should be domesticated since it may be utilized as a health food. Future research can focus on a deeper understanding of the mechanism of Silver nitrate (AgNO₃) synthesis as it will help in maintaining a control over the particle size and shape.

References

- Ali, K., Ahmed, B., Dwivedi, S., Saquib, Q., Al-Khedhairy, A. A. and Musarrat, J. 2015. Microwave accelerated green synthesis of stable silver nanoparticles with Eucalyptus globulus leaf extract and their antibacterial and antibiofilm activity on clinical isolates. *PloS one*, *10*(7), e0131178.
- AlQahtani, F.S., AlShebly, M.M., Govindarajan, M., Senthilmurugan, S., Vijayan, P., Benelli, G. (2017): Green and facile biosynthesis of silver nanocomposites using the aqueous extract of *Rubus ellipticus*

leaves: toxicity and oviposition deterrent activity against Zika virus, malaria and filariasis mosquito vectors. *Journal of Asia-Pacific Entomology* 20(1):157-164.

- Arawande, J. O., Komolafe, E. A. and Imokhuede, B. 2013. Nutritional and phytochemical compositions of fireweed (Crassocephalum crepidioides). *Journal of Agricultural Technology*, 9(2), 439-449.
- Ayodele, A.E., 2005. The Medicinally important leafy vegetables of Southwestern Nigeria. *Ethnobotanical leaflets*, 2005(1),16.
- Banerjee, P., Satapathy, M., Mukhopahayay, A. and Das, P., 2014. Leaf extract mediated green synthesis of silver nanoparticles from widely available Indian plants: synthesis, characterization, antimicrobial property and toxicity analysis. *Bioresources and Bioprocessing*, 1, 1-10.
- Baran, M. F. 2017: Biosorption of some toxic metals in water. PhD Thesis, Dicle University, Institute of Science and Technology, Diyarbakır.
- Bhaskara, R.K.V., Hemath, N.K.S., Kumar, G. and Karthik, L., 2010. Extracellular biosynthesis of silver nanoparticles using the filamentous fungus Penicillium sp. *Arch. Appl. Sci. Res*, *2*(6), 161-167.
- Edhaya, N.E., & Prakash, S. 2013. Biological synthesis of gold nanoparticles using marine algae Gracilaria corticata and its application as a potent antimicrobial and antioxidant agent. *Asian Journal of Pharmaceutical Clinic Research*, 6(2), 179-182.
- EU (2011) Commission Recommendation of 18 October 2011 on the definition of nanomaterial Official Journal of the European Union L275/38
- Husen, A. and Siddiqi, K. S. 2014. Phytosynthesis of nanoparticles: concept, controversy and application. *Nanoscale research letters*, *9*, 1-24.
- Kathiresan, K., Manivannan, S., Nabeel, M. A. and Dhivya, B. 2009. Studies on silver nanoparticles synthesized by a marine fungus, Penicillium fellutanum isolated from coastal mangrove sediment. *Colloids and surfaces B: Biointerfaces*, 71(1), 133-137.
- Kotakadi., V. S., Rao., Y. S., Gaddam, S. A., Prasad, T. N. V. K. V., Reddy, A. V. and Gopal, D. S. 2013. Simple and rapid biosynthesis of stable silver nanoparticles using dried leaves of Catharanthus roseus. Linn. G. Donn and its anti microbial activity. *Colloids and Surfaces B: Biointerfaces*, 105, 194-198.
- Krishnaraj, C., Jagan, E.G., Rajasekar, S., Selvakumar, P., Kalaichelvan, P.T. and Mohan, N. 2010. Synthesis of silver nanoparticles using Acalypha indica leaf extracts and its antibacterial activity against water borne pathogens. *Colloids Surf B Biointerfaces*, 76(1), 50-56.
- Madhuri, S., Maheshwar, S., Sunil, P. and Oza, G. 2012. Nanotechnology: concepts and applications. Boca Raton, Florida: CRC Press.
- Massironi, A., Morelli, A., Grassi, L., Puppi, D., Braccini, S., Maisetta, G. and Chiellini, F. 2019. Ulvan as novel reducing and stabilizing agent from renewable algal biomass: Application to green synthesis of silver nanoparticles. *Carbohydrate Polymers*, 203, 310-321.
- Oluwasesan, M.B., Ogbesejana, A.B. and Uduma A. 2018. Launaea taraxacifolia; a Neglected Vegetable from Nigeria, its Antiinflammatory and Antioxidant Activities. *ChemSearch Journal*, 9(1), 9-12.
- Parthasarathy, G., Saroja, M. and Venkatachalam. 2017. Bio-synthesized nano-formulation of Zinc oxide-Aloe vera and to study their characterization and antibacterial activities against multiple pathogens. *International Journal of Pharmaceutical Sciences and Research*, 8(2), 900-907.
- Phatak, R. S. and Hendre, A. S. 2015. Sunlight induced green synthesis of silver nanoparticles using sundried leaves extract of Kalanchoe pinnata and evaluation of its photocatalytic potential. *Der Pharmacia Lettre*, 7(5), 313-324.
- Rajeshkumar, S., Malarkodi, C. and Venkat-Kumar, S. 2017 Synthesis and characterization of silver nanoparticles from marine Brown seaweed and its antifungal efficiency against clinical fungal pathogens, Asian J. Pharmaceut. Clin. Res. 10 (2): 190–193.

- Roduner, E., 2006. Size matters: why nanomaterials are different. *Chemical society reviews*, 35(7), 583-592.
- Shah, M., Poinern, G. E. J. and Fawcett, D. 2017. Biosynthesis of silver nanoparticles using indigenous Xanthorrhoea glauca leaf extract and their antibacterial activity against Escherichia coli and Staphylococcus epidermis. *International Journal of Research in Medical Sciences*, 4(7), 2886-2892.
- Siddiqi, K. S. and Husen, A. 2017. Recent advances in plant-mediated engineered gold nanoparticles and their application in biological system. *Journal of Trace Elements in Medicine and Biology*, 40, 10-23.
- Siddiqi, K. S., ur Rahman, A. and Husen, A. 2016. Biogenic fabrication of iron/iron oxide nanoparticles and their application. *Nanoscale research letters*, *11*, 1-13.
- Siddiqi, K. S., & Husen, A. 2016. Engineered gold nanoparticles and plant adaptation potential. *Nanoscale Research Letters*, 11, 1-10.
- Singh, A. K., Tiwari, R., Kumar, V., Singh, P., Khadim, S. R., Tiwari, A. and Asthana, R. K. 2017. Photoinduced biosynthesis of silver nanoparticles from aqueous extract of Dunaliella salina and their anticancer potential. *Journal of Photochemistry and Photobiology B: Biology*, 166, 202-211.
- Swamy, M. K., Akhtar, M. S., Mohanty, S. K. and Sinniah, U. R. 2015. Synthesis and characterization of silver nanoparticles using fruit extract of Momordica cymbalaria and assessment of their in vitro antimicrobial, antioxidant and cytotoxicity activities. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 151, 939-944.

Actualizing Teaching Practice Objectives Among Business Education Students For Developing New Teachers In Anambra, State.

Ofuonye, Roseline A. Department of Business Education, Nwafor Orizu College of Education Nsugbe rozzita101@gmail.com; 07030444328

Abstract

This study ascertained the actualizing teaching practice objectives among business education students for developing new teachers in Anambra state. To this end, the study was guided by two research questions and one null hypothesis was tested at 0.05 level of significance. Related literatures pertinent to the study were reviewed and which exposed the need for the study. A descriptive survey research design was adopted for the study. The population consisted of 196 respondents, this is made up of year one, year two and year three degree business education students of Nwafor Orizu College of Education, Nsugbe, in Anambra State. A sample of 170 respondents was drawn using proportionate stratified random sampling techniques. Data were collected using a research developed instrument titled self structured 4- part questionnaire (SSQ) the instrument was validated by three experts who are lecturers in Nwafor Orizu College of Education, Nsugbe, two from the school of vocational and technical Education (Business Education) while one from Measurement and Evaluation Department (G&C) The reliability index of 0.75 was obtained using test-rest method. Data collected for the study were analysed using descriptive statistics of mean and standard deviation. The finding of the study revealed among others that Actualizing Teaching Practice Objectives among business education students for developing new teachers in Anambra State. The academic- related issues in actualizing teaching practice objectives among business education students for developing new teachers to disagreed that teacher ask students to behave naturally, student- related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers to accept the mean score.

Keywords: Teaching, Business Education, Students and Teachers

Introduction

Teaching Practice is an integral part of a teacher education programmer aimed at providing student-teachers an opportunity to put into practice their theoretical knowledge in a real school-life situation. It also offers teacher educators and educational managers a golden opportunity for practical appraisal of the effectiveness of teacher education programmed. Teaching practices is an interactions key for all learning in early childhood settings. They foster trust and emotional security; are communication and language rich; and promote critical thinking and problem-solving. They also support social, emotional, behavioral, and language development; provide supportive feedback for learning; and motivate continued effort. Teaching practices and interactions are responsive to and build on each child's pattern of development and learning. They can be measured by the Classroom Assessment Scoring System (CLASS) and other adult-child interaction tools. These observations may then be used to support professional development. Teaching practices also include how schedules and routines are carried out.

The Impact Of Teaching Practice To Students Teacher

the teaching practice exercise is the culminating point where the relationship among the three major players: university supervisor, host teacher, and aspiring teacher interface to determine the quality of experience the

aspiring teaching will take away. It becomes the bedrock on which the aspiring teacher once certified and employed builds his/her professional identity. It is therefore, necessary that aspiring teachers are paired with competent, knowledgeable and concerned university supervisors to help them assume the full range of duties of a teacher during this hands-on training period. Host teachers have equally vital influence in aspiring teachers' professional growth and development. Student learning - a desired outcome and primary goal of higher educational institutions, teaching is the most important experience in teacher education programmed and is generally based on a country's National Education policy. Teaching practice is a compulsory course for all aspiring student teachers registered in a teacher preparation programmed in Nigeria. It is one-semester in duration; usually lasting from the beginning to the end of the First Semester of the final year of students' training. During this period, most programmers focus on the following:

Instructional planning Instructional technology Micro-teaching mentoring Studies in teaching methods Posting of students to schools where they can practice their major courses of study .The Student Teaching Program at any higher institution is a well-structured programmed designed to provide an opportunity to develop and evaluate aspiring teachers' competence in an actual classroom within school settings. In a paper on Global exposure presented at the Research Seminar Series, Aglazor (2015) noted that field-based experiences such as study abroad and student teaching are intended to bridge theory and practice.

"Practice does not necessarily make perfect but good practice" (Richards and Crookes, 2018) It is not so easy to understand and realize a good teaching practice component in teacher education programs. The teaching practice component of teacher education programs is composed of mainly five aspects:) a student teachers as the active participants of the teaching practice, b) university supervisors as the experts to help student teachers before and after they practice teaching, c) cooperating teachers as the experts helping student teachers in their teaching practice schools, d) students as the receivers of knowledge that student teachers are required to complete their student teaching requirements. Beck, C. and Kosnik, C. (2022).

The teaching practice is located at the highest level of the university-school cooperation of the teacher education programs (Tang, 2022). It is also reported by some pre-service teachers that they are not adequately prepared by the teacher education programs to meet the requirements of teaching in a real classroom environment (Stuart and Thurlow, 2020). They report that they are not able to cope with the problems they face during teaching practice. Not being able to practice the teaching skills they have learned throughout their training in the teacher education programs causes student teachers to experience discouragement and disappointment (Stuart and Thurlow, 2020). All in all, it is possible to assume that the mostly theoretical education they receive in their teacher education programs can provide student teachers with some of the knowledge they need when they start practice teaching.

According to National Universities Commission (NUC, 2017) Benchmark and National Commission for Colleges of Education (NCCE, 2015), the following sets of objectives have been established for why teaching practice is a mandatory component of teacher training.

- i. To expose student-teachers to real life classroom experiences under the supervision of professional teachers.
- ii. To provide the forum for student-teacher to translate educational theories and principles into practice.
- iii. To enable student-teachers discover their own strengths and weaknesses in classroom teaching and provide opportunities to enable them address their weaknesses and enrich their strengths.
- iv. To familiarize student-teachers with real school environment as their future work place.
- v. To provide student-teachers with an opportunity for further acquisition of professional skills, competencies, personal characteristics and experience for full-time teaching after graduation. vi.

vi. To help student-teachers develop a positive attitude towards the teaching profession. vii. To serve as a means of assessing the quality of training being provided by teacher training institutions.

It is to be argued that the expectations of teacher trainers and mentor teachers may or may not match in a teaching practice environment. As Clark (2022) discusses, what student teachers and teacher educators expect from student teaching experience and the teaching practice is 'doing a good job'. The primary purpose of teaching practice is to give the to-be teachers a chance to prepare themselves as future teachers. Preservice teachers see teaching practice as the most important constituent of their teaching experience and as a vital component of their teacher education (Zeichner, 2019).

Concept of Business Education

Business education is one of the major components of vocational education. In Nigeria, the discipline is offered at both the secondary and tertiary levels of education. According to Abdullahi (2012), Business education is an aspect of total educational programme which provides the recipient with knowledge, skills, understanding and attitude needed to perform well in the business world as a producer or consumer of goods and services. Furthermore, Osuala (2014) is of the opinion that Business education is a broad area of knowledge that deals with a nation's economic system and also identifies and explains the rate of business contentment and experience that prepare individuals for effective participation as citizens, workers and consumers. Finally, The National Open University of Nigeria (NOUN) (2018) defines Business education as an aspect of vocational education that equips people with necessary skills and theoretical knowledge needed for performance in business world either for job occupation or self-employment. It could be deduced from the definitions above that Business education is an education for and about business. It combines both theoretical and practical knowledge.

Teaching practices as stress-creating experiences for student teachers

Although the purpose and the function of the teaching practice component in teacher education are clear and meaningful, several problems appear in the implementation stage of this process. For example, teaching practices are stress-creating experiences due to the factors such as lack of role clarification, the Evaluation procedure, not knowing the expectations of the cooperating teacher and the supervisor, and lack of time to talk with the cooperating teacher (MacDonald, 2015; Murray-Harvey, Slee, Lawson, Silins, Banfield, and Russel, 2020). Moreover, several researchers have tried to identify the problems in student teaching during teaching practice and have specified a wide range of problematic areas such as classroom management, individual learner differences, dealing with unmotivated learners, managing time, inappropriate lesson planning, etc. (Veenman, 2014; Valdez, Young, and Hicks, 2020; Hertzog, 2022, Tang, 2022).

Concept of student teacher

In Nigeria, before becoming licensed by the state to teach, a student who wants to become a teacher must complete all the requirements to graduate from an accredited university with a teaching degree; In their final semester of college, the student must successfully complete the "student teaching" experience. Student teachers are assigned to work in a normal, functioning classroom. (If they are elementary, they work in an elementary classroom; secondary teachers likewise teach in a secondary classroom, usually in the subject they are preparing to teach.). They begin by just observing the classroom, and gradually take over the tasks of the teacher until they are fully operating as a teacher (Barksdale-Ladd, Draper, King, Oropallo and Radencich, 2021)

Statement of the Problem

Nowadays, teachers face many challenges such as: the spread of behavioral and academic problems that threaten the educational system in most of the schools. These problems have direct influence on the learning process. Trainee teachers might face some problems in classroom management such as behavior problems and how to create a good studying environment. Indeed, trainee teachers had learnt about pedagogy, educational psychology and philosophy before they went for their teaching practice. However, they might have difficulties in applying all the concepts into their teaching. Some schools may also hardly provide the ample basic facilities to trainee teachers in which such situation will inhibit the learning process as trainee teachers do not have suitable teaching aids to enhance students' understanding.

Purpose of the Study

The general purpose of the study was to ascertain some common issues in actualizing teaching practice objectives among business education students for developing new teachers in Anambra state; specifically the study is designed to:

- 1. Determine the academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers
- 2. Determine the student-related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers.

Research Questions

In order to realize the above aims, the following research questions were formulated to guide the study:

- 1. What are the academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers?
- 2. What are student-related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers?

Research Hypotheses

The following research hypotheses was tested at 0.05 level of significance

1. There are no significant academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers.

Methodology

Research Design

The descriptive survey research design was adopted for the study. The two researches questions guided the study and one null hypothesis was tested at 0.05 level of significance.

Area of the Study

The study was carried out in Nwafor Orizu College of Nsugbe.

Population of the Study

The total population of the study was 196 respondents which comprised of year 2 to year 4 degree Business education students of Nwafor Orizu College of Education Nsugbe.

Instrument for Data Collection

The sample size for the study was one hundred and seventy (170) respondents (students) in Business education department, Proportionate stratified random sampling technique was adopted by the Researcher in selecting the sample size,

Method of Date Analysis

Data were collected using researchers developed Instrument titled Actualizing Teaching Practice Objectives among Business Education Students for developing new Teachers in Anambra State,

The instrument was validated by two experts, one from the Department of business Education in Nwafor Orizu College of Education, Nsugbe in Anambra East Local Government Area of Anambra state while the other from the Department of Educational psychology all in Nwafor Orizu college of education, Nsugbe. A reliability coefficient of 0.75 was obtained, using test re-test method. The data collated for the study were analyzed using mean and standard deviation.

Results:

Research question 1: What are the academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers?

Table 1: mean and standard deviation of responses on academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers

N = 300

S/N	ITEM	Mean	Std Dev	Decision
1	teaching practice are stress-creating experiences due to the factors such as lack of resources, work-life balance and political issues	3.45	0.8	Accepted
2	schools may also hardly provide the ample basic facilities to trainee teachers and such situation will inhibit the learning process	3.46	0.78	Accepted
3	Students also tend to lose attention during lectures which is greatly reflected on their knowledge and understanding	2.06	1.36	Rejected
4	Teachers work longer hours than many other positions, which often lead to burnout and stress.	2.92	0.76	Accepted
5	Lack of concern in the performance of educational activities by the school	2.07	0.73	Rejected
6	the learner not participating in the group discussion	3.01	0.73	Accepted
7	Teacher asked learner to behave naturally, without specifying the standards of classroom conduct	2.17	0.78	Rejected
8	A lack of communication and interaction between teachers and students during the class	2.83	0.82	Accepted
	Low level of academic achievement of student teacher	3.00	0.89	Accepted
10	Lack of appropriate support from parents, administrators, and, especially, government legislation	2.63	1.38	Accepted
	Total	27.6	9.03	

Source: Researcher Field Survey. 2024

Table 1 above showed that with respect to the extent academic-related problems that affect student-teachers during their teaching practice; it is surprising to observe that students recognized that the low level of academic achievement of students bothers the respondents with a mean of 3.0. However, they disagreed that teacher asked students to behave naturally, without specifying the standards of classroom conduct (2.17); the

student teachers agreed that schools may also hardly provide the ample basic facilities to trainee teachers in which such situation will inhibit the learning process with a mean score of 3.46 and standard deviation of 0.78. In general, items number 1, 2, 4, 6, 8, 9 and 10 yielded a mean score of 3.45, 3.46, 2.92, 3.01, 2.83, 3.00, 2.63 and standard deviation of 0.8, 0.78, 0.76, 0.73, 0.82, 0.89, 1.38 respectively and thus was accepted while item 3, 5, 7, gave the mean score of 2.06, 2.07, 2.17 corresponding to standard deviation of 1.36, 0.73, 0.78 and thus was rejected.

Research question 2: What are Student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers?

Table 2: mean and standard deviation of responses on Student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers N=300

chers				N - 300
S/N	ITEM	Mean	Std	Decision
11	managing pair and group work	1.85	0.95	Rejected
12	classroom discipline	2.23	0.88	Rejected
13	Cheating during examination	2.93	1.03	Accepted
14	Not completing projects / assignments	3.20	0.89	Accepted
15	problems related to learners' own culture	3.48	0.72	Accepted
16	meeting the needs of different kinds of students	1.45	0.76	Rejected
17	Unnecessary talking with seatmates	1.98	0.9	Rejected
18	dealing with problems of individual students	2.90	1.14	Accepted
19	Bullies sometimes physically harm other students	2.56	1.28	Accepted
20	Managing inappropriate skills which students learn	3.17	0.64	Accepted
	Total	25.75	9.19	

Source: Researcher Field Survey. 2024

Table 2 above showed that based on the analysis made on research question 2 the respondents agreed that problems related to learners' own culture constitute a major student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers (3.48); in relation to students continuous assessment, there are indications that being unable to complete projects / assignments also constitute some hitches (3.20); on the whole, items 13, 14, 15, 18, 19, 20 were accepted with a mean score 2.93, 3.20, 3.48, 2.90, 2.56, 3.17 corresponding to standard deviation of 1.03, 0.89, 0.72, 1.14, 1.28, 0.64 respectively, while items 11, 12, 13, 16, 17 were rejected with a mean score of 1.85, 2.23, 1.45, 1.98 and standard deviation of 0.95, 0.88, 0.76, 0.9 respectively. Table 2 also showed that the task of managing inappropriate skills which students learn is among major student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers.

Hypothesis 1: There are no significant academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers.

Item	SA	Α	D	SD	TOTAL
1	50(55)	70(60)	30(35)	20(50)	170
2	50(55)	80(60)	20(35)	20(50)	170
3	60(55)	40(60)	40(35)	30(50)	170
4	70(55)	40(60)	50(35)	10(50)	170
5	45(55)	70(60.0)	35(35)	20(50)	170

 Table 5: Chi Square analysis on academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers

From the table above, the expected frequencies are in brackets.

Degree of Freedom (df) = (R-1)(C-1) = (5-1)(4-1) = 4x3 = 12

Level of Significance = 0.05

 $\mathbf{X}^{\mathbf{2}}$ Critical Value = 48.89

 X^2 Calculated Value = 21.03

Summary of Major Findings

- > Teaching practices are stress-creating experiences due to the factors such as lack of role clarification
- Problems related to learners' own culture is one of the student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers.
- > Teaching disadvantaged children from poor families is a big problem for many student teachers
- Student teachers should tap into the resource of retired teachers to provide mentoring and support.

Discussion of Findings

Research question 1 sought to find out the academic-related issues in actualizing teaching practice objectives among business education students for developing new teachers, the study found out that the respondents are of the opinion that teaching practice are stress-creating experiences due to the factors such as lack of role clarification (3.45), this view has previously been promulgated by Murray-Harvey, Slee, Lawson, Silins, Banfield, and Russel, (2020), they upheld the knowing the expectations of the cooperating teacher and the supervisor, and lack of time to talk with the cooperating teacher are in the list of stress risers. To worsen the challenges, the respondents believed that most schools hardly provide the ample basic facilities to trainee teachers in which such situation will inhibit the learning process (3.46) comparatively, Veenman (2014) suggested that classroom discipline, motivating students and heavy teaching load resulting in insufficient preparation time were among the most cited problems of beginning teachers.

Research question 2 dealt with the Student-Related disciplinary issues in actualizing teaching practice objectives among business education students for developing new teachers. Based on the analysis, the respondents agreed that not completing projects / assignments is a major student-related disciplinary issue in actualizing teaching practice objectives among business education students for developing new teachers (3.20); in relation to individual students, there are indications that teachers encounter serious problems in dealing with problems of individual students (2.90). collaborating this findings, literature has specified a wide range of problematic areas such as classroom management, individual learner differences, dealing with unmotivated learners, managing time, inappropriate lesson planning, etc. (Veenman, 2014; Valdez, Young, and Hicks, 2020; Hertzog, 2022, Tang, 2022). Although bullies sometimes physically harm other students contributed to the student teacher problem (2.56), managing inappropriate skills which

students learn pose even greater challenge to the student teachers (3.17) this is because according to Kwo (2016) student teachers had problems related to learners' own culture and thus challenging students to higher levels of learning.

In table 2 item number seventeen indicated that unnecessary talking with seatmates does not pose significant challenge to the student teacher, in line with this findings, Lee and Loughran (2020) found that there was a change in the types of concerns in different stages of the teaching practice after their study designed to investigate the concerns of student teachers in eight themes: teachers, students, content, context, pedagogy, classroom management, supervising teachers, and assessment.

Conclusion

In conclusion, base on the findings of the study presented, analyzed and discussed, the study concludes that academic related issues in actualizing teaching practice objective among business education students for developing new teachers was disagree by respondent while student- related disciplinary issues, class room behavioral issues and solution that addresses the issues were agree by the respondent.

References

- Ali M (2019). Self-reported problems of pre-service EFL teachers throughout teaching practicum. Anadolu University *Journal of Social Sciences* cilt/vol.: 10 no: 2 : 199–226.
- Arif S (2019). Problems encountered by student-teachers during their practicum Studies. *Procedia Social* and Behavioral Sciences 2, 707–711
- Bain, J. D., Mills, C., Ballantyne, R. and Packer, J. (2022). Developing reflection on practice through journal writing: impacts of variations in the focus and level of feedback. *Teachers and teaching: theory and practice*, 8 (2), 171-196.
- Barksdale-Ladd, M. A., Draper, M., King, J. Oropallo, K. and Radencich, M. C. (2021). Four approaches to preservice teachers' involvement in the writing of case stories: a qualitative research project. *Teaching and Teacher Education*, 17, 417-431.
- Beck, C. and Kosnik, C. (2022). Components of a good practicum placement: student teacher perceptions. *Teacher Education Quarterly*, Spring, 81-98.
- Brinton, D. and Holten, C. (2019). What novice teachers focus on: The practicum in TESL. *TESOL Quarterly*, 23 (2), 343-350.
- Burant, T. J. and Kirby, D. (2022). Beyond classroom-based early field experiences: understanding an "educative practicum" in an urban school and community. *Teaching and Teacher Education*, 18, 561-575.
- Chan, K. W. and Leung, M. T. (2018). Hong Kong preservice teachers' focus of concerns and confidence to teach –a perspective of teacher development. Paper presented at the "Australian Association of Research in Education 2018 Conference", Adelaide, Australia.
- Chapman, B. S. (2019). Praxis: An adult education practicum. *Adult Learning*, 11(1), 14-17.
- Chepyator-Thomson, J. R. and Liu, W. (2013). Pre-service teachers' reflections on student teaching experiences: lessons learned and suggestions for reform in PETE programs. *Physical Educator*, 60 (2), 2-12.
- Darling, L. F. (2021). Portfolio as practice: the narratives of emerging teachers. *Teaching and Teacher Education*, 17, 107-121.

The Evolving Dynamics of Mother-in-Law and Favorite Son Relationships in Modern Family Structures

¹Obi Rita Nkemjika and ²Okadigwe John Chukwujekwu Ph.D

^{1,2}Department of Home Economics, Nwafor Orizu College of Education Nsugbe Correspondence email: jekwuokad@gmail.com

Abstract

This study covered the evolving dynamics of mother and son relationships within modern family structures. Drawing upon psychological, cultural, and societal perspectives, the study examines the various factors influencing these intergenerational bonds. Through an analysis of attachment theory, the study elucidates the complex nature of these relationships and their impact on family dynamics. The study further explored traditional and modern family structures, including their evolution and impact on mother and son relationships. It delved into psychological dynamics, gender roles, and parenting styles, examining their influence on attachment and communication patterns. Cultural influences and contemporary challenges were also analyzed, along with strategies for navigating differences. The study concludes with predictions for future research and societal implications. The findings suggest that these relationships are shaped by a myriad of factors, including attachment styles, cultural influences, understanding the dynamics of mother-in-law and favorite son relationships becomes increasingly important for promoting harmony and resilience within families. The study concludes by emphasizing the need for continued research and exploration in this field to develop effective strategies for supporting healthy and thriving family dynamics within modern family structures.

Keywords: evolving dynamics, mother, son, relationships, modern family structures

Introduction

In contemporary Igbo society, the role of a mother holds significant cultural and familial importance. Traditionally, the mother is often regarded as a matriarchal figure, responsible for upholding family traditions and values. She plays a central role in overseeing the family unit, offering guidance and wisdom to her children and their spouses (Woolley& Greif, 2019). While respect for elders is deeply ingrained in Igbo culture, the relationship between a mother and her daughter can sometimes be complex, influenced by factors such as personality dynamics, family expectations, and generational differences. Notwithstanding, the relationship between a mother and her son has long been a subject of fascination and scrutiny (Tunca & Durmuş, 2024). Traditionally depicted as fraught with tension and conflict, this dynamic has evolved significantly in modern family structures. Today, these relationships are shaped by changing societal norms, altered gender roles, and evolving family compositions.

A mother is the mother of one's spouse, typically forming a significant familial relationship within marriage. In many cultures, she holds a respected position, often serving as an elder matriarch figure within the family unit. Traditionally, she may play a role in guiding and supporting her children and their spouses, offering advice and assistance when needed (Allendorf, 2017). Historically, mother and son relationships were often characterized by power struggles and discord. Traditional family structures emphasized hierarchical roles and placed significant expectations on individuals based on their gender. Mothers were often perceived as domineering figures, while sons were expected to defer to their wives and, by extension,

their mothers (Ali-Saleh et al, 2022). This dynamic frequently led to friction and resentment within families.

However, as society has progressed into a modern family structure, so too have these relationships. Modern family structures refer to the diverse arrangements of familial relationships and living arrangements prevalent in contemporary society. These structures often deviate from traditional nuclear families and may include single-parent households, blended families, same-sex parent families, and cohabiting couples without marriage (Svallfors et al, 2024). Modern family structures reflect changing societal norms, such as increased acceptance of diverse family forms, evolving gender roles, and advancements in reproductive technologies. With the advancement of gender equality and women's empowerment, mothers and sons now often enjoy more equitable and harmonious relationships. Research has shown that shifting gender roles and increased autonomy for women have contributed to greater mutual respect and understanding between mothers and their sons (Seidu et al, 2021). Additionally, changes in family compositions, such as the prevalence of nuclear families and dual-income households, have reshaped the dynamics of intergenerational relationships.

Understanding the evolving dynamics of mother and son relationships requires consideration of the psychological aspects at play. Attachment theory, proposed by Bowlby (1982), suggests that early attachment bonds between mothers and sons can influence subsequent relationships, including those with mothers. Sons who have secure attachment bonds with their mothers may be more likely to establish positive relationships with their mothers, characterized by trust and affection. Studying the evolving dynamics of mother and son relationships in modern family structures is crucial for several reasons. Firstly, these relationships have historically been portrayed as fraught with tension and conflict, yet they are integral components of family dynamics. Understanding how these dynamics have evolved over time provides valuable understanding into changing societal norms, gender roles, and family compositions.

Moreover, research in this area helps identify gaps in our understanding of intergenerational relationships within contemporary families. For example, while studies may have explored the impact of gender roles on mother and daughter relationships, there may be limited research on the dynamics between mothers-in-law and their favorite sons. Additionally, there may be gaps in understanding how cultural differences influence these relationships, particularly within diverse family structures. For instance, a study by Bietsch et al, (2021) may have focused on the evolving dynamics between mothers and daughters but failed to address the experiences of sons within these relationships. Similarly, research by Fahey (2019) may have explored the influence of cultural norms on mother-son relationships but overlooked the specific dynamics between mothers and their sons. The outcome of the current study will help researchers to better understand the complexities of intergenerational relationships within modern families and develop strategies to foster healthier familial dynamics.

Theoretical Framework

In the context of mother and son relationships within modern family structures, Attachment Theory, proposed by Bowlby in 1982, provides a framework to understand the emotional bonds formed between individuals. Figure 1 illustrates how Attachment Theory can be applied to these evolving dynamics:



Figure 1: Attachment bond between the mother and her favorite son.

In the evolving dynamics of mother and son relationships, Attachment Theory suggests that the mother serves as a secure base, offering safety and support as the son navigates life. Both develop internal models from early attachments, shaping their interactions and emotional responses. The son's instinctual need for closeness and reassurance reflects the attachment bond, causing separation anxiety when apart. Applied, a securely attached son, nurtured by his mother, is likely to foster positive relations with his mother. Conversely, an insecurely attached son may struggle, potentially leading to family tension. Thus, the quality of the mother-son attachment influences intergenerational relationships within modern families.

Traditional family structures, Cultural and societal norms

Traditional family structures and cultural/societal norms play a foundational role in shaping the dynamics of family relationships. Throughout history, traditional family structures have typically revolved around nuclear families, consisting of a married heterosexual couple and their biological children, often living together under one roof. Within these structures, distinct roles were assigned based on gender and generational hierarchy. The father typically served as the breadwinner, responsible for providing financially, while the mother assumed the role of caregiver and homemaker, responsible for domestic duties and childcare (Nicholson, 2016). Cultural and societal norms heavily influenced these traditional family roles. In many cultures, patriarchal norms dictated that men held primary authority and decision-making power within the family unit. Women were expected to prioritize their roles as wives and mothers, often sacrificing personal aspirations for the well-being of the family (Pinho & Gaunt, 2024). These gendered expectations extended to intergenerational relationships, including those between mothers and sons.

Over time, however, family dynamics have evolved in response to broader societal changes. Economic shifts, such as increased industrialization and globalization, have led to changes in workforce participation and family structures. Women have entered the workforce in greater numbers, challenging traditional gender roles and altering the division of labor within families (Lim, 2024). Similarly, advancements in reproductive technologies have expanded the possibilities for family formation, including same-sex couples and single-parent households. These changes have been accompanied by shifts in cultural and societal norms surrounding family relationships. There is a growing recognition of diverse family structures and the importance of inclusivity and acceptance. Traditional gender roles are being redefined, with greater emphasis placed on equality and shared responsibilities within partnerships (Ekoh et al, 2022). Additionally, cultural attitudes toward marriage, parenthood, and care giving have become more varied and accepting of non-traditional arrangements.

A study by Mensah (2023) explored how changing gender roles and increased autonomy for women have influenced family dynamics, including relationships between mothers-in-law and sons-in-law. The study found that as women have gained greater independence and agency, intergenerational relationships within families have become more equitable and harmonious. Similarly, research by Hong (2018) examined cultural norms surrounding family roles and found that attitudes toward traditional gender roles are shifting, leading to greater flexibility and acceptance of diverse family structures.

The Changing Nature of Modern Family Structures

The changing nature of modern family structures is influenced by a myriad of factors, including shifts in family composition and demographics, the influence of technology, globalization, urbanization, and socioeconomic factors. These changes have significant implications for family dynamics and relationships. Shifts in family composition and demographics are perhaps the most visible aspect of the changing nature of modern family structures (Sherifat & Ajiboye, 2014). Traditional nuclear families, once the predominant form, are now just one of many family arrangements. Single-parent households, blended families, same-sex parent families, and cohabiting couples without marriage have become increasingly common. These changes reflect societal shifts in attitudes toward marriage, parenthood, and familial

relationships.

For example, research by Pearce et al, (2018) highlights the growing diversity of family structures, with a rising number of adults identifying as unmarried and living alone or with unmarried partners. Similarly, studies in European countries have documented the increasing prevalence of non-traditional family forms, such as cohabitation and single-parent households (Hofäcker & Chaloupková, 2014). The influence of technology, globalization, and urbanization has also played a significant role in shaping modern family structures. Advancements in communication technology have made it easier for families to stay connected across distances, but they have also introduced new challenges, such as digital distractions and cyber bullying. Globalization has facilitated cultural exchange and migration, leading to greater cultural diversity within families and communities. Urbanization, meanwhile, has led to changes in living arrangements, with more people residing in urban areas and facing the pressures of urban life.

These trends have been documented in research examining the impact of technology on family life. For instance, studies have explored how digital communication tools affect family relationships, finding both positive and negative effects on communication patterns and family dynamics (Onyeator & Okpara, 2019). Similarly, research on globalization and urbanization has highlighted the influence of these trends on family structures and dynamics, including changes in social norms, values, and lifestyles (González-Ramos, 2020). Furthermore, socioeconomic factors play a crucial role in shaping modern family structures and dynamics. Economic inequalities, unemployment, poverty, and access to resources all influence family life and relationships. Families with higher socioeconomic status may have greater access to education, healthcare, and social support networks, while families facing economic hardship may experience increased stress and instability.

Understanding Mother and Son Relationships

Understanding mother and son relationships involves delving into various psychological aspects, power dynamics and hierarchy, and communication patterns, social media, traditional masculinity norms, setting boundaries, managing expectations and conflict resolution strategies inherent in these relationships as illustrated in Figure 2. These elements shape the nature of the relationship and significantly impact its dynamics. Psychological aspects play a central role in shaping mother and son relationships. A securely attached son, who experienced warmth and support from his mother during childhood, is more likely to form positive and trusting relationships with his mother. Conversely, an insecurely attached son, characterized by feelings of anxiety or avoidance, may struggle to establish a healthy rapport with his mother, potentially leading to conflicts or tension within the family (Olutola et al, 2017).

Furthermore, power dynamics and hierarchy play a significant role in mother and son relationships. Traditional family structures often placed mothers in positions of authority and control within the family unit. However, as societal norms have evolved, power dynamics have shifted, leading to more egalitarian relationships. Sons may assert themselves more in familial decision-making, challenging traditional hierarchical roles. Research by Cherry and Gerstein (2021) explores the impact of traditional masculinity norms on men's relationships with their mothers, which can influence their interactions with their mothers. Understanding these power dynamics is essential for navigating conflicts and fostering healthy relationships within the family.

Communication patterns and conflict resolution strategies are critical components of mother and son relationships. Effective communication is essential for addressing conflicts and misunderstandings before they escalate. Open and honest communication, coupled with active listening, can help build trust and understanding between family members. Research by Dozier et al, (2013) suggests that setting boundaries and managing expectations are also critical components of effective communication within these relationships. By establishing clear communication channels and addressing issues as they arise, families can prevent conflicts from escalating and maintain harmonious relationships.

relationships.

For example, research by Pearce et al, (2018) highlights the growing diversity of family structures, with a rising number of adults identifying as unmarried and living alone or with unmarried partners. Similarly, studies in European countries have documented the increasing prevalence of non-traditional family forms, such as cohabitation and single-parent households (Hofäcker & Chaloupková, 2014). The influence of technology, globalization, and urbanization has also played a significant role in shaping modern family structures. Advancements in communication technology have made it easier for families to stay connected across distances, but they have also introduced new challenges, such as digital distractions and cyber bullying. Globalization has facilitated cultural exchange and migration, leading to greater cultural diversity within families and communities. Urbanization, meanwhile, has led to changes in living arrangements, with more people residing in urban areas and facing the pressures of urban life.

These trends have been documented in research examining the impact of technology on family life. For instance, studies have explored how digital communication tools affect family relationships, finding both positive and negative effects on communication patterns and family dynamics (Onyeator & Okpara, 2019). Similarly, research on globalization and urbanization has highlighted the influence of these trends on family structures and dynamics, including changes in social norms, values, and lifestyles (González-Ramos, 2020). Furthermore, socioeconomic factors play a crucial role in shaping modern family structures and dynamics. Economic inequalities, unemployment, poverty, and access to resources all influence family life and relationships. Families with higher socioeconomic status may have greater access to education, healthcare, and social support networks, while families facing economic hardship may experience increased stress and instability.

Understanding Mother and Son Relationships

Understanding mother and son relationships involves delving into various psychological aspects, power dynamics and hierarchy, and communication patterns, social media, traditional masculinity norms, setting boundaries, managing expectations and conflict resolution strategies inherent in these relationships as illustrated in Figure 2. These elements shape the nature of the relationship and significantly impact its dynamics. Psychological aspects play a central role in shaping mother and son relationships. A securely attached son, who experienced warmth and support from his mother during childhood, is more likely to form positive and trusting relationships with his mother. Conversely, an insecurely attached son, characterized by feelings of anxiety or avoidance, may struggle to establish a healthy rapport with his mother, potentially leading to conflicts or tension within the family (Olutola et al, 2017).

Furthermore, power dynamics and hierarchy play a significant role in mother and son relationships. Traditional family structures often placed mothers in positions of authority and control within the family unit. However, as societal norms have evolved, power dynamics have shifted, leading to more egalitarian relationships. Sons may assert themselves more in familial decision-making, challenging traditional hierarchical roles. Research by Cherry and Gerstein (2021) explores the impact of traditional masculinity norms on men's relationships with their mothers, which can influence their interactions with their mothers. Understanding these power dynamics is essential for navigating conflicts and fostering healthy relationships within the family.

Communication patterns and conflict resolution strategies are critical components of mother and son relationships. Effective communication is essential for addressing conflicts and misunderstandings before they escalate. Open and honest communication, coupled with active listening, can help build trust and understanding between family members. Research by Dozier et al, (2013) suggests that setting boundaries and managing expectations are also critical components of effective communication within these relationships. By establishing clear communication channels and addressing issues as they arise, families can prevent conflicts from escalating and maintain harmonious relationships.

Illustratively, a study by Akanle and Ogunkan (2021) explored the role of social media in intergenerational relationships, including those between mothers and sons. The study found that while social media can facilitate communication and connectivity, it can also exacerbate tensions within families by amplifying disagreements and misunderstandings. Similarly, research by Jeon and Yoo (2017) examined shifting dynamics in mother and daughter relationships, highlighting the importance of effective communication strategies in fostering healthy familial relationships.



Figure 2: Components Psychological aspects of Mother and Son Relationships

Factors Influencing Mother and Son Relationships

Factors influencing mother and son relationships encompass a range of elements, including gender roles and expectations, interpersonal dynamics within the family, and external influences such as cultural differences and societal pressures as shown in Figure 3. These factors shape the nature of the relationship and significantly impact its dynamics. Gender roles and expectations play a pivotal role in shaping mother and son relationships. Traditional gender norms often dictate distinct roles and responsibilities for men and women within the family unit. Historically, mothers were expected to fulfill caregiving and domestic duties, while sons were expected to provide financial support and act as the primary breadwinners. However, as societal norms have evolved, these traditional gender roles have become more fluid, leading to changes in family dynamics. Research by Thébaud and Pedulla (2016) explores the impact of traditional masculinity norms on men's relationships with their mothers, which can influence their interactions with their mothers. Understanding these gender dynamics is essential for navigating conflicts and fostering healthy relationships within the family.



Figure 3: Factors Influencing Mother and Son Relationships

Interpersonal dynamics within the family also play a significant role in mother and son relationships. Family dynamics are shaped by various factors, including communication patterns, conflict resolution strategies, and emotional dynamics. The quality of these interpersonal relationships can significantly impact the dynamics between mothers and sons. For example, a study by Nielson et al, (2022) examined shifting dynamics in mother and daughter relationships, highlighting the importance of effective communication strategies in fostering healthy familial relationships. Similarly, research by Freytag and Rauscher (2017) explored effective communication strategies for intergenerational relationships, emphasizing the role of open and honest communication in addressing conflicts and maintaining harmonious family dynamics.

External influences, such as cultural differences and societal pressures, also exert a significant influence on mother and son relationships. Cultural norms and values shape familial expectations and behaviors, influencing how individuals navigate their relationships within the family unit. Differences in cultural backgrounds can lead to misunderstandings and conflicts, particularly in intergenerational relationships. For example, research by Thomas (2020) explored the role of social media in intergenerational relationships, finding that while social media can facilitate communication, it can also exacerbate tensions within families by amplifying disagreements and misunderstandings. Similarly, research by Kengatharan (2020) examined the impact of cultural norms on family roles, highlighting how attitudes toward traditional gender roles vary across cultures and influence family dynamics.

Psychological Dynamics in Mother and Son Relationships

Mother and son relationships are deeply influenced by various psychological dynamics that shape their nature and quality. Identity formation and differentiation are crucial dynamics in understanding mother and son relationships. As individuals mature, they seek to establish their own identities apart from their family of origin. This process involves navigating their relationship with their mother while maintaining autonomy. Sons often face the challenge of balancing their own identity with familial expectations and traditions. For instance, they may seek to assert their independence while also respecting their mother's authority and cultural beliefs. Research suggests that a clear sense of identity is associated with greater relationship satisfaction. Sons who are secure in their identities can navigate their relationship with their mother more effectively (Greif & Woolley, 2019).

Emotional intelligence also plays a significant role in shaping the quality of mother and favorite son relationships. Emotional intelligence refers to the ability to recognize, understand, and manage emotions, both one's own and others'. High emotional intelligence enables individuals to navigate conflicts, communicate effectively, and empathize with others. Research has shown that emotional intelligence is associated with greater relationship satisfaction and intimacy. Sons with high emotional intelligence can manage the complexities of their relationship with their mother more effectively (Ferguson, 2014).

Emotional intelligence helps sons to understand and manage their own emotions, as well as to empathize with their mother's perspective. This enables them to navigate conflicts and disagreements in a constructive manner, fostering greater understanding and mutual respect. Moreover, emotional intelligence allows sons to communicate effectively with their mother, expressing their thoughts and feelings in a clear and respectful manner. By fostering open and honest communication, emotional intelligence helps to strengthen the bond between mothers and sons, leading to greater harmony and cohesion within the family unit.

Communication Strategies for Navigating Mother and Son Relationships

Effective communication is essential for navigating the complexities of mother and son relationships. Effective communication techniques are crucial for building trust and mutual respect between mothers and sons. Active listening is a fundamental skill that allows individuals to truly understand each other's perspectives and concerns. Sons should strive to listen attentively to their mother's thoughts and

feelings, acknowledging her perspective without judgment or defensiveness (Karim et al, 2023). Similarly, mothers should listen empathetically to their son's viewpoints, validating his experiences and emotions. Furthermore, assertive communication is essential for expressing one's needs, preferences, and boundaries effectively. Sons should feel empowered to assert themselves respectfully when communicating with their mother, expressing their thoughts and feelings in a clear and assertive manner. Similarly, mothers should communicate their expectations and boundaries assertively, ensuring that their son understands and respects their wishes.

Conflict resolution skills are another vital aspect of communication in mother and son relationships. Conflicts are inevitable in any relationship, but how they are managed can determine the overall health and longevity of the relationship. Sons and mothers should approach conflicts with a willingness to listen, understand, and find mutually agreeable solutions (Tsevenda et al, 2024). They should strive to maintain a calm and respectful demeanor during conflicts, avoiding blaming or criticizing each other. Instead, they should focus on finding common ground and compromising when necessary.

Setting boundaries and managing expectations is essential for maintaining healthy boundaries within mother and son relationships. Both parties should communicate their expectations and boundaries clearly and openly, ensuring that they are understood and respected. Sons should feel comfortable setting boundaries with their mother, asserting their autonomy and independence while still showing respect and appreciation (Okoi, 2021). Similarly, mothers-in-law should be mindful of their son's boundaries and preferences, refraining from imposing their own expectations or desires.

Gender Dynamics and Role Expectations

Gender dynamics and role expectations play a significant role in shaping mother and son relationships. Firstly, gender stereotypes influence how individuals perceive their roles and responsibilities within the family unit. Society often imposes rigid gender norms that dictate certain behaviors and expectations based on one's gender. For example, traditional gender stereotypes may dictate that mothers should fulfill caregiving and domestic duties, while sons are expected to provide financial support and act as the primary breadwinners. These stereotypes can influence how mothers and sons interact with each other and may shape their expectations of each other's roles within the family (Van-Dijk & Van-Engen, 2019).

Secondly, the role of masculinity and femininity in family interactions is a crucial aspect of gender dynamics within mother and son relationships. Masculinity and femininity are socially constructed concepts that influence how individuals express their gender identity. Within the family context, traditional notions of masculinity may emphasize qualities such as strength, assertiveness, and independence, while femininity may be associated with nurturing, empathy, and caretaking. These gendered expectations can impact how mothers and sons perceive each other and may influence their interactions and communication styles (SanLeong & Juhari, 2021).

Finally, intersectionality refers to the interconnected nature of social categories such as gender, race, class, and sexuality, and the ways in which they intersect and influence individuals' experiences and identities (Warner & Shields, 2013). Intersectionality acknowledges that individuals experience multiple forms of privilege and oppression simultaneously, shaping their perspectives and interactions within society. In the context of mother and son relationships, intersectionality may influence how gender dynamics intersect with other aspects of identity, such as race, ethnicity, and socioeconomic status. For example, cultural norms and expectations surrounding gender roles may vary based on cultural background, leading to differences in how mothers and sons navigate their relationship dynamics (Thébaud et al, 2021).

Parenting Styles and Their Impact on Mother and Son Relationships

Parenting styles captured in Figure 4 significantly influence mother and son relationships, shaping attachment dynamics and intergenerational interactions. Authoritative parenting is characterized by high

levels of warmth, responsiveness, and support, coupled with clear and consistent boundaries and expectations (Tunca & Durmuş, 2024). Parents who adopt an authoritative parenting style are nurturing and responsive to their children's needs while also setting reasonable limits and expectations. Research suggests that authoritative parenting fosters secure attachment bonds between parents and children, promoting feelings of trust, autonomy, and independence (Allendorf, 2017). In the context of mother and son relationships, sons who were raised by authoritative parents may have developed secure attachment styles, which can positively influence their relationships with their mother. They may feel comfortable expressing their needs and opinions while also respecting their mother's authority and boundaries.

Conversely, authoritarian parenting is characterized by high levels of control, strict discipline, and low levels of warmth and responsiveness (Ali-Saleh et al, 2022). Authoritarian parents tend to enforce strict rules and expectations without considering their children's opinions or feelings. Research suggests that authoritarian parenting can lead to insecure attachment styles characterized by anxiety, fear, and avoidance (Svallfors et al, 2024). In the context of mother and son relationships, sons who were raised by authoritarian parents may struggle to establish healthy boundaries and assert themselves in their interactions with their mother. They may feel resentful or constrained by their mother's authority, leading to conflicts or tension within the relationship.



Figure 4: Parenting Styles in relation to Mother and Son Relationships

Permissive parenting is characterized by high levels of warmth and responsiveness but low levels of control and discipline (Fahey, 2019). Permissive parents are indulgent and lenient, allowing their children considerable freedom and autonomy. While permissive parenting may foster close and affectionate relationships between parents and children, it can also lead to issues such as lack of self-discipline and poor impulse control (Mensah, 2023). In the context of mother and son relationships, sons who were raised by permissive parents may struggle with setting and maintaining boundaries in their interactions with their mother. They may feel uncertain or insecure in their roles within the family, leading to conflicts or misunderstandings.

The impact of parenting styles on mother and son relationships underscores the importance of understanding and reconciling differences in parenting approaches. One strategy for reconciling differences is open and honest communication. Mothers and sons should strive to discuss their parenting beliefs, values, and expectations openly, acknowledging their differences and seeking common ground. By fostering mutual understanding and respect, both parties can work together to establish consistent and cohesive parenting strategies that align with their family's values and goals. Additionally, compromise and flexibility are essential for navigating differences in parenting approaches. Mothers and sons should be willing to compromise and adapt their parenting styles as needed, taking into account each other's perspectives and preferences. By being flexible and open-minded, both parties can create a supportive and nurturing

environment for their children while also maintaining positive and harmonious relationships within the family.

Cultural Influences on Mother and Son Relationships

Cultural influences significantly shape mother and son relationships, encompassing a range of norms, practices, and traditions that vary across different cultures. This section explores three key aspects: examination of cultural norms and practices, cross-cultural comparisons of family dynamics, and strategies for navigating cultural differences in family relationships.

Firstly, cultural norms and practices play a fundamental role in shaping the dynamics of mother-inlaw and favorite son relationships. Cultural values and beliefs influence how individuals perceive their roles within the family unit and dictate expectations regarding familial obligations, respect for elders, and intergenerational interactions. For example, in cultures with collectivist values, such as many Asian societies, family harmony and filial piety are highly valued, and individuals may prioritize the needs and wishes of the family over their own desires (Cherry & Gerstein, 2021). In contrast, in individualistic cultures, such as many Western societies, autonomy and independence are emphasized, and individuals may prioritize personal fulfillment and self-expression (Nielson et al, 2022). These cultural differences can significantly impact the dynamics of mother-in-law and favorite son relationships, influencing communication styles, decision-making processes, and conflict resolution strategies.

Secondly, cross-cultural comparisons of family dynamics highlight the diversity of familial relationships across different cultural contexts. Research has identified significant variations in family structures, roles, and interactions across cultures, reflecting the unique historical, social, and economic contexts of each society. For example, in some cultures, such as many African societies, extended family networks are common, and multiple generations often live together in the same household, leading to close and interconnected family relationships (Thomas, 2020). In contrast, in other cultures, such as many Western societies, nuclear family structures are prevalent, and individuals may prioritize individual autonomy and privacy (Kengatharan, 2020). These cross-cultural differences underscore the importance of understanding and respecting cultural norms and practices when navigating mother-in-law and favorite son relationships.

Lastly, strategies for navigating cultural differences in family relationships are essential for fostering understanding, respect, and harmony within multicultural families. Effective communication is key, allowing family members to discuss their cultural backgrounds, values, and expectations openly and honestly. By sharing their perspectives and experiences, individuals can gain insight into each other's cultural contexts and develop empathy and understanding for their differences. Additionally, cultural competence the ability to navigate and adapt to diverse cultural contexts is crucial for building strong and resilient family relationships (Karim et al, 2023). Individuals should strive to educate themselves about different cultures, challenge their own biases and assumptions, and embrace cultural diversity within their families.

Future Directions and Implications

Predictions for the future of mother-in-law and favorite son relationships are influenced by ongoing societal changes, including shifts in family structures, gender roles, and cultural norms. As family dynamics continue to evolve, it is likely that mother and son relationships will also undergo transformations. For example, as more women enter the workforce and attain financial independence, traditional gender roles within the family may become more fluid, leading to changes in the dynamics of intergenerational relationships. Additionally, as society becomes increasingly multicultural and diverse, mother and son relationships may reflect a broader range of cultural influences and practices.

The evolution of mother and son relationships has potential societal impacts and consequences.

Strong and supportive family relationships contribute to individuals' overall well-being and quality of life, while strained or conflicted relationships can have negative effects on mental and emotional health. Therefore, fostering positive and harmonious mother and son relationships is essential for promoting family cohesion and resilience. Moreover, the quality of family relationships can have broader societal implications, influencing social cohesion, community well-being, and even economic productivity. As such, investing in programs and initiatives that support healthy family dynamics can yield significant social benefits.

Suggestions for further research and exploration in the field of mother and son relationships include, investigating the role of emerging trends and technologies in shaping family dynamics, exploring the impact of cultural and societal changes on intergenerational relationships, and examining the effectiveness of interventions and strategies for improving family communication and conflict resolution. Additionally, longitudinal studies tracking the trajectories of mother and son relationships over time can provide valuable understanding into their long-term evolution and outcomes. By continuing to study and understand the complexities of these relationships, researchers can contribute to the development of evidence-based interventions and policies aimed at strengthening family bonds and promoting positive social outcomes.

Conclusion

In conclusion, the study on the evolving dynamics of mother and son relationships within modern family structures sheds light on the diverse nature of these intergenerational bonds. Through an exploration of psychological, cultural, and societal factors, it becomes evident that these relationships are deeply influenced by a variety of dynamics, including attachment styles, gender roles, parenting approaches, and cultural norms.

As families continue to adapt to changing societal norms and cultural influences, the dynamics of mother and son relationships are expected to evolve further. Understanding the complexities of these relationships is crucial for promoting harmony and resilience within families and society as a whole. By fostering open communication, empathy, and cultural competence, individuals can navigate the challenges and embrace the opportunities presented by these evolving dynamics, ultimately fostering stronger and more fulfilling family bonds.

As we look to the future, continued research and exploration in this field will be essential for gaining deeper understanding into the dynamics of mother and son relationships and for developing effective strategies to support healthy and thriving family dynamics within modern family structures. Through collaboration and understanding, we can cultivate relationships that honor the past, embrace the present, and pave the way for a more connected and compassionate future.

References

- Akanle, O., & Ogunkan, L. F. (2021). Mothers-in-law or monsters-in-law: perspectives on intergenerational relations in a family context. *Comparative Sociology*, 20(5), 590-614.
- Ali-Saleh,O., Goldblatt, H., & Baron-Epel, O. (2022)."My problem is that I live next door to my mother-inlaw": Arab women's postpartum experiences with positive and negative social interactions and the impact on their well-being: A qualitative study. *Health & Social care in the Community, 30(6)*, e3985-e3994.
- Allendorf, K. (2017). Like her own: Ideals and experiences of the mother-in-law/daughter-in-law relationship. *Journal of Family Issues*, 38(15), 2102-2127.
- Bietsch, K. E., LaNasa, K. H., & Sonneveldt, E. (2021). Women living with their mothers-in-law. *Gates open research*, 5.
- Bowlby, J. (1982). Attachment and loss: Vol. 1 attachment (2nd ed.). New York: Basic Books

- Cherry, K. E., & Gerstein, E. D. (2021). Fathering and masculine norms: Implications for the socialization of children's emotion regulation. *Journal of Family Theory & Review*, *13*(2), 149-163.
- Dozier, D. M., Grunig, L. A., & Grunig, J. E. (2013). *Manager's guide to excellence in public relations and communication management*. Routledge.
- Ekoh, P. C., Okoye, U. O., Agbawodikeizu, P. U., George, E. O., & Ejimkaraonye, C. (2022). Changes in family structures and roles, and its impact on older people in displacement in Abuja, Nigeria. *Journal* of Population Ageing, 15(4), 925-941.
- Fahey, J. E. (2019). *The Impact of the Mother-Son Relationship on Expressions of Aggression in Young Adulthood* (Doctoral dissertation, Alliant International University).
- Ferguson, B. B. (2014). *The relationship between emotional intelligence and leadership styles of African American law enforcement executives* (Doctoral dissertation, Walden University).
- Freytag, J., & Rauscher, E. A. (2017). The importance of intergenerational communication in advance care planning: Generational relationships among perceptions and beliefs. *Journal of health communication*, 22(6), 488-496.
- González-Ramos, A. M. (2020). Digital communication tools for fostering career advancement and sustaining interpersonal relationships. *Sociological Research Online*, 25(2), 184-200.
- Greif, G. L., & Woolley, M. (2019). Sons-in-law and their fathers-in-law: Gaining a preliminary understanding of an understudied family relationship. *Journal of Family Social Work*, 22(3), 292-311.
- Hofäcker, D., & Chaloupková, J. (2014). Patterns of family life courses in Europe–between standardisation and diversity: A cross-national comparison of family trajectories and life course norms in European Countries. *Comparative Population Studies*, *39*(3).
- Hong, S. J. (2018). Gendered cultural identities: The influences of family and privacy boundaries, subjective norms, and stigma beliefs on family health history communication. *Health communication*, 33(8), 927-938.
- Jeon, S., & Yoo, J. (2017). The study on mother-daughter differentiation, solidarity and relationship satisfaction between mother-in-law and son-in-law: A comparative study on mother-in-law and son-in-law. *Family and Environment Research*, 55(3), 233-247.
- Karim, S., Kwong, C., Shrivastava, M., & Tamvada, J. P. (2023). My mother-in-law does not like it: resources, social norms, and entrepreneurial intentions of women in an emerging economy. *Small Business Economics*, 60(2), 409-431.
- Kengatharan, N. (2020). Shouldering a double burden: the cultural stigma of the dogma of gender role ideology and its impact on work–family conflict. *Journal of Advances in Management Research*, 17(5), 651-667.
- Lim, Y. (2024). When you are not alone: school composition by family structure and students' academic achievements in South Korea. *School Effectiveness and School Improvement*, 1-22.
- Mensah, E. O. (2023). Husband is a priority: Gender roles, patriarchy and the naming of female children in Nigeria. *Gender Issues*, 40(1), 44-64.
- Nicholson, L. (2016). The myth of the traditional family. In Feminism and families (pp. 27-41). Routledge.
- Nielson, M. G., Ward, L. M., Seabrook, R. C., & Giaccardi, S. (2022). The roots and fruits of masculinity: Social antecedents and sexual relationship consequences of young men's adherence to masculine norms. *The Journal of Sex Research*, 59(7), 897-910.
- Okoi, I. O. (2021). The Impact of Internal Boundaries and Ethnic Conflicts on Nation Building in Nigeria.

Lwati: A Journal of Contemporary Research, 18(2), 55-73.

- Olutola, F. O. (2012). Wife-mother-in-law relationship and violence among Yoruba women of South-Western Nigeria. *American Journal of Sociological Research*, 2(2), 11-18.
- Onyeator, I., & Okpara, N. (2019). Human communication in a digital age: Perspectives on interpersonal communication in the family. *New Media and Mass Communication*, 78(1), 35-45.
- Orawo, D. A., Kutotto, P. L., & Kafu, J. (2017). Factors That Determine the Nature of Relationship between Mothers and Their Daughters In-Law: A Content Analysis of the 'Mother In-Law'Tv Drama Series. *African Journal of Education, Science and Technology*, 4(1), 165-176.
- Pearce, L. D., Hayward, G. M., Chassin, L., & Curran, P. J. (2018). The increasing diversity and complexity of family structures for adolescents. *Journal of Research on Adolescence*, *28*(3), 591-608.
- Pinho, M., & Gaunt, R. (2024). Biological essentialism, gender ideologies, and the division of housework and childcare: comparing male carer/female breadwinner and traditional families. *The Journal of Social Psychology*, 164(1), 59-75.
- San-Leong, M., & Juhari, R. (2021). Positive and Negative Interactions between Mother-in-law and Daughter-in-law: What about Son-in-law?. *Malaysian Journal of Social Sciences and Humanities* (MJSSH), 6(5), 84-94.
- Seidu, A.A., Aboagye, R.G., Okyere, J., Agbemavi, W., Akpeke, M., Budu, E., Saah, F.I., Tackie, V. and Ahinkorah, B.O., 2021. Women's autonomy in household decision-making and safer sex negotiation in sub-Saharan Africa: an analysis of data from 27 Demographic and Health Surveys. SSM-Population Health, 14, p.100773.
- Sherifat, Y. O., & Ajiboye, E. O. (2014). Social change, and traditional gender roles in Lagos state, Nigeria. *African Journal for the Psychological Studies of Social Issues*, 17(3), 58-68.
- Svallfors, S., Båge, K., Ekström, A. M., Elimian, K., Gayawan, E., Litorp, H., & Kågesten, A. (2024). Armed conflict, insecurity, and attitudes toward women's and girls' reproductive autonomy in Nigeria. *Social Science & Medicine*, 348, 116777.
- Thébaud, S., & Pedulla, D. S. (2016). Masculinity and the stalled revolution: How gender ideologies and norms shape young men's responses to work–family policies. *Gender & Society*, *30*(4), 590-617.
- Thébaud, S., Kornrich, S., & Ruppanner, L. (2021). Good housekeeping, great expectations: Gender and housework norms. *Sociological Methods & Research*, *50*(3), 1186-1214.
- Thomas, M. H. (2020). The impact of communication technology and social media on intergenerational relationships between older individuals and their adult children in Bangkok. *Manusya: Journal of Humanities*, 23(2), 188-204.
- Tsevenda, M., Terzungwe, I. D., Benjamin, S. K., & Ogunode, N. J. (2024). Promoting Alternative Dispute Resolution in Nigeria: Tertiary Institutions in Perspective. *Journal of Innovation in Education and Social Research*, 2(1), 245-254.
- Tunca, A., & Durmuş, E. (2024). An investigation of mother-in-law's role in the family system in Turkish culture: a phenomenological study. *Current Psychology*, *43*(11), 10247-10263.
- Van-Dijk, H., & Van Engen, M. L. (2019). The flywheel effect of gender role expectations in diverse work groups. *Frontiers in Psychology*, *10*, 394340.
- Warner, L. R., & Shields, S. A. (2013). The intersections of sexuality, gender, and race: Identity research at the crossroads. *Sex roles*, *68*, 803-810.
- Woolley, M. E., & Greif, G. L. (2019). Mother-in-law reports of closeness to daughter-in-law: The determinant triangle with the son and husband. *Social work*, *64*(1), 73-82.

Integrating E-Learning Into TVET Programmes: Implications For Teacher Preparation In Nigeria

Eze Chinwe P. Ph.D

Department of Building Technology Education School of Industrial Technical Education, Federal College Of Education (T), Umunze ezechinwe31@yahoo.com +2348035056211

Abstract

Continuous changes in information and communication technology has made e-learning to become very important in teaching and learning and even research in Technical, Vocational Education and Technology (TVET). Hence the purpose of this study is to find out the perception of TVET teachers on the benefits of integrating e-learning into TVET programmes and the factors that can limit the use of e-learning facilities in TVET programmes for teacher preparation in Nigeria. Two research questions and one null hypothesis guided the study. Descriptive survey was used for the study. A purposive sampling technique was used to select four tertiary institutions that offer TVET programmes in Anambra and Enugu States. All the 77 TVET teachers comprising of 46 males and 31 females served as the sample. The entire population was used because the number was manageable. Questionnaire was used to collect data and data were analyzed using mean scores and standard deviation for the research questions while t-test statistics was used for the null hypothesis. The reliability of the instrument was established using test-retest method and Cronbach Alpha statistics employed to determine the coefficient index value which yielded 0.72. The study revealed among others, that e-learning opportunities provide flexibility and improvement in quality and quantity of learning instead of total dependence on textbooks and print materials. Based on the findings, recommendations were made such as making all Stakeholders to come together and work towards a common agenda of embedding e-learning within TVET system so as to reap its benefits and, that TVET teachers should be trained on the use of e-learning facilities through workshops, seminars, conferences and short courses in ICT.

Keywords: TVET, Institutions, e-learning, information and communication technology (ICT)

Introduction

The world is undergoing tremendous changes in all aspects of life especially in the use and dissemination of information. Hence information as well as educational sectors seems to be the most vibrant sectors of the national economy. Notably, the twenty first (21st) century education is filled with pedagogical shifts brought about by rapid advances in technology particularly in information and communication technology (ICT) (Yunusa, Umard & Berveil, 2019). The emergence of ICT has brought with it changes in the process of imparting and acquiring knowledge (Danjuma & Levong, 2022). The impact of ICT in education is enormous as it has great speed of providing flexibility and improvement in quality and quantity of learning instead of total dependence on textbooks and print materials. Supporting this assertion, Obwoge and Kwamboka (2016), agreed that developed economies enjoy a lot of freedom and flexibility in their education systems because of advanced technology.

The introduction of ICT in educational institutions has led to the development of e-learning. E-learning, according to Eze (2016), literally means electronic learning which means learning using electronic devices. E-learning involves the use of electronic technologies to access educational curriculum outside of the traditional classroom (Danjuma & Levong, 2022). It includes computer-based teaching (CBT), web-based learning, virtual classrooms and digital collaboration. Oluwalola and Awodeji (2019), define e-learning as

an innovative approach for delivery of electronically mediated, well designed learner-centred and interactive learning environment to everyone, anyplace anytime by utilizing the internet and digital technologies in the instruction design principles. According to Ibezim (2013), e-learning makes use of the internet to support the delivery of learning skills and knowledge by applying a systematic approach that does not necessarily limit itself to any particular course, technology or infrastructure, but rather offers flexibility which enables teaching and learning anytime and anywhere.

Many countries have enhanced their development by embracing well organized and linked technical, vocational and education training (TVET) systems. TVET, according to Obwoge and Kwamboke (2016), is an education that prepares people for specific trades, crafts and careers at various levels from a trade, crafts, technician and professional position like engineering, accountancy, nursing, medicine, architecture, pharmacy, etc. Okoye, Otuka and Iheonunekwu (2010), define TVET as all forms of education that are technical and vocational in nature, provided in either educational institutions or public authorities, the private sector or through other forms of organized education formal or non-formal. By this, it ensures that all members of the community have access to the pathways of life-long learning. Hence, TVET contributes so much in courses ranging from electrical/electronic technology, mechanical/auto mechanics technology, woodwork technology, building technology, etc. The essential role of TVET is to facilitate skill development for the socio-economic and technological development of industries globally. So TVET is a practical oriented education which makes it unique in its content and approach thereby demands special attention. This accounts for the increasing importance attached to this type of education. Unfortunately, TVET is yet to be accorded the attention it deserves despite its glaring contributions to the economy. The major role of TVET in enhancing skills development for the socio-economic and technological development of many countries account for the increasing importance attached this type of education. Thus Okpor and Hassan (2012), agreed that TVET is rooted on preparation of students for acquisition of necessary skills, knowledge and attitude to gain employment as expert assistants to professionals in any field of technology and engineering. Hence TVET provides individuals with skills, knowledge and attitudes for effective employment in specific occupations.

With the advancement in technology and frequent calls by experts for a change in TVET curriculum, there seems to be some attempts to tackle the ugly situation. What is urgently needed is to reposition TVET delivery systems through resources and methods. This, according to Polit (2015), will bring about the intended outcome in students. Such instructional resources are ICTs which is currently a driving force economically, scientifically and technologically all over the world.

With the integration of e-learning into TVET programmes, a lot of cost will be saved by institutions, governments as well as students. The need for physical infrastructure like workshops facilities will be reduced and students do not need to travel very far to enroll in programmes and courses of their choice if they are available online. Hence with e-learning, TVET instructors will be able to reach out to learners in different places using available diverse ICT resources. This will reduce the limitation of time, space and place that have become a great challenge to TVET delivery especially for the working class. On the other hand, TVET learners will greatly benefit as they have variety of choices in course completion mode and a lot of flexibility in learning delivery leading to lifelong learning. Institutions that have implemented the use of e-learning technology are witnessing a number of benefits such as cost reduction from infrastructure needed to accommodate learners within the school environment and many ICT technologies, learners can be reached without necessarily being bound to school premises. Unfortunately, Eze; Chinedu-Eze and Bello (2018), noted that despite noticeable benefits which the integration of e-learning offers to developing countries, its adoption has been somehow low due to low literacy rates and meager funding of education from government at all levels.

Statement of Problem

The current changes in education and work environment across the world necessitates a shift from the norm. As new technology emerges, several skills are required in the labour market for sustainable livelihood. Many developing countries greatly rely on skilled labour to enhance their developmental agenda. This skilled labour is provided through TVET. Undoubtedly, TVET being a practical oriented programme is unique in its content and approach thereby demanding special attention. Hence, TVET programmes have an extensive link with e-learning as skill is highly needed in assessing the programme. Thus, the integration of e-learning into TVET programme requires a thorough training in the use of modern technology that will add new dimension to the equipment and facilities for TVET. According to Okpor and Hassan (2012), TVET is rooted in preparation of students for acquisition of necessary skills, knowledge and attitude to earn employment as expert assistants to professionals in any field of technology and engineering. Chukwuedo and Omofonwan (2013), believe that the acquisition of skills in TVET programme should be supported with sufficient ICTs in order to widen the horizon of both students and teachers. This is necessary because in this technology-driven age, everyone needs ICT competence to survive. Notably, ICT plays a crucial role in removing distance from education and thus develop a lifelong learning culture in TVET.

Notably, TVET in Nigeria is a disaster due to inadequate funding, dearth of qualified teachers, adequate facilities, inappropriate curriculum and students' population explosion (Oviawe, Uwaemeyi & Uddin, 2017). According to Agbo, Onaga and Omeje (2018), TVET in almost all the institutions is undoubtedly challenging due to its capital intensive nature. This then calls for a change in the pattern of its delivery so as to bring the intended learning outcomes in students (Polit, 2015). Such instructional resources are ICTs which is currently a driving force economically, scientifically and technologically globally.

The study specifically aims to determine;

- 1. The perception of TVET teachers on the benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria.
- 2. Factors limiting the use of e-learning facilities in TVET programmes for teacher preparation in Nigeria.

Research Questions

The following research questions guided the study

- 1. What are the perceptions of TVET teachers on benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria?
- 2. What factors can limit the use of e-learning facilities in TVET programmes for teacher preparation in Nigeria?

Hypothesis

One null hypothesis was tested at 0.05 level of significance.

Ho: There is no significance difference between the mean scores of male and female TVET teachers regarding the integration of e-learning into TVET programmes for teacher preparation in Nigeria

Methods

This study adopted a descriptive survey meant to determine the benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria. A purposive sampling technique was used to select four tertiary institutions that offer TVET programmes in Anambra and Enugu States, Nigeria. The institutions are Nnamdi Azikiwe University, Awka, Federal College of Education (T) Umunze, Enugu State University of

Science and Technology (ESUT), Enugu and Enugu State College of Education, (T), Enugu State. All the 77 TVET teachers comprising of 46 males and 31 females served as the sample. The entire population was used because the number was manageable. A structured questionnaire developed by the researcher after extensive review of literature and based on the objectives of the research was used to collect the required data from the respondents. The instrument was face and content validated by three experts. A total of 77 copies of the questionnaires were administered by the researcher and three research assistants, and all the copies were returned and used for analysis. The questionnaire was based on a 4-point rating scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) with assigned weights of 4, 3, 2, and 1 respectively.

The reliability of the instrument was established using test-retest method and Cronbach Alpha statistics employed to determine the coefficient index value which yielded 0.72 thus was considered appropriate for use by the researcher. Data were analyzed using mean and standard deviation to answer the research questions and t-test statistics for the null hypothesis. Particularly the standard deviation were used to determine how close or spread the respondents' ratings are. Decisions were taken thus; items with mean score of 2.50 and above were agreed with while mean scores below 2.50 were disagreed with. The decision for the null hypothesis is thus; if the calculated t-value is greater than the critical t- value, the null hypothesis will be rejected otherwise it will be upheld (t- critical ? t-cal).

Results

Data collected were analyzed using mean, standard deviation and t-test statics, and were presented in tables in accordance with the corresponding research questions and the hypothesis.

Research Question 1: What are the perceptions of TVET teachers on benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria?

Table 1: Mean and Standard deviation of responses on the perception of TVET teachers on the benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria.

. S/N	Item	X	SD	Remark
1.	Contributes towards meeting human development needs		0.89	Disagree
2	Enhance socio-economic development.		0.56	Agree
3.	Gives wider access to educational services	3.51	0.67	Agree
4.	Can improve quality of education		0.79	Agree
5.	Can open learning multimedia instructional delivery		0.77	Agree
6.	Useful tool for improving teaching and learning	3.56	1.28	Agree
7.	Helps in preparing new crop of teachers		0.56	Agree
8.	Can break down barriers like disabilities	3.44	0.48	Agree
9.	Enables collaborative and cooperative learning	2.98	0.83	Agree
10.	Increases flexibility in learning	3.66	1.05	Agree
11.	Saves time.	2.38	0.85	Disagree
12	Provides self-learning opportunities	3.52	0.62	Agree
	Grand Mean	3.28	0.78	Agree

Data in Table 1 shows a grand mean of 3.28 which means that TVET teachers agreed to the benefits of integrating e-learning into TVET programmes for teacher preparation in Nigeria. This is because all the items but two have their mean scores above the cut off point of 2.50. However, items 1 and 11 with mean scores of 2.11 and 2.38 respectively were disagreed with by the respondents. This implies that in the perception of the respondents, e-learning is useful for improving teaching and learning so as to enhance

socio-economic development, gives wider access to educational services, improves quality of education, opens learning multimedia instructional delivery, helps in preparing new crop of teacher, break barriers like disabilities, enables collaboration and cooperative learning as well as increasing flexibility in learning. However, the respondents disagreed with e-learning contributing to human development needs and saves time.

Research Question 2: What factors can limit the use of e-learning facilities in TVET programmes for teacher preparation in Nigeria.

Table 2	: Mean a	nd Standard deviation of responses on the factors that can l	imit the	e use of e-learı	ning
facilitie	es in TVE	T programmes for teacher preparation in Nigeria.			
S/N	Item	Y	SD	Remark	

S/N	Item	х	SD	Remark
1	Lack of knowledge of e-learning	2.32	0.85	Disagree
2	Deficiency of training materials	3.43	1.22	Agree
3	Shortage of modern tools in the classroom	3.82	0.88	Agree
4	Non-existence of awareness of e-learning	2.33	1.28	Disagree
5	Lecturers' attitudes and resistance to change	2.87	0.68	Agree
6	Inadequate fund for infrastructure	3.69	0.64	Agree
7	Lack of skills in ICT	2.14	0.72	Disagree
8	Cost of e-learning facilities	2.96	0.63	Agree
9	Lack of ICT programmes in training curricular	3.12	0.81	Agree
10	Poor Administrative Support	3.38	0.59	Agree
	Grand mean	3.01	0.83	Agree

The result in Table 2 shows that items 2, 3, 5,6,8,9 and 10 with mean scores above 2.50 were agreed with by the respondents as factors that can limit the use of integrating e-learning into TVET programmes for teacher preparation in Nigeria. However, they disagreed with items 1 and 7 with mean scores below 2.50.

Ho: There is no significance difference between the mean scores of male and female TVET teachers regarding the integration of e-learning into TVET programmes for teacher preparation in Nigeria.

 Table 3: Summary of t-test analysis on the perception of male and female TVET teachers regarding the integration of e-learning into TVET programmes for teacher preparation in Nigeria

Respondents	Ν	ĪX	SD	DF	t-cal	t-crit	Decision
Male TVET Teachers	46	3.13	0.54	75	0.14	1.96	Not significant
Female TVET Teachers	31	3.10	0.60	15	0.14	1.90	significant

N = 77, df = 75, p < 0.05, *Accept

The result of the analysis in Table 3 indicates that the t-calculated value (0.14) is less than the critical value of t (1.96) at 0.05 level of significance and 75 degree of freedom. This indicates that there is no significance difference between the mean scores of male and female TVET teachers regarding the integration of elearning into TVET programmes for teacher preparation in Nigeria. The null hypothesis here was therefore upheld.

Discussion

The findings in Table 1 show the mean responses of TVET teachers on the benefit of integrating e-learning into TVET programmes for teacher preparation in Nigeria. The mean scores for the 12 items indicate that 10 out of the 12 items were agreed with while the mean scores were rated above 2.50 while items 1 and 11 were disagreed with because their mean scores fell below 2.50 which is the cut-off mean. The general result in Table 1 reveals that integrating e-learning into TVET programmes can give wider access to education thus improve quality of education and increase flexibility in learning. This is supported by the work of Obwoge and Kwamboka (2016), who agreed that developed economies enjoy a lot of freedom and flexibility in their education systems because of advanced technology. Furthermore Ibezim (2013), agreed that e-learning makes use of the internet to support the delivery of learning skills and knowledge by applying a systematic approach that does not necessarily limit itself to any particular course, technology or infrastructure, but rather offers flexibility which enables teaching and learning anytime and anywhere.

Table 2 focused on the factors that can limit the use of e-learning facilities in TVET programmes for teacher preparation in Nigeria. Some factors were identified which include deficiency of training materials, modern tools in the classrooms and non- awareness of e-learning in schools. Although ICT programmes are not fully integrated in the training curriculum, some TVET teachers who are resistance to change or adapt to new technologies may be due to poor administrative support, low literacy or meager funding may not be able utilize the available ICT facilities. This is in line with the opinion of Eze; Chinedu-Eze and Bello (2018), who noted that despite noticeable benefits which the integration of e-learning offers to developing countries, its adoption has been somehow low due to low literacy rates and meager funding of education from government at all levels. Oviawe, Uwaemeyi and Uddin (2017), decried that TVET in Nigeria is a disaster due to inadequate funding, dearth of qualified teachers, inadequate facilities, inappropriate curriculum and students' population explosion. Hence Polit (2015), calls for a change in the pattern of its delivery so as to bring the intended learning outcomes in students.

Table 3 showed no significant difference between the mean scores of male and female TVET teachers regarding the integration of e-learning into TVET programmes for teacher preparation in Nigeria. Thus the null hypothesis was upheld because the t-cal was less than the critical t meaning that there is no significance difference between the mean scores of male and female TVET teachers regarding the integration of e-learning into TVET programmes for teacher preparation in Nigeria. This result is in line with Danjuma and Levong (2022), who agreed that the emergence of ICT has brought with it changes in the process of imparting and acquiring knowledge. Furthermore, Chukwuedo and Omofonwan (2013), believe that the acquisition of skills in TVET programme should be supported with sufficient ICTs in order to widen the horizon of both students and teachers. This means that all TVET teachers agree to the innovation irrespective of gender.

Conclusion

This study has revealed the perception of TVET teachers in integrating e-learning into TVET programmes for teacher preparation in Nigeria. It is evident in the foregoing discussion that ICT in today's world is a force that has drastically changed many aspects of the way we live. Although there is great potential for integrating e-learning in TVET, there seems to be great laxity in its implementation into TVET institutions in developing countries mainly due to limited funding opportunities. It is therefore suggested that research on e-learning readiness both at the individual and institutional levels should be conducted to ensure that both teachers and students are ready for programme so as to reap the full benefits of e-learning.

Recommendations

Based on the findings of this study, it is therefore recommended that:

- 1. TVET institutions in developing countries especially Nigeria, should carry out e-learning readiness survey so as to determine the status with the aim of providing adequate infrastructure that supports ICT.
- 2. TVET teachers should be trained on the use of e-learning facilities through workshops, seminars, conferences and short courses in ICT
- 3. TVET teachers should be encouraged to undergo self-development trainings in the area of ICT so as not to be left behind in the pedagogical shifts.
- 4. Governments at all levels should allocate funds to TVET sector to facilitate acquisition of ICT infrastructure.
- 5. There should be an introduction of e-learning courses in the curriculum for all students as general studies to equip them early with e-learning skills.
- 6. All Stakeholders should come together and work towards a common agenda of embedding elearning within TVET system so as to reap its benefits.

References

- Agbo, B. C. D.; Onaga, P. O. & Omeje, H. O. (2018). Teacher's opinion on availability of e-learning opportunities for effective technical and vocational education and training (TVET) in tertiary institutions in South East Nigeria. *International Journal of Vocational and Technical Education*, 10(1), 1-6.
- Chukwuedo, S. & Omofonmwan, G. (2013). Information and communication technology: The pivot of teaching and learning skills in electrical and electronic technology programme in Nigeria. *International Journal of Vocational and Technical Education*, 5(6), 117-123.
- Danjuma, P.S. & Levong, D. S. (2022). Challenges facing technical and vocational educators in the emerging field of e-learning in Nigeria: the way out. *Nigerian Journal of Business Education* (*NIGJBED*) 9. (2), 97-104.
- *Eze, C. P. (2016). Availability of e-learning devices and strategies for improvement in secondary schools in Anambra State. Journal of Technical Education and Research Development (JOTERD), 5(1), 11-21.*
- Eze, S., Chinedu-Eze, V. & Bello, A. (2018), "The utilization of e-learning facilities in the educational delivery system of Nigeria: a study of M-University". *International Journal of Educational Technology in Higher Education*, 15, 1–20.
- Ibezim, N. (2013), "Technologies Needed for Sustainable E-Learning in University Education". Modern Economy, 4, 633–638.
- Obwoge, E. M. & Kwamboka, S. O. (2016). E-Learning in TVET: An Opportunity for Developing Countries. *IRA International Journal of Education and Multidisciplinary Studies*, *3(3)*, *347-352*).
- Okoye, R.; Otuka, J.E.O. & Iheonunekwu, E. (2010). Vocational and technical education in Nigeria: Trends and prospects. Onitsha: Global Academy Group, Online Academic Resources
- Okpor, I. & Hassan, N. (2012). Public-Private Partnership for Skill Acquisition and Vocational Technical Education Development in Nigeria; *Mediterranean Journal of Social Science* 3(4).21-30.
- Oluwalola, F. K. & Awodeji, O. A. (2019). "Availability and utilization of e-learning facilities for management and business courses in universities in Kwara State, Nigeria". Nigerian Journal of Business Education, 2 (6), 346-357.

- Oviawe, J. I., Uwameyi, R.& Uddin, P. O. S. (2017). Bridging Skill Gap to Meet Technical, Vocational Education and Training School-Workplace Collaboration in the 21st Century. *International Journal of Vocational Education and Training Research*, *3*(1) 7-14.
- Polit, S. D. (2015). Utilization of information and communication technology by mechanical trades teachers in North Central Nigeria. *Unpublished MSc thesis*, University of Jos.
- Yunusa, A., Umar, I., & Bervell, B. (2019), "Octenal Review (2010-2018) of Literature on M-Learning for Promoting Distributed-Based Medical Education in Sub-Saharan Africa". *International Review* of Research in Open and Distributed Learning, 20, (2), 279–301.

The Positive And Negative Impacts of Globalization To Nigeria Culture, Economy And Society

Uzoka Obioma Agatha

Department of Business Education Nwafor Orizu College of Education, Nsugbe Anambra State, Nigeria. obiomsy@gmail.com

Abstract

Globalization is one of the few phenomena for which there is no accurate timestamp. Globalization is therefore defined as a social process in which the constraints of geography on economic, political, social and cultural arrangements recede in which people become increasingly aware that they are decreasing, and people act accordingly. Development is a multi-dimensional process involving the reorganization and reorientation of the entire economic and social systems. Economic development is thus, the process in which a nation improves the living standard of its people as well as their political and social well-being. The product of this research concludes that there is interconnectedness between globalization and economic development in Nigeria, which in turn increases the rate of unemployment and hinders democratic development in Nigeria. Globalization was discovered to be the root cause of massive unemployment rate in Nigeria and the hindrance to democratic development in Nigeria.

Introduction

The human race can hardly point to the start of globalization as a social process. Where Nigeria is concerned, however, the nation's active participation in the globalization framework can be traced to the period of the industrial revolution in the <u>1980</u>s, with the introduction of SAP (Structural Adjustment Programme). As Adejumobi (<u>2004</u>) captures it, the establishment of the Structural Adjustment Programme (SAP) was the most decisive factor in the reconstitution and decline of state spending in the social sector. He further alluded to the crucial link between SAP and globalization, wherein he agrees with Mihevc (<u>1995</u>) in describing SAP as the "fundamentalist economic doctrine emerging under the spell of globalization". Structural Adjustment Programme (SAP) was introduced by international financial institutions (forces of globalization) to Nigeria and many other developing African countries in response to the uncompromising pressures of creditor agencies. This adjustment programme came with some policies that were not favourable to the Nigerian state and its people, and Nigeria delayed for five years before adopting it.

Concept of Globalization

According to Acosta (2015) Globalization is the process by which businesses or other organizations develop international influence or start operating on an international scale. It is a term used to describe how trade and technology have made the world into a more connected and interdependent place.

Type of Globalization

Globalization is more than just the global exchange of money, technology and goods. Below are some examples of different types of globalization.

- 1. Economic globalization: Economic globalization refers to the increasing integration and interdependence of the world's economies. Examples include the spread of capitalism, an increase in market trading and exports, and the forming of global economic policies.
- 2. Cultural globalization: The sharing and trading of cultural beliefs, traditions, and ideas. Examples

of this include the rise of K-Pop (Korean pop music).

- 3. **Digital globalization:** The sharing of data and information on digital platforms that speeds up and improves how we connect to people around the world. Examples include big tech platforms like Facebook, Instagram, and YouTube.
- 4. Financial globalization: The rise in global financial systems and the exchanging of money globally. Examples include the global stock market, which relies on the economy as a whole and where a decline in one market has a knock-on effect on others.
- **5.** Geographic globalization: The ever-changing organization of different regions and countries around the world. Examples include the sharing of visas between certain countries which enable people to work, live, and travel easily in countries other than their own.
- 6. Political globalization: The development and influence of international organizations which decide on actions and laws at an international level. Examples of such organizations include the European Union, the UN, and even the World Health Organization.
- 7. Ecological globalization: Refers to the growing movement towards seeing the Earth (and its upkeep) as a single entity of which we must all be responsible. Examples include the COP26 summit which saw countries from around the world come together to tackle climate change as one global team.

Advantages of Globalization

1. Economic Growth

it's widely believed that increased globalization leads to greater economic growth for all parties. There are several reasons why this might be the case, including:

Access to labor: Globalization gives all nations access to a wider labor pool. Developing nations with a shortage of knowledge workers might, for example, "import" labor to kickstart industry. Wealthier nations, on the other hand, might outsource low-skill work to developing nations with a lower cost of living to reduce the cost of goods sold and pass those savings on to the customer. Access to jobs: This point is directly related to labor. Through globalization, developing nations often gain access to jobs in the form of work that's been outsourced by wealthier nations. While there are potential pitfalls to this, this work can significantly contribute to the local economy. Access to resources: One of the primary reasons nations trade is to gain access to resources they otherwise wouldn't have. Without this flow of resources across borders, many modern luxuries would be impossible to manufacture or produce. Smartphones, for example, are dependent on rare earth metals found in limited areas around the world.

The ability for nations to "specialize": Global and regional cooperation allow nations to heavily lean into their economic strengths, knowing they can trade products for other resources. An example is a tropical nation that specializes in exporting a certain fruit. It's been shown that when nations specialize in the production of goods or services in which they have an advantage, trade benefits both parties.

2. Increased Global Cooperation

For a globalized economy to exist, nations must be willing to put their differences aside and work together. Due to this, increased globalization has been linked to a reduction—though not an elimination of conflict. "Of course, as long as there have been nations, they've been connected with each other through the exchange of lethal force, through war and conquest and this threat has never gone away," Reinhardt says in Global Business. "The conventional wisdom has been that the increased intensity of these other flows, goods, services, capital, people, and so on have reduced the probability that the world's nations will fall back into the catastrophe of war."

3. Increased Cross-Border Investment

Globalization has led to an increase in cross-border investment. At the macroeconomic level, this international investment has been shown to enhance welfare on both sides of the equation. The country that's the source of the capital benefits because it can often earn a higher return abroad than domestica.

Disadvantages of Globalization

1. Increased Competition

When viewed as a whole, global free trade is beneficial to the entire system. Individual companies, organizations, and workers can be disadvantaged, however, by global competition. This is similar to how these parties might be disadvantaged by domestic competition: The pool has simply widened. With this in mind, some firms, industries, and citizens may elect governments to pursue protectionist policies designed to buffer domestic firms or workers from foreign competition. Protectionism often takes the form of tariffs, quotas, or non-tariff barriers, such as quality or sanitation requirements that make it more difficult for a competing nation or business to justify doing business in the country. These efforts can often be detrimental to the overall economic performance of both parties. "Although we live in an age of globalization, we also seem to be living in an age of anti-globalization," Reinhardt says in Global Business. "Dissatisfaction with the results of freer trade, concern about foreign investment, and polarized views about immigration all seem to be playing important roles in rich-country politics in the United States and Europe. The threats in Western democracy to the post-war globalist consensus have never been stronger."

2. Disproportionate Growth

Globalization can introduce disproportionate growth both between and within nations. These effects must be carefully managed economically and morally. Within countries, globalization often has the effect of increasing immigration. Macro economically, immigration increases gross domestic product (GDP), which can be an economic boon to the recipient nation. Immigration may, however, reduce GDP per capita in the short run if immigrants' income is lower than the average income of those already living in the country. Additionally, as with competition, immigration can benefit the country as a whole while imposing costs on people who may want their government to restrict immigration to protect them from those costs. These sentiments are often tied to and motivated—at least in part—by racism and xenophobia. "Meanwhile, outside the rich world, hundreds of millions of people remain mired in poverty," Reinhardt says in Global Business. "We don't seem to be able to agree about whether this is because of too much globalization or not enough."

3. Environmental Concerns

Increased globalization has been linked to various environmental challenges, many of which are serious, including:

Deforestation and loss of biodiversity caused by economic specialization and infrastructure development Greenhouse gas emissions and other forms of pollution caused by increased transportation of goods The introduction of potentially invasive species into new environments While such issues are governed by existing or proposed laws and regulations, businesses have made environmental concerns and sustainability a priority by, for example, embracing the tenets of the triple bottom line and the idea of corporate social responsibility.

Effects of Globalization on Nigeria Economy

Globalization has allowed for welcoming foreign investments which has helped in providing resources,

capital and technology that will support economic development. This paves way and improves employment , increases exports to a country and thereby improves the current account and therefore will help to the repayment of foreign debt. Globalization has helped to foster smooth modern day banking such as e-banking or mobile banking, Automated Teller machine Services (ATM) and Internet banking.

Through globalization, job opportunities are made available to people from different countries within the global. This has created the concept of outsourcing. Access to higher learning institutions has been made easier. Today, you can move in search of the best educational facilities in the world without any hindrance. Technology is a powerful force that drives the world toward a converging commonality, therefore, due to globalization, there has been an improvement in technologies and increased managerial capabilities. Globalization has created and expanded foreign trade in the world. Things that were only found in developed countries can now be purchased here. This is done through international trade whereby our country can export and import goods within countries. This has allowed for quality products at a reduced cost. It has also led to reduction of tax of importation of goods. Globalization of markets in Nigeria is growing so fast. This has brought benefits which are economies of scale in production, reduced prices, distribution, marketing and management.

Cultural Globalization

Cultural globalization is the process through which the culture of one country or society is spread to other countries. Cultural globalization is the process through which the values, ideas, and experiences of a specific culture are transmitted and disseminated across the world. The process of cultural globalization has significant effects on international relations and interactions between different cultures in the same country, Aretha (2016). For example, many aspects of the "culture" of the United States have bled into other countries. When these facets of American culture replace the local norms and values in other countries, this is called "Americanization." In fact, some people argue that cultural globalization only benefits the culture of the United States. They believe that the term "cultural globalization" should be replaced with "Americanization." Some researchers think of this as a good trend, but others decry it as a dangerous development that threatens to completely eradicate local cultures. Have you ever been abroad? It doesn't matter whether you went to Canada, Russia, or Thailand. You may have noticed that every place has some things that are the same as your hometown, such as fast food restaurants like McDonald's or Levi jeans being sold in a local store. Those are just a couple of examples of cultural globalization, which refers to the process by which one culture's experiences, values, and ideas are disseminated throughout the world through various means. We'll explore some examples of cultural globalization, the factors that influence it, and its effects throughout the world.

Effects of Globalization on the Society

The world has become more connected than ever before through the increase in technological advancements and economic integrations. Advanced economies are formed as domestic businesses transform into international ones and further contribute to the spread of technology around the world. There are several benefits of globalization, such as increased international trade and cooperation and less international aggression. Social globalization—the sharing of ideas and information between countries has led to innovation in the medical, technological, and environmental preservation industries.

Additionally, globalization has improved the quality of life in several developing nations. This includes implementing efficient transportation systems and ensuring accessibility to services such as education and healthcare.

However, globalization can also have negative effects on society, such as increased income inequality and substandard working conditions in developing countries that produce goods for wealthier nations. Income

inequality is directly related to globalization as it further increases the gap between more advanced and developing areas of a nation. As a result, it can also increase the risk of societal violence.

Conclusion:

Globalization presents a complex and multifaceted set of impacts on culture, economy, and society. While it has facilitated cultural exchange, economic growth, and technological advancements, it has also raised concerns about cultural homogenization, income inequality, and environmental degradation. As we navigate the challenges and opportunities of a globalized world, it is crucial to address the negative impacts and work towards a more inclusive and sustainable global society.

References

- Acosta O. and Conzakez Jl (2015). *A thermodynamic approach for emergence of globalization*", in eng KG (Ed) Globalization -*Today, Tomorrow, Croatia Sciya*.
- Adejumobi S. (2014) "Creating an integrated Vehicle for Callable Participation and Claim sharing". Paper prepared for the Free Market Forum," *The Role of Markets and Governments in Pursuing the Common Good" Panel Topic: Globalization and the Common good, at Hillsdale College, September* 29
- Aretha, P. B, and Irughe LR (2016) Oil induced Environmental Degradation in the Nigeria's Niger Delta, The Multiplier Effects of Globalization to the society" *Journal of Sustainable Development in Africa* 11 (4).

Gaddens, A. (2016). The Consequences of Modernity. Cambridge: Polity Press

- ILO, (2014) Stopping forced labor: Global report under the follow-up to the ILO Declaration on Fundamental principles and Rights at Work, *International Labour Conference*, 89th Session 2014, *Repot IB*.
- lyayi, F. (2010), "Globalization, The Nigerian Economy and Peace", in *Akani, C. Globalization and the Pooples of Africa*. Enugu: Fourth Dimension Publishing Lad.
- Jaja, J. M (<u>2010</u>). Globalization or Americanization: Implications for Sub- Saharan Africa", in DngKG (Ed) Globalization-*Today, Tomorrow, Croatia Sciya*.
- Kalbessa W, (2012) "Dialogue Among Civilizations and the Process of Globalization", in Moazami, Bahman and Rassouli, Navid (eds.) *Collection of Papers of the international Conference on Dialogue Among Civilizations*

Facteurs Psychologiques Influençant L'enseignement Du Français Aux Ecoles Secondaires

Vanessa Georgina Udeh

Department of French NwaforOrizuCollege of Education, Nsugbe Udeh.Vanessa.Georgina@nocen.edu.ng; 08036679123

Résumé

Cette étude est baséesur les facteurs psychologique influençant l'enseignement de la langue française aux écoles secondaires.Le but de l'étude est de savoir comment est-ce que nous pouvons améliorer les problèmes psychologiques dans l'enseignement et l'apprentissage du français; et si les professeurs du français tiennent compte de ces facteurs psychologiques.Nous avons constaté qu'il y a le manque de professeur de la langue française, qu'entre les autres que la motivation, l'âge, l'attention, l'intérêt, la fatigabilité, la mémoire, les antécédents, l'attitude, l'aptitude, et la personnalité sont des sources des problèmes psychologiques chez les professeurs et les étudiants. Les parents n'encouragent pas leurs enfants d'apprendre le français. Les rôles de gouvernement n'encouragent pas l'apprentissage de français. Donc la réalisation de bilinguisme reste obscure. Enfin nousavons donné quelques recommandations qui peuvent aider à surmonter ces problèmes que les professeurs aux écoles secondaires ont eus dans l'enseignement de la langue française. Nous avons recommandé la bourse d'étude aux étudiants et aux professeurs pour voir une bonne compétence en français. Le gouvernement doit organiser des séminaires concernant la psychologie pédagogique dans l'enseignement et insister sur la connaissance de la psychologie pédagogique chez les professeurs.

Mots cles: psychologie, enseignement, apprentissage, bourse, bilinguisme.

Introduction

L'éducation est un outil très important pour le développement d'une nation. Elle est le mot de passe ou le centre de la vie sociale. C'est l'éducation qui reste dans la personnalité de gens après toute chose qu'on a apprise disparue. L'éducation ouvre la pensée et la mémoire de gens, sans l'éducation le monde sera dans l'obscurité. L'éducation fournit à l'individu les habilités nécessaires pour être utile dans la société,en considérant les avantages que la communauté reçoit à travers l'éducation de tirer des ressources pour arriver au but de l'éducation. On a deux termes importants dans l'éducation qui sont : l'enseignement et l'apprentissage.

Pour avoir un enseignement et l'apprentissage efficace, le professeur doit comprendre l'étudiant et l'étudiant doit aussi comprendre le professeur. Donc pour avoir une situation d'enseignement effectif, une connaissance de la psychologie est très importante. Nkwocha (2016) définit la psychologie comme une étude scientifique du comportement et les processus de la mémoire. Un pédagogue, Iroegbu (2023), dit que la psychologie pédagogique est une partie de la psychologie qui a affaire de l'application des principes psychologiques à l'éducation. Alors le premier but de la psychologie pédagogique et pour améliorer l'enseignement et l'apprentissage. Elle se préoccupe de ce qui se passe dans la salle de classe et les conditions qui touchent à l'enseignement et l'apprentissage. L'application de la psychologie dépend du domaine concerné. La psychologie d'application à l'enseignement de la science est différente de ce qu'on applique à l'enseignement de l'art, en l'occurrence de la langue, cela dépend de la situation.

SelonWikipédia, avant 1976, la politique de l'éducation étant encore largement façonnée par la politique coloniale de la période coloniale britannique. En 1976, le programme d'enseignement primaire

universel a été créé. Le programme a rencontré de nombreuses difficultés et a ensuite été révisé en 1981 et 1990. L'éducation de base universelle (UBE) a été créée en 1999 et est venue remplacer l'éducation primaire universelle. On n'enseignait pas le français avant l'indépendance au Nigéria. Mais après le (UBE), on constate que le français était enseigné dans les écoles primaires, secondaires, l'école normale et supérieure. Pour obtenir les avantages de l'étude de la langue française, en 1996, l'ancien dicteur Monsieur M.T. Liman et Le Président, GeneralSani Abacha ont fait le français la deuxième langue officielle du Nigéria.

On voit que le français est la deuxième langue plus populaire et plus parlé dans sept continents du monde après l'anglais. Selon Ebong-Offong (2017), la nouvelle politique de l'éducation a fait le français obligatoire dans les écoles secondaires de premier cycle. « Il veut que leNigéria devienne bilingue ». Par cela on va améliorer le problème de la communication avec nos pays voisins. Le français est la seule langue étrangère étudiée dans les écoles secondaires au Nigéria.

Le français est une langue donc, la psychologie appliquée à l'enseignement de la chimie, est différente de celle qu'on applique à l'enseignement du français. Quand on considère la nature complète de l'enseignement de la langue française, on constate qu'il y a la nécessité d'avoir un professeur fort dans l'application de la psychologie pédagogique qui est adéquate à l'enseignement du français. La psychologie pédagogique adéquate à l'enseignement du français prendra en compte l'apprenant. Elle a une affaire de l'âge, la mémoire, l'attention, la motivation, les antécédents, les attitudes, l'aptitude, la personnalité et l'intérêt de l'apprenant. En considérant toute ces facteurs, on s'accorde à dire que la psychologie pédagogique améliore l'enseignement du français.

Aujourd'hui les statistiques ont montré que le gouvernent et les auteurs éducatifs font beaucoup d'efforts pour soutenir l'étude du français au Nigéria. Néanmoins, malgré les efforts consentis par le gouvernement et les auteurs éducatifs pour améliorer l'enseignement du français dans nos écoles on trouve que les performances et les rendements dans la langue ne sont pas assez élevés. Les étudiants sont faibles en oral et en écrit. Quelle est la cause de ce problème? Peut-on dire que le problème vient de la part des professeurs qui ne sont pas compétents ou bien des étudiants qui n'ont pas la capacité d'apprendre? Selon les structuralistes, la pratique et l'apprentissage de la langue est une sorte de comportement, une sorte d'habitude conditionnée. L'apprentissagede la langue suit le processus Skinnerian de stimulus et réaction d'où on applique le conditionnement et le renforcement dans l'enseignement de la langue. Cette idée met l'enseignement de la langue dans le domaine de la psychologie.

Y-a-t-il donc des facteurs psychologiques qui risquent d'entraver l'enseignement de français aux écoles secondaires? A vrai dire dans la société nigériane d'aujourd'hui, le français est devenu un instrument très outil pour les opportunités, l'instrument pour réussir et surmonter les problèmes dans le monde du travail. Le gouvernement et les acteurs éducatifs sont au courant de l'importance du français dans le curriculum scolaire. C'est pour cela que beaucoup d'efforts sont déployés pour arriver à l'efficacité de l'enseignement du français dans nos écoles. Mais malgré ces efforts consentis par le gouvernement et les acteurs éducatifs la performance des élevés de français reste faible. C'est- à -dire qu'au niveau d'apprentissage, la fin ne justifie pas toujours le moyen. Les facteurs qui posent ces problèmes sont des facteurs psychologiques. Aux files des années, les facteurs psychologiques ont posés beaucoup de désavantages et des situations difficiles en ce qui concerne l'enseignement de la langue français. De nos jours, nos écoles ne s'intéressent plus au cours de français. Ils sont l'impression que le français est très difficile et aussi inutile dans la société. Ceci a gravement touché l'enseignement du français dans les écoles nigérianes. C'est pour cette raison que nous avons décidé de faire une recherche sur les facteurs psychologiques qui influencent l'enseignement du français aux écoles secondaires.

Au temps passé, les gens pensaient des questions pour trouver la raison pour laquelle les gens se comportaient des manières différentes. Mais les premières ont formellement spéculé sur des êtres humains et leurs comportements étaient les philosophes grecs et romains. Ils ont mis l'accent sur le concept et le contenu

de l'âme. Aristote un grand philosophe, pensait que les fonctions mentales sont situées dans l'âme. Les questions qu'on considérait comme des questions psychologiques à ce moment étaient laissées pour les philosophes. La psychologie à ce moment fusait partir de la philosophie.

Le nom "Psychologie" vient de deux mot grecs. "PSYCHE" – "AME" et "LOGOS" –" SCIENCE ou ETUDE". On définit la psychologie comme science de l'âme et après la définit comme science des expériences conscientes. Les philosophies à cette époque s'intéressaient dans la nature du contenu de l'âme. Mais comme les activistes de la recherche se sont renforcées, il y avait l'évolution. Selon Chauhan (1978), les psychologues ont observé que les activistes conscients de l'individu sont une partie insignifiante de la personnalité totale. Donc on a détaché la psychologie de la philosophie quand les psychologues ont rejeté la méthode d'introspection de recueil des données et demande une méthode scientifique pour l'étude de comportement humain.

Alors la psychologie a acquis une autre définition. C'est l'étude scientifique des humains et des animaux. Dans la psychologie, notre emphase est sur l'étude des comportements humains. Comme les autres sciences, la psychologie chercheà comprendre et àprédire les comportements des humains, (Ikpeazu, 2016). L'emphase est de découvrir et comprendre des données objectives qui concernent le comportement humain afin de permettre aux individus de se comprendre et développer leurs conditions. Nwamuo (2002) affirme qu'il sera une exagération si on dit que la psychologie va résoudre tous les problèmes humains, pourtant les principes de la psychologie donnent un aperçu sur les comportements des gens de certaines manières. Ikpeazu (2016) dit qu'un avantage de la méthode scientifique de la psychologie est que les activistes (résultats) peuvent êtrevérifiées par quiconque dans n'importe quelle heure et les résultats confirmes ou rejetés.

Le Concept de la psychologie pédagogique.

Il y aplusieurs définitions de la psychologie pédagogique. Chauchan (1978) explique que la psychologie pédagogique et l'application des résultats dans les activités pédagogiques. Chauchan a continué son explication en disant que la psychologiepédagogiqueemploie les principes psychologiques pour créer des changements dans la technique, processus etl'environnement de l'apprentissage. Aussi l'évolution des résultats de l'enseignement.

Anderson (2017), définit la psychologie pédagogique comme un sujet àétudier, un domaine de connaissance, une collection des applications des lois et des principes d'un domaine des connaissances. Nkwocha (2009), voit la psychologie pédagogique comme un domaine de la psychologie qui s'intéresseà l'application des principes de la psychologie pour améliorer l'enseignement. Dans la mêmevisée continuant, Oladele (2003) a observé que la psychologie pédagogique est une psychologie appliquée qui étudie la manière dans laquelle l'étudiant sera mis dans une interaction progressive avec la matière apprendre. Une bonne connaissance de la psychologiepédagogique donne un outil au professeur pour trouver et donner des solutions aux problèmes qui touchent sur l'enseignement et l'apprentissage.

Chukwudire (2014) dit que le but de la psychologie pédagogique est de: Comprendre le comportement, Prévoir un comportement et Réguler un comportement dans l'organisation du curriculum et l'enseignement dans la salle de classe.Les apprenantssont les gens qui prennent de la leçon chez le professeur et le professeur est celui qui enseigne les apprenants. L'enseignement et l'apprentissage du français au Nigeria est une affaire très difficile car le français est vu comme une langue étrangère. C'est-à-dire que multilinguisme ou plurilinguisme est un facteur qui empêche l'enseignement du français et même le manque de professeurs. À part de l'anglais, il y a au moins 200 langues ethniquesau Nigeria. Selon Prof. Kuupole (2013), « le multilinguisme désigne coexistence des languesdifférentes dans une sociétédonnée ». L'importance de la langue française ici reste toujours obscure. Donc les rapports entre les langues.

L'intérêt et perception de français au Nigéria n'encourage pas les gens à étudier la langue. Selon

Anijah (1978), le français n'est pas seulement utilisé pour devenir un professeur de français. Il est au contraire un outil trèsimportant pour les français et les hommes qui veulent les succèséconomiques de leur pays qui essayent de réussir dans leurscarrières personnelles et qui ont une vision large de l'avenir. La société ne comprend pas bien l'importance de la langue française. Elle pense que l'apprentissage du français se termine dans la classe. Elle voit le françaiscomme un cours non professionnel et que d'être un professeur de français est le seul profit.

Les facteurs psychologiques dans l'enseignement de la Langue.

Des fois, quand on parle de facteur dans l'enseignement, on se limite aux facteurs physiques et sociaux. Par exemple, des problèmes de l'administration, la nature de la salle de classe, le nombre d'étudiants, l'endroit où l'école est située, la compétence de professeurs et ainsi de suite. Mais les recherche faites récemment ont montré que les facteurs psychologiques sont les plus grands facteurs dans l'enseignement. Le résultat de la recherche suite par «Child Développement Center »(CDE) Dublin Ireland, montre que tous les autres facteurs de l'enseignementà la fin deviennent un facteur psychologique. Baron (2021) a défini un facteur psychologique comme une sorte de comportement qui n'est pas acceptable dans une sociétédonnée. Taddei(2021), dit qu'un facteur psychologique est une sorte de désordre dans l'âme d'un individu qui réduit le rendement. En ce qui concerne l'éducation, les facteurs psychologiques ici sont des comportements qui retardent l'enseignement dans un programmepédagogique. Concernant ce sujet, Ajagbe (2022), a dit que chaque facteur interne qui est différent de chaque individu, qui dérangel'apprentissage et l'enseignement est un facteur psychologique. Puisqu'il y a des différences entre des individus donc les facteurs psychologiques peuvent subvenir dans des formes différentes. Cela dépend de la situation. Nous allons voir quelques une au-dessous.

Le manque des professeurs de français au Nigéria.

Pendant la colonisation, il y avait le manque de professeurs de français, dans tous niveaux de l'éducation du Nigéria. Les gens ne savent pas l'importance de français, c'est la raison pour laquelle il n'y a pas de professeurs en ce temps-là. Jusqu'aujourd'hui, il y avait le manque de professeur. C'est vrai que « the national Policy on Education 2004 » a favorisé le français au Nigéria, malheureusement il n'est pas encore assez pour faciliter le programme de bilinguisme. La population des étudiants augmente toujours mais ceci n'est pas la même chose avec des professeurs. Quand nous parlons de professeurs bien qualifier pour l'enseignement de français. Le statut de français est pitoyable dans ces deux époques : lapériode de colonie et aujourd'hui, ils n'ont pas aidéou bien facilité l'enseignement et l'apprentissage de français.

L'attitude des parents envers le français.

Les parents parfois voient le français comme un cours ridicule. Il dépendtoujours des statuts de professeurs au Nigéria. Les parents les ont considérées comme les pauvres qui n'ont pas de valeur ou rien à contribuer au développement du pays. Ils n'ont pas encouragé leurs enfantsàétudier le français en concluant que le français va les lancer finalementàêtreprofesseur. Cela montre que quelques parents sont àblâmer pour le manque de professeurs et enmême temps de motivation à l'étude de français comme beaucoup de parents influencent le choix de matières pour leurs enfants.

Le français facilite le développement national. Si les parents aiment la langue, ils ne peuvent jamais penser du matérielfinancier qui s'attache comme d'avantage. Donc, si le français est bien enseigné, les étudiants commenceront à aimer le français. Les parents deviennent en place pour demander le gouvernement de développer les laboratoires de la langue lorsqu'ils aidentà l'acquisition et facilitent l'enseignement de français. Ils ne savent pas que si la langue française est bien réalisée par cela, les étudiants vont aimer le français. Donc le but d'être un pays bilingue sera réalisé et au futur, les jeunes Nigérians

enseigneront le français. Enfin, il n'aura plus de manque de professeurs à l'enseignement de français.

Le manque d'intérêt chez les étudiants

La plupart des étudiantsdisent que le français est difficile. Ils ne comprennent pas l'importance de la langue française. Un étudiant pose telle question toujours à soit même« pourquoi est-ce-que je fais le français? » « Qu'est-ce je peux faire après mes études avec cettematière? ». Les étudiants se constatent cette question à cause de certaine raison : ils n'ont pas d'intérêt, ils n'ont pas motivé ou peut-être, ils manquent de confiance. Comme ça, ils n'essaient pas de suivre les leçons du français, ils ne font pas de devoirs et ils ne possèdent pas dematériels, comme des livres et des cahiers recommandés pour l'apprentissage de français. Le pire est qu'ils ne pratiquent pas le français parmi eux en dehors de la classe surtout l'aspect oral.

Le manque de motivation financière auprès du gouvernement du Nigéria.

Pour encourager les jeunes àétudier le français, ou bien à devenirles professeurs de français, le gouvernement doit rémunérer les professeurs de français en payant leurs salaires à l'heure, il doit aussi augmenter le prix de leurs salaires.L'ignorance du gouvernement et les administrateurs des écoles concernant les affaires des professeurset surtout à propos de l'étude à découragé plusieurs étudiantsàétudier cette langue. En plus, le gouvernement peut faire bénéficier chaque étudiant. Le manque de motivation financièreauprès le gouvernement du Nigéria donne négligence et aussi l'attitude négativeaux affaires de professeur de français. Le salaire reçoit par chaque professeur de français n'est pas le même avec leurscollègues en science et mathématique. Donc on peut améliorer leurs salaires pour encourager les jeunes gens. Il aura mis au programme de formation ou des stages des enseignants.

Au Nigéria, on ne peut jamais parler de difficulté de l'étude du français soit le manque de professeur ou les autres côtés mentionnés, le mal financièrement de l'éducation. Cela face aussi l'application de la politique de français au Nigéria pour que le Nigéria devienne un pays bilingue, l'image de professeur doit bien placer.

Pour achever notre rêve de pays bilingue, le gouvernement peut établir des campus du Village français aux autres États ou zone où le Nigéria se limite avec les pays francophones qui sont leurs voisins. Les écoles secondaires, qui font le français seront bien équipés, par les matériaux de l'enseignement et prennent soin des besoins des écoles publiques. La méthode communicative est la meilleure pour enseigner le français mais beaucoup de recherches montrent que le gouvernement n'avait pas bien fondé les écolesfinancièrement pour la construction des Centres de langue, et la formation desprofesseurs est trèsbasse. C'est vrai que les professeurs peuvent trouver des matériaux mais sans les fonds, c'est toujours un rêve. Les matériaux pédagogiques comme les films français, les magnétophones, les livres français et les laboratoires de langue ne sont pas équipés.

Le problème de finance sera oublié si le gouvernement du Nigéria par le ministre de l'éducation donne des bourses d'étude aux étudiants qui se distinguent bien en français, organiser des compétitions, soit au niveau des zone, de l'état ou national pour gagner des prix et bourse pour voyager aux pays francophones, pour mettre en pratique le bilinguisme, il faut que le Nigéria emploie les gens qui ont une bonne connaissance de la langue dans les différentes stations de transmission soit la radio ou la télévision et même la presse.

Manque de motivation financière auprès du gouvernement de la France.

Depuis le commencement d'étudefrançais au Nigéria, la France encourage l'étude par les bourses d'étude. La bourse de l'étude est arrêtée lorsqu'il avait la criseéconomiquemondiale. La formation de beaucoup de professeurs de françaisétait avant en France, grâceà la bourse de l'étude qui vient de la France pour supporter la déclaration du français comme la deuxième langue officielle au Nigéria, la France doit

faire quelque changement pour encourager les gens à l'étude de leur langue. Aider en formation de professeur comme il y a le manque de professeur de français aujourd'hui au Nigéria. Il faut que le gouvernement équipe les écoles secondaires du Nigéria qui offrent le français avec des équipements modernes.

La formation des professeurs

La formation des professeurs est parmi les facteurs qui ont contribué au manque des professeurs de français au Nigéria. Pendant mon stage pédagogique, j'ai vu que les professeurs de français dans certaines écoles soit les publiques ou privées n'ont pas leur licence (BA ou BED) mais seulement la NCE et certains parmi eux ne savaient pas la conjugaison des verbes de premier groupe au futur.

Les étudiants mal formés ou non qualifiés ne peuvent pas enseigner le françaiscorrectement. Les activités orale et écritesont nécessaires en ce cas comme lefrançais est une langue étrangère au Nigéria ici.« Parfois le problème de quelques étudiants est l'anglais », dit Adegboku, un professeur du Village français du Nigéria, Badagry. Comment? Les élèves qu'ont acquis des solides compétences de base en communication orale, écriture et à la lecture en anglais auront de bonne connaissance pour commencer l'apprentissage de français. L'apprentissage de l'anglais renforcera des compétences dans la langue française puisque l'élève pourra faire des comparaisons et saisir le génie propre au français.

Nombre des professeurs

L'emploi des professeurs n'encourage pas les professeurs de français des écoles secondaires. Il y a des écolesoù on se trouve deux professeurs qui enseignent plus de 350 étudiants, le français et certains ont quitté le travail à cause de l'ambigüité de leurs travails. Il faut que le gouvernement embauche un grand nombre de professeurs. La ressource humaine est nécessaire. Selon Olayiwola (2015), «les ressources humaines sont très important dans le processus de stimulation ». La qualité de professeur produit un impact remarquable chez étudiants.

Importance de français.

C'est un profit d'étudier le français comme les autres cours professionnels, l'éducation la médicine et l'administration par l'exemple. Dans un discours d'orientation par professeur Aje (2013), « par l'acquisition du français les étudiants seraient capable de travailler dans les différents secteurs de l'économie » il ajoute que «le français est la seule langue européenneétudiée par les professeurs, avocats, secrétaires bilingues et administratives».

La langue française est une langue diplomatique. Elle est utilisée par les transports maritimes et aériens internationaux. De plus, c'est une langue de travail des organisations internationales telles la CEDEAO, L'UA et L'ONU. C'est aussi une langue de développement car elle s'adapte à la science et à la technologie. L'importance du français au sein international, l'importance du français pour le pays ne peut pas êtresous-estimée. Le français facilite de contact avec les hommes d'affaire nigérians et francophones et offre une connaissance de la culture française auxétudiants nigérians. Elle pourrait assurer un emploi dans les entreprises et établissementsfrançais dans le pays bien qu'ailleurs. Comme un étudiant de français, pourrait être un professeur, une bonne formation à propos le français est nécessaire. C'est seulement les professeurs qui peuvent enseigner les étudiants donc la société doit leurs accorder de respect.

La Cadre Théorique.

L'apprentissage désigne un changement en comportement. L'apprentissage se définie selon la théorie en utile. Il y a différentesthéories de l'apprentissage formulées par les psychologues, particulièrement le stimulus réponsethéorie (SR THEORY). Selon Onyekpere (2014), «la psychologie traite

la contribution psychologique à l'enseignement de la langue. Les résultatsaccumulés dans le domaine de la psychologie comportementale permettent de jeter des lumières sur la langue et l'enseignement de la langue. Nous profitons de la recherche des psychologues comme Watson, Pavlov, Piagetetc. ». Onyekperea dit pendant le cours « la psychologieappliquée n'enseigne pas seulement la langue mais elle enseigne la langue et le langage, et la psychologie résourd le problème dans l'enseignement de la langue et dans les autres matières cela montre que les théories de l'apprentissage et l'enseignement de la langue ont la relation avec la psychologie.

Iroegbu (2023), dit que « l'apprentissage est le changement permanent relative en comportement qui se base sur l'expérience, connaissance ou pratiques.» Il y a troisthéories d'apprentissage : *Stimuli Réponsethéorie, Cognitive théorie et Behaviorisme théorie.* Selon Wikipédia, (SR Theory) « Est la mise en relation entre un évènement provoqué par l'extérieur (stimulus) et une réactionadéquate du sujet qui cause un changement qui est persistant, mesurable et spécifique ou permet à l'individu de formuler une nouvelle construction mentale ».

En côté du cognitif, la théorie se fonde sur l'idée que la pensée est décomposable en processus mentaux distincts qu'il convient de modéliser comme des entités relativement autonomes. Les caractéristiques de ces processus mentaux sont alors indirectement accessibles au moyen d'expérience et le comportement et expérimentale. Ces théories influencent l'apprentissage et l'enseignement. Les cognitives psychologues sont d'accord que « chaque individu estné avec une connaissance interne que se développe en progrès de la maturité et expérience » (Wikipédia com. /théorie cognitive). S'il est vrai que l'enseignant doit maîtriser les contenues d'apprentissage, il doit aussi les faire acquérir.

Résumé

Cette étude a été faite sur les facteurs psychologique influençant l'enseignement de la langue française aux écoles secondaires.Le but de l'étude est de savoir comment est-ce que nous pouvons améliorer les problèmes psychologiques dans l'enseignement et l'apprentissage du français; et si les professeurs du français tiennent compte de ces facteurs psychologiques.On a revu la littérature de la cadre théorique et conceptuelle.On a constaté qu'il y a de manque de professeurs et les parents n'encouragent pas leurs enfants d'apprendre le français. Les rôles de gouvernement n'encouragent pas l'apprentissage de français. Donc la réalisation de bilinguisme reste obscure. Enfin on a donné quelques recommandations qui peuvent aider à surmonter ces problèmes que les professeursaux écoles secondaires ont eus dans l'enseignement de la langue française. On a recommandé la bourse d'étude aux étudiants et les professeurs pour voir une bonne compétence en français.Un professeur de la langue doit être mettre au courant en ce qui concerne l'emploi de la psychologie dans l'enseignement, le gouvernement doit organiser des séminaires concernant la psychologie pédagogique dans l'enseignement et insister sur la connaissance de la psychologie pédagogique chez les professeurs.

Finalement, on a conclu que les facteurs psychologiques affectent l'enseignement et l'apprentissage du français et cela touche la performance des étudiants dans les écoles secondaires et les autres écoles aussi.

Recommandations et les suggestions :

- 1. Un professeur de la langue doit être au courant de ce qui concerne l'effet de l'enseignement d'une langue étrangère pour qu'on puisse mettre l'accent sur l'emploi de la psychologie dans l'enseignement de la langue.
- 2. Le ministre de l'éducation doit utiliser cette étude comme répercussion pour qu'on organise des séminaires en ce qui concerne la psychologie pédagogique dans l'enseignement de la langue.
- 3. Les professeurs ont besoin de créer un milieu d'apprentissage convivial, proposer des activités pertinentes et présenter l'enseignement de français dans un contexte d'aménagement linguistique.

4. Le gouvernement veut le bilinguisme donc il est nécessaire qu'il employé les professeurs bien qualifiés en français et leur fournir avec les matériaux. En plus, développe des laboratoires de la langue dans les écoles secondaires, donne de bourse d'étude aux étudiants et même à leurs professeurs pour obtenir une bonne formation en française et puis développer leurs intérêts en étude de français.

Les References

Ajagbe, A.A. (2022). Language, Psychology of Child Development. Lagos, Apex

Anderson C.B (2017). Socialization in Education, Owerri, Spike.

Anijah J. (1978). Problems of Teaching French in Nigeria: Badagry: Nigeria French Language Village.

Baron F.G (2021).La langue quotidienne, Nice; l'Orient.

- FRN (2004). National Policy on Education, Lagos: NERDC Press.
- Iroegbu T.C. (2023). Principles of Psychology, Owerri: Liu House of Excellence. Ventures.
- Kuupole D.D. (2013). Enseignement du français, langue étrangère en Contexte plurilingue Africain : Conférence Inaugurale à l'occasion du colloque international organisé par RECFLEA: Badagry Lagos.
- Le Curriculum de l'Ontario (2006)
- Le Dictionnaire le PetitLarousse (2015), Paris : Larousse.
- La politique de l'Education 2004.
- Nwocha P. C, Onyemenekeya N.P, Ekeada S.U, Ogwudire H.U & Emenogunwanmuo A.P, Ikpeazu V.A, Njoku L.N. & Uwazuruike N.R, (2016) *Education Psychology: A Foundation Preview*Owerri: Cape.
- Ogwudire H.U & Iroegbu T.C (1997), Human learning principles & application, Owerri: Benneka.
- Ohiagu V. (2012).*L'enseignement du français dans les écoles primaireset secondaires ;Problèmes et solution*, Owerri: Imo State University, Owerri.
- Oladele, B.C (2003). Process in Child Education, Badagry: Lincoln.
- Olayiwola, S (2015). *Initiation à la Culture et Civilisation français et Francophone*, Ibadan : Agaro Publicity Company.
- Stonner, F.J & Gilbert, T.R. (2000). La Psychologie de la langue, Montpellier : France.

Funding: A Challenge to Optimizing ICT usage Among Business Education Students in Nigeria Tertiary Institutions.

¹Onyeagba Josephat N. Ph.D and ²Mbanugo, Cyriacus Izuchukwu

^{1,2}Department of Business Education ^{1,2}Nwafor Orizu College of Education, Nsugbe ¹08069630696, ²cyriacandrew1@gmail.com; 07036994433

Abstract

This paper investigates the impact of funding on the adoption and utilization of Information Communication Technology (ICT) among business education students in Nigeria tertiary institutions. Despite the importance of ICT in modern business education, Nigeria students face significant challenges in accessing and utilizing digital tools and resources. It was revealed that inadequate funding is a major obstacle to ICT adoption, resulting in a significant digital divide between Nigerian students and their global counterparts. The paper highlights the need for increased funding and strategic investment n ICT infrastructure, teacher training, and curriculum development to bridge the digital divide and optimize ICT usage among business education students in Nigeria tertiary institutions. The study's recommendations have implications for policy development, educational planning, and resource allocation in Nigeria's business education sector.

Keywords: Funding, ICT usage, Business education.

Introduction

Background of the Study

Information Communication Technology (ICT) has become an integral part of modern business education, enhancing teaching and learning. However, in Nigeria, the adoption and utilization of ICT among business education students remain limited due to various challenges, including inadequate funding. Business education is an essential aspect of Nigeria's tertiary education system, and the integration of Information Communication Technology (ICT) is critical for students' success in today's digital age (Okoli, 2012). However, the effective use of ICT in business education faces significant challenges particularly in terms of funding (Okoro, 2013).

Funding is a critical factor in the adoption and implementation of ICT in business education, and inadequate funding hinders the ability of institutions to invest in ICT infrastructure hire qualified instructors, and provide students with the necessary resources (Ejiofor and Osinem, 2010). The Nigerian government has initiated various initiatives to improve funding and infrastructure n tertiary institutions, including Tertiary Education Trust Fund (TETFUND) and the Nigerian National Petroleum Corporation (NNPC) Scholarship (Okoli, 2012). However more needs to be done to address the specific challenges faced by business education students in optimizing ICT usage.

In the words of Nwaiwu, Dikeocha and Nwagu (2015), Finance is an indispensable tool in achieving any educational objective. No programme of education can effectively be managed and administered without adequate funding. From the stage of planning to implementation required funds. It is often said that education does not only lie with the receivers of education but also with the producer of education (government).To provide a qualitative education, adequate budgetary provisions should be made by the education providers.

Funding tends to act as a challenge to optimizing Information and Communication Technology (ICT) usage among business education students in various institutions. This is sending negative alert that

enough is not being received by concerned institutions. A farmer cannot carry out good farming work in the absence of sufficient funding so is it with optimizing ICT usage among business education students in our institutions.

There is need to assert that there must be availability and provision of ICT facilities and equipment before we talk of their optimization. The equipping of institutions with ICT facilities and equipment required huge amount of money to be actualized.

As institutions plan the provision of enough ICT facilities and equipment, there is the need to equally plan for the people that will look after such ICT facilities and equipment in terms of maintenance and safe keeping. Enough building will equally be made available to store the ICT facilities and equipment, to house ICT laboratory, where computers and laptops and other necessary facilities and equipment are kept.

The standby generators should also be made available so as to supplement the provision of power when electricity is not available. Money will be provided for buying recharge cards for the meter to ensure that power will be available when the electricity is not available. Even fuel must equally be ensured to make sure that the generator tanks are filled with petrol ready to be used when electricity is off. All these provisions required a lot of money to be actualized and without adequate funding of business education these plans cannot be materialized.

In this era, a lot of money is being spent in the provision of health facilities, drugs and other complementary materials. Workable plans should be put in place to aid in the source of funds in order to support and compliment the efforts made by the government in the provision of facilities and equipment for the institutions.

Despite all efforts of the government, funding the programme (business education) remains grossly inadequate. The inadequacy is due to the following reasons among others:

- 1. Inadequate budgetary provision from government.
- 2. Overdependence on government for funds and
- 3. Poor spending by head of the institutions (Daramola, 2015)

Finance constitutes a serious challenge to the successful implementation of business education progamme (Daramola, 2015: 54). According to Okeke and Eze (2010), it is generally known that new technological facilities needed in business education are capital intensive. Sufficient fund is needed to procure and secure relevant equipment. But regrettably, it has been pointed out by Okeke and Eze that sufficient fund has not been channeled to business education which is a major problem plaguing the system. Similarly, Ugoegbe in Daramola (2015) observed that poor funding cause acute shortage of computer system, typewriters, furniture and sizable laboratories for business education programme to be effective and efficient as it is found in most developed nations.

The proper provision of adequate funds in business education programme will not only help business education students to optimized usage of ICT but will also enhance the efforts of business education in training competent graduates that will serve the society and cause unemployment reduction. According to Olaniyan and Titiloye (2012), if business education is adequately funded at the various levels of education, all other segments of the economy will be greatly improved. Thus business education exposes one to various business opportunities that are capable of bringing about sustainable economic and national development. According to Umezulike (2015), to achieve the identified objectives of business education which are prerequisite to realistic and desirable sustainable national development, government should allocate and disburse adequate/sufficient funds for the procurement of relevant modern equipment. Hence, it will enhance efficient economic and sustainable development.

Regardless of the efforts of the government and institutions to make adequate provision of the requisite ICT facilities available to students, business education students themselves need to support by acquiring laptops that have internet connections, smart phones for academic works, printers, flash, computer

paper, etc. The acquisition of the mentioned equipment, facilities and materials will go a long way to assist the students to make adequate and proper use of ICT when at home and use that of institution during time at the university in for optimization of the ICT.

Challenges of ICT in Teaching Business Education.

The use of ICT in teaching business education is faced with several problems, some of which are:

i. Poor and Insufficient Electricity Supply

Unreliable and inadequate electricity supply is an obstacle to the use of ICT in our institutions of learning. Towns and cities in Nigeria where institutions of learning are located do not have constant supply of electricity and some do not have access to electricity at all, especially the rural areas. This greatly affects the use of ICT in our institutions of learning. Anajuonye in Harmza and Garba (2020) affirmed that when electricity supply is not stable and constant, it is difficult to keep high technological equipment functioning thereby denying the use of ICT and other electricity devices.

ii. Cost

Another obstacle to the use of ICT in the teaching and learning of business education is the high cost of procurement and maintenance of ICT facilities and accessories. Nigerian institutions are not properly funded to enable them procure, install and maintain ICT facilities and accessories for effective use in respective institutions (Harmza and Garba 2020). Federal Republic of Nigeria (FRN) (2005) observed that there is high cost of imported ICT in Nigeria assemble computers, this warrants unavailability of the accessories and peripherals leading to a high cost.

iii. Under Utilization of ICT Facilities

Government may provide the Information Communication Technology centres in our institutions of learning, but the non-challant nature of those handling it would not allow the students full utilization of the facility thereby allowing the decay in the facilities without a corresponding benefits to students (Harmza and Garba, 2020).

iv. Limited Access to Internet

There are few internet providers in the country today. Most of these providers render poor service to customers while those that provide reliable services charge very high amounts of money for their services thereby reducing access to the use of the internet. Another obstacle to the use of ICT in the teaching and learning of business education is insufficient/inadequate availability of ICT facilities/ structures in the country. Such facilities/structure includes computers, instructional packages and equipment (Harmza and Garba, 2020).

v. The Absence of Proper Funding

Njoku (2015) observed that the lack of proper funding does not only hamper implementation of Business education programme but also affect the quality of students produced, the attitude of teacher and infrastructural development of the institutions.

The economic situation of the country affects the subvention given by government to institutions for running highly capital intensive business education programme. In actualizing meaningful training, business education needs to be equipped with the appliances which serve to reinforce learning. Poverty level is very high in the country and as such tending to affect funding ICT too.

vi. Inadequate Facilities to Cater for the Needs of Large Number of Students

The expensive nature of ICT facilities make it difficult to procure. Lack of facilities in our schools resulted from unaffordable computers, laboratories, equipment and so on required for teaching and learning. There is unavailability of relevant software in our schools thereby making teaching and learning difficult to teachers and students.

vii. Inadequate and Unqualified personnel in ICT

Apparently, some teachers still give in to technophobia. That's to say that they have fear for technological innovations thereby delaying the use ICT facilities for teaching in our schools. According to Bello, Oludele and Ademiluyi (2016), teachers need extra time to learn the use of new technologies and software for effective use of ICT. Teachers learn to create new things for teaching to meet up with greater expectations being placed on them. Equally Bongotons and Onyenwe (2010) observed that many institutions offering business education programme also lack lecturers who are proficient in the teaching of ICT.

viii. Poor Maintenance Culture of ICT Facilities

The current maintenance culture of our ICT facilities is poor in that once the facilities spoil; they are discarded and replaced with new ones despite their expensive nature. According to Bello, Oludele and Ademieluyi (2016), the problem most often noted by educationist is concerned with maintenance of ICT equipment and facilities. The poor maintenance culture of ICT facilities is a prevalent issue in many educational institutions, leading to frequent downtime, reduced productivity, and diminished learning outcomes. "Poor maintenance of ICT facilities can lead to a significant reduction in their lifespan resulting n unnecessary replacement costs" (Akande, 2010).

In the same vein, Bello (2019) asserted that effective maintenance of ICT facilities is crucial for ensuring reliability, efficiency, and longevity. The importance of maintaining the available ICT facilities within the reach of the institutions and business education programme in general can never be over-emphasized.

Funding of Tertiary Education

The financing of tertiary institutions is a critical component of a nation's educational system, playing a pivotal role in shaping the future of individuals, communities, and societies as a whole. Tertiary institutions are essential for human capital development, innovation, and economic growth yet they require adequate financial resources to fulfill their mandates. Funding of tertiary institutions, particularly business education programmes crucial for sustainable national development (Bolatito, 2017). It should a collective task of both government and her citizens. The funding of tertiary institutions should be a shared responsibility rather than leaving it solely in the hand of government alone. According to Nwosu and Ibe (2015), such money or financial resources should be enough to carter for the project or programme for which they are provided.

Finance is an indispensable tool for the growth of any organization, schools and higher institutions inclusive. According to Nwosu and Ibe (2015), the quality of education being provided for students has been a source of great concern for a long time.

The sources of school finance or funds are as follows:

- i. Internal generated funds which include school fees, conference dues, journal levies and so on.
- ii. Allocation from government-this covers the subvention from government.
- iii. Finance/fund from philanthropists. It includes donations from well-meaning individuals to government.
- iv. Donor organizations like UN, UNESCO, WHO, UNICEF and so on.
- v. Borrowing in form of Debenture
- vi. Alumi contributions given by graduates of an institution to their alma mater.
- vii. Special allocation (projects) from Tetfund. This source of fund is almost the last resort and the survival means of most tertiary institutions today.
- viii. Through wills as witnessed when Dr. Nnamdi Azikiwe willed his house at Nsukka to University of Nigeria, Nsukka.

The funds generated from these sources are often used for the payment or provision of immediate and remote needs of the school. The areas to spend the money are as follows:

- i. Payment of salaries and other outstanding emoluments of the school. According to Kalo et al (2015) for proper and effective implementation of business education programme there is therefore, the need for consistent funding, in form of payment of teachers' salaries purchasing of instructional material and teaching facilities, building of classroom and equipping of typing pools and offices with modern technological devices.
- ii. Provision of human resources for conferences, workshops and so on. Kalo et al (2015) maintained that funds are required and necessary to maintain both the human and material resources of every system in order to achieve desirable goals.
- Provision of library and equipment and so on for business education students' teaching and learning. Ashogbon (2015) contend that funding of Nigerian higher education is imperative because of maintenance costs implication.

The Need for Proper Funding of Business Education Programme.

Education at all levels in Nigeria is grossly underfunded (Nwosu and Ibe, 2015). Soludo in Nwosu and Ibe (2015) added that the biggest challenge facing the government is inadequate public spending on education. Igbinoba in Nwosu and Ibe (2015) observed that business education is currently being faced with poor funding and has resulted to inadequate teaching facilities, equipment, machines and materials. It also implied that business education graduates are ill equipped to face the challenges of the industry.

Business education programme requires facilities for effective teaching and learning. The importance of facilities to the overall success of any educational programme is not contestable. The Nigeria educational system needs proper funding. The national summit on higher education 2001 in Igwe (2010) was of the opinion that the level of funding in the education system has been the result of ill-equipped libraries, obsolete and outdated equipment, lack of well-equipped laboratories and corruption.

Business education programme by virtue of its nature as skills development programme requires a lot of money for capital projects. It requires modern facilities and equipment to provide students with comprehensive and practical learning experience. However, many institutions lack the necessary resources to invest in state-of-the-art facilities, technology and equipment, hindering the delivery of high-quality education.

Osuala in Nwosu and Ibe (2015) maintained that regardless of these efforts by government, funding of the programme remains grossly inadequate and has created a gap in knowledge which has to be filled. This inadequacy is largely due to inadequate budgetary provisions by the government and over dependence on government for funds, lack of financial commitment to the programme by well-to-do individuals and poor gestures from industries.

Funding is regarded as the act of providing money or financial resources for a particular purpose on a continuous basis. Such money or financial resources should be enough to carter for the project or programme for which they are provided (Nwosu and Ibe, 2015).

Quality is about how good or bad a product is. What type of education do we need in Nigeria? If qualitative education is desired, then there is need for adequate funding especially the aspect of business education programme. The quality of education being provided for students has been a source of great concern for a long time (Nwosu and Ibe, 2015).

Benefits of Adequate Funding of Business Education.

- i. Improved quality of education: funding enables institutions to attract top faculty, upgrade infrastructure and provide modern learning resources.
- ii. Enhanced student experience: Students benefit from state-of-the-art facilities technology and equipment, preparing them for the modern business world.

- iii. Global competitiveness: Proper funding enables business programme to compete globally, attracting international students and collaborations.
- iv. It will make possible the procurement of modern teaching and facilities possible for update of curriculum instruction and delivery.
- v. It will help to make the products of business education viable in modern office, business and technological setting (Umezulike, 2015).

Benefits of Tertiary Education Trust Fund to Business Education

Babayo (2014) maintained that since establishments of TETFUND, as an intervention agency in the education sector under the TETFUND ACT of 2011, the fund acts in pivotal role of business education.

Attempting reversal of the infrastructural decay, TETFUND play a significant role in the funding of business education in Nigeria, they include:

- i. Infrastructural development: TETFund supports the construction and upgrade of facilities, such as lecture halls, libraries, and laboratories, in business education institutions.
- ii. Research grant: TETFund provides funding for research in business and management, promoting innovation and entrepreneurship.
- iii. Capacity building: TETFund supports faculty development programme enabling business educators to enhance their teaching and research skills.
- iv. Access to modern technology: TETFund provides funding for modern technology and equipment, enhancing the learning experience in business education programme.

By providing these benefits, TETFund plays a crucial role in promoting excellence in business education in Nigeria.

Conclusion

The integration of ICT in business education is critical for student success in today's digital age. However, the effective use of ICT in business education faces significant challenges, particularly in terms of funding. The Nigerian government and institutions must prioritize funding for ICT infrastructure, instructor training, and curriculum development to bridge the digital divide between Nigerian students and their global counterparts and also address the challenges faced by business education students in optimizing ICT usage.

Recommendations

The following recommendations are made:

- 1. Government should provide adequate funds for acquisition of modern ICT resources and centres in various education institutions.
- 2. Business education department should develop a strong and vibrant relation with their alumni within and outside the country by organizing homecoming programme on annual basis to source funds from the alumni.
- 3. Considering the huge amount of money needed for business education programme which is grossly insufficient, diversified sources of generating revenue should be adopted to complement government efforts.
- 4. The legislative arm of government should enact policies that would make funding available to the institutions offering business education programme in order to facilitate the adequate utilization of ICT in their respective institutions.

References

- Ashogbon, O.S. (2015). Funding challenges and growth of business education in Nigeria: The need to act now. *Nigerian Journal of Business Education*, 2 (3) 75-89.
- Babayo, M. (2014). Breathing life into comatose tertiary education system. *Guardian News*. Retrieved from htt://ngrguardiannews.com/features/educat.
- Barko, L. & Durtur, S.L. (2015). Funding of business education in Plateau State: A critical review. *Nigerian Journal of Business Education*, 2 (3), 278-285.
- Bello, G.A., Oludele, L.Y. & Ademiluyi, A.B. (2016). Impact of information and communication technology on teaching and learning. *Nigerian Journal of Business Education*, 3 (1) 189-197.
- Bolatito, A. (2017). Appraising new approaches to the funding of tertiary education for sustainable national development in Nigeria. *Sokoto educational review*, *17(1 & 2)* 88-92.
- Daramola, R. (2015). Sources of funding business education programme in federal colleges of education in north-west Nigeria. *Nigerian Journal of Business Education*, 2 (2), 53-59.
- Federal Republic of Nigeria (2005). *National Policy on education*. Abuja: Federal Government Printing Press.
- Harmza, M.T. & Garba, B.Y. (2020). Relevance and prospects of information and communication technology to business education programme. *Nigerian Journal of Business Education*, 7 (1), 240-248.
- Igwe, S.N. (2010). Education sector reform in Nigeria postmortem. *Journal of Business and Vocational Education*, 1 (1), 43-50.
- Kalo, V.A., Effah, M.A. & Okudare, J.U. (2015). Funding: An imperative for effective implementation of business education programme in tertiary institutions in Nigeria. *Nigeria Journal of Business Education*, 2 (3), 55-64.
- Njoku, C. U. (2015). Critical incidents in the Nigeria education system: Challenges to business educators. *Nigerian Journal of Business Education*, 2(1)1-17.
- Nwaiwu, B.N., Dikeocha, U & Nwagu, C.C. (2015). Funding: A challenges to effective implementation of business education programme in colleges of education in south eastern Nigeria. *Nigerian Journal of Business Education*, 2 (2), 60-68.
- Nwosu, C.D. & Ibe, C.E. (2015). Funding of Business Education in Nigeria. *Nigerian Journal of Business Education*, 2 (2), 69-74.
- Okeke, B.C. & Eze, C.P. (2010). Repositioning vocational and technical education for the 21st century: Implication and challenges. *Journal of Vocational and Adult Education*, 7 (1), 58-67.
- Ejiofor, E.E., & Osinem, B.O. (2010). Strategies for enhancing the teaching of ICT in business education. *Journal of business education*, 5(2), 1-12.
- Okoli, J., (2013). The role of ICT in business education. Journal of business education, 6(2) 1-10.
- Okoro, J. (2013). Strategies for enhancing the teaching of ICT in business education. *International Education studies*, 6(10), 78-92.
- Olaniyan, M.K.O. & Titiloye K.A. (2012). Achieving millennium development goals (MDGS) through a sustainable Business Education programme. *Association of Business Educators of Nigeria Book of Reading*, 2(1), 74-83.
- Umezulike, A. (2015). Achieving a reliable and desirable sustainable national development through adequate funding of Business Education programme. *Nigerian Journal of Business Education*, 2 (2), 83-89.
- WHO (2020) World Health Organization report. America: General Publication

Difficultes D'emploi Des Adjectives Epithetes Chez Les Apprenants Au Premier Cycle D'ecoles Secondaires A Onitsha North De L'etat D'Anambra.

Okeke, Nchedo Priscilla

Department of French, Nwafor Orizu College of Education, Nsugbe, Anambra State okeke.nchedo@nocen.edu.ng or cheddyprisca@gmail.com; 08034298365

Résumé

Cette étude a examiné les difficultés d'emploi des adjectives épithètes chez les apprenants au premier cycle d'écoles secondaires à Onitsha North de l'état d'Anambra. L'objectif principal de ce travail c'est d'identifier les difficultés rencontrées par les apprenants au premier cycle d'écoles secondaires dans l'emploi des adjectives épithètes. L'instrument de collecte de données utilisé pour cette étude était un questionnaire développé par la chercheuse pour les élèves et les enseignants. L'échelle de notation qui a 16 éléments et liées aux difficultés d'emploi des adjectifs épithètes chez les apprenants au premier cycle d'écoles secondaires, était distribué aux élèves et aux enseignants. Le pourcentage simple était utilisé pour l'analyser de données et chaque échelle de notation que son moyen dépasse 2.5 a été acceptée tandis que toute moyenne obtenue en dessous de 2.5 a été rejetée. Les résultats montrent que les apprenants ne peuvent pas correctement employer l'adjective épithètes. Cependant, c'était recommandé que la Commissaire d'Éducation d'état d'Anambra devrait organiser des Séminaires ou des Ateliers pour les professeurs de français afin de les exposer aux différentes méthodologies d'enseignement du français et à la manière de sélectionner les documents pour leurs leçons de grammaire.

Mots-clés: Adjectifs, Adjectives épithètes et Premier cycle d'écoles secondaires

Introduction

L'apprentissage d'une langue étrangère comme la langue française nécessite le développement des compétences d'expression écrite, de compréhension orale et de compréhension écrite, mais chez les apprenants, la compétence, la plus importante c'est la compétence d'expression orale. Le but d'étudier toutes langues, comme la langue française, est de communiquer. Dans le monde entier, et même dans le cadre des organisations internationales, pouvoir parler en plusieurs langues, surtout en français, donne un avantage linguistique favorisant une intégration rapide de l'individu dans le monde actuel. C'est pour cette raison que le syllabus de l'enseignement du français pour les écoles secondaires porte sur le développement de la capacité des apprenants à communiquer dans des langues, surtout en français afin de répondre à ces besoins du monde.

Selon Dubois (2015), La grammaire traditionnelle définit les adjectifs comme des mots qui sont joints au nom pour exprimer la qualité de l'objet, l'être, ou la notion pour designer par ce nom ou pour permettre à ce nom d'être actualisé dans une phrase. Pour Eluerd (2010) les adjectifs sont les mots qui sont ajoutés aux noms. Eoghan (2022) ajoute qu'un adjectif est un mot qui modifie ou décrit un nom ou un pronom. Les adjectifs peuvent être utilisés pour décrire les qualités de quelqu'un ou de quelque chose indépendamment ou par rapport à autre chose. Quant à Le Dictionnaire Cambridge (2022), un adjectif est un nom ou un pronom qui fait office de sujet dans une phrase. Les adjectifs se trouvent après le verbe ou avant le nom qu'il modifie. Le Dictionnaire Collins (2022) avoue qu'un adjectif est un mot tel que « grand », « mort » ou «

financier » qui décrit une personne ou une chose, ou donne des informations supplémentaires à leur sujet. Il affirme que les adjectifs viennent généralement avant les noms ou après les verbes. Même Le Dictionnaire Merriam-Webster (2022) atteste que les terminaisons d'un adjectif s'accordent toujours avec le nom en termes de genre (masculin ou féminin) et de nombre (singulier ou pluriel).

Le Petit Robert (2019) voit l'adjectif comme mot susceptible d'être adjoint directement (épithète) ou indirectement (attribut) au substantif avec lequel il s'accorde, pour exprimer une qualité (qualificatif) ou un rapport (déterminatif). Ce dictionnaire donne une définition plus élaborée de l'adjectif. Il explique qu'un adjectif est un mot qui s'adjoint à un nom :

- pour le qualifier (c'est alors un adjectif qualificatif) : *un vieux chien une personne généreuse Ce plat est froid.* pour le mettre en lien avec un autre élément (c'est alors un adjectif relationnel) :
- *une voiture présidentielle l'étoile polaire*
- pour exprimer une place dans une série (c'est alors un adjectif numéral ordinal) :
 le second livre la trentième lauréate

Il ajoute que lorsque l'adjectif est relié au nom par un verbe, on dit qu'il est attribut : *Ce livre est passionnant.* Et lorsque l'adjectif s'adjoint directement au nom, on dit qu'il est épithète : *C'est un livre passionnant. Après avoir définit le concept d*'adjectif, *il est alors pertinent d'expliquer le concept d*'adjectif épithète.

Etymologiquement, le mot grec *«épithète»* signifie *«qui est ajouté»*. C'est ainsi que l'épithète est ajouté au nom. Dubois (2015) est d'avis que l'adjective épithète est toute unité qui détermine sans mots de liaison, un substantif ou un équivalent du substantif. Le Petit Robert (2019) apporte que l'adjectif épithète est un adjectif qualificatif qui n'est pas relié au nom par un verbe. Pour Eluerd (2010) l'adjective épithète est un modificateur du nom et un constituant complémentaire du groupe nominal étendu. On peut tirer de cette définition que l'adjectifs épithète set un mot qui indique la qualité ou l'état d'un nom. Augustyn (2022) résume que ces adjectifs épithètes ne peuvent être séparés par un autre mot. Il ajoute que la propriété qu'exprime l'épithète est intégrée au référent immédiat du nom et le syntagme Noun +adjectif. L'épithète s'accorde avec le nom qu'elle caractérise. Pour lui, l'épithète n'est pas introduite par un verbe et suit ou précède directement le nom. Elle peut être séparée du nom par une virgule. Il est maintenant, indispensable de discuter le placement d'adjective épithète.

La place de l'adjective épithète en français diffère de celui d'anglais. En anglais, il précède toujours le substantif, contrairement en français où sa place varie souvent. Eluerd (2010) stipule qu'en français, la place des adjectifs épithètes relève de irrégularités diverses. Certains ont une place fixé qui est généralement antéposés et certains sont postposés. Le Robert (2019) soutient que l'adjectif épithète est le plus souvent placé directement devant ou derrière le nom qu'il qualifie, mais il peut en être séparé par un adverbe ou un autre adjectif. Par exemple : *une personne très tolérante*; *une entreprise rentable et prestigieuse*.

L'adjective épithète pose beaucoup de difficultés chez les apprenants de français, surtout chez les apprenants au premier cycle d'école secondaire. Le premier cycle d'école secondaire s'adresse aux enfants âgés de 11 à 14 ans. L'enseignement secondaire est organisé en deux cycles, à savoir : le premier cycle (J. S. S.) et le deuxième cycle (S.S.S.). Le premier cycle qui a une durée de trois ans, est sanctionné par l'obtention du BECE et donne accès aussi à l'enseignement moyen (général, technique et professionnel) ou à la vie active. Ce cycle a pour mission non seulement de consolider les acquis de l'éducation de base, mais aussi de

préparer les élèves à l'enseignement supérieur ou à la vie active. Malheureusement, les élèves en ce niveau ne savent pas quand l'adjective épithète doit suivre ou précéder le nom qu'il qualifie. Notre intérêt dans cette recherche porte sur les règles syntaxiques qui régissent la disposition correcte des constituants d'une phrase. C'est dans ce domaine que règnent les difficultés des apprenants pour ce qui concerne l'emploi de l'adjective épithète.

Problématique de l'Étude

L'enseignement de la grammaire connait beaucoup de problèmes car la plupart des apprenants n'arrivent pas à employer des adjectifs épithètes de manière isolée ou en contexte. La langue française existe sous deux formes d'expression ; oral et écrit. Pour s'en rendre maitre, il est très important de veiller à la bonne structure syntaxique des phrases construites. Un cas très pertinent pour cette assertion est le bon emploi syntaxique d'adjectives épithètes françaises.

Nous avons remarqué que la place des adjectifs épithètes relève d'irrégularités diverses en français. La variation de place de l'adjective épithète française est au contraire de l'anglais où les épithètes précèdent toujours le substantif. Les apprenants aux écoles secondaires surtout les élevés au premier cycle d'écoles secondaires, expriment des grandes difficultés dans l'emploi syntaxique d'adjectifs épithètes. C'est dans ce contexte que le chercheur a voulu exposer les difficultés d'emploi des adjectives épithètes chez les apprenants au premier cycle d'écoles secondaires.

Objectifs de l'étude

L'objectif principal de ce travail est d'identifier les difficultés d'emploi des adjectives épithètes chez les apprenants au premier cycle d'écoles secondaires à Onitaha North dans l'état d'Anambra.

Questions de recherche

Les questions de recherche suivantes ont guidé l'étude :

- 1. Quelles sont les difficultés liées à l'emploi des adjectives épithètes?
- 2. Quelles sont les causes possibles de ces difficultés ?
- 3. Quelle est la meilleure méthodologie pour enseigner des adjectives épithètes ?
- 4. Quelle sont les stratégies pour améliorer l'emploi des adjectifs épithètes chez les apprenants ?

Cadre théorique

Cette recherche est basée sur la théorie de moniteur de Krashen. Stephen Krashen en 1981 mis à jour dans ses publications successives la théorie du « moniteur ». Il postule deux systèmes indépendants impliqués dans le développement de la compétence en langues – l'acquisition inconsciente et l'apprentissage conscient – et une relation particulière entre ces systèmes : l'acquisition inconsciente semble être beaucoup plus importante. Selon lui, les adultes ont deux moyens distincts et indépendants de développer la compétence dans une deuxième langue. L'*acquisition*, fortement mise en avant par Krashen, serait « très semblable aux processus utilisés par les enfants pour acquérir une langue première ou seconde » – des processus qu'il qualifie d'« inconscients », car ils ont lieu lors d'interactions sociales où l'attention de l'individu est focalisée sur le sens, et non pas sur la forme linguistique de l'énoncé (Krashen, S. (1981)).

Le propos fondamental de la Théorie du moniteur est que nos apprentissages conscients ne servent que de simple *Moniteur* lors de l'utilisation du langage. Les énoncés sont initiés par le système acquis. Notre connaissance « formelle » de la langue seconde – nos apprentissages conscients – peuvent servir à ajuster les productions générés par le système acquis. Nous effectuons ces réglages pour améliorer la précision de l'ensemble. L'apprentissage sert une seule fonction : celle du Moniteur, d'un éditeur. Les connaissances apprises ne servent que pour changer l'énoncé, une fois qu'il est « produit » par le système acquis.

Selon cette théorie, le développement des compétences d'une langue peut se faire en deux façons distinctives. La première c'est l'acquisition d'une langue qui passe pour une activité subconsciente applicable aux enfants et aux adultes. L'apprenant ne dispense aucun effort délibéré et conscient pour développer ses compétences linguistiques. Cependant, Krashen et Terrell (1993) soutient qu'un apprenant acquiert les compétences en exerçant des activités telle que lire, raconter des histoires, ainsi de suite.

Méthodologie

Le dessin de cette étude est un sondage sur les difficultés d'emploi des adjectives épithètes chez les apprenants de français en premier cycle d'écoles secondaires à Onitsha North dans l'état d'Anambra.

Cette étude a été réalisée autour des élèves et des professeurs du français de premier cycle d'écoles secondaires à Onitsha North dans l'état d'Anambra.

La population de l'étude consiste de 18,234 élèves en premier cycle et 150 enseignants de français en premier cycle d'école secondaire à Onitsha North dans l'état d'Anambra. Cette population ressort de 18 écoles secondaires publiques que nous avons à Onitsha North dans l'état d'Anambra.

La chercheuse a utilisé une technique de l'échantillonnage prémédite pour sélectionner cinq écoles secondaires à Onitsha North dans l'état d'Anambra. Un échantillon de 300 élèves était sélectionné, donc 60 élèves ont été choisis de premier cycle de chaque école secondaire. Nous avons également sélectionné 25 enseignants pour répondre aux questions.

L'instrument de recherche utilisé pour cette étude était un questionnaire développé par la chercheuse pour les élèves et les enseignants. L'échelle de notation est composée de 16 éléments qui sont liées aux difficultés d'emploi des adjectives épithètes chez les étudiants au premier cycle d'écoles secondaires à Onitsha North dans l'état d'Anambra. Les articles étaient structures sur une échelle de quatre (4) points: Très D'accord (TD), D'accord (D), pas D'accord (PD) et pas de Tout D'accord (PTD). L'échelle a été notée comme suivant :

Très D'accord (TD)	4points
D'accord (D)	3points
Pas D'accord (PD)	2points
Pas de Tout D'accord (PTD).	1points

Le pourcentage simple sera utilisé pour l'analyser de données, c'est-à-dire, le moyen. Chaque échelle de notation que son Moyen dépasse 2.5 a été acceptée et toute moyenne obtenue en dessous de 2.5 a été rejetée.

Formule de moyenne (\vec{x}) :

 $\mathbf{x} = \mathbf{f} \mathbf{x} / \mathbf{N}$

- $O\dot{u} \, \bar{x}$ = symbole de moyenne statistique
- N = Nombre totale d'élèves ou enseignants
- F = Fréquence
- x = score
- FX = somme totale ou la somme

Presentation Des Résultats

Question de la Recherche 1 : Quelles sont les difficultés liée à l'emploi des adjectifs épithètes ?
Tableau 1 : Réponses des élèves et des enseignants

Article	Questions	Élèves			Élèves Ensei			Enseigr	iants
		Ν	x ⁻	Décision	Ν	x	Décision		
1	J'ai du mal à identifier les adjectives épithètes.	300	3.6	Accepté	25	1.96	Rejetée		
2	Je ne peux pas correctement employer l'adjective épithète.	300	2.8	Accepté	25	1.76	Rejetée		
3	Le placement d'adjective épithète n'est pas très difficile.	300	1.35	Rejetée	25	3.8	Accepté		
4	La transformation souvent dans la formation d'adjectif épithète me confondre.	300	3.8	Accepté	25	1.64	Rejetée		
MOYEN	INE GLOBALE		2.89	Accepté	2.29		Rejetée		

Dans le premier tableau, les élèves acceptent qu'ils ont du mal à identifier les adjectifs épithètes (3.6), qu'ils ne peuvent pas correctement employer l'adjectif épithète (2.8) et que la transformation souvent dans la formation d'adjectif épithète les confondre. Ils même rejettent que le placement d'adjectif épithète n'est pas très difficile. La moyenne globale pour les élèves est 2.89 et cela montre que les élèves ont du mal à identifier et à employer l'adjective épithète.

En autre part, les professeurs avec la moyenne globale de 2.29 montrent qu'ils n'ont pas de difficultés avec l'emploi d'adjective épithète.

Question de la Recherche 2 : Quelles sont les causes possibles de ces difficultés ? Tableau 2 : Réponses des élèves et des enseignants

S/N	Questions	Élèves				Enseignants		
			x	Décision	Ν	x	Décision	
5	Le professeur de français ne comprend pas bien l'enseignement et l'apprentissage d'adjective épithète.	300	2.1	Rejetée	25	1.92	Rejetée	
6	Les élèves n'achètent pas des livres de grammaire pour améliorer leur connaissance.	300	3.41	Accepté	25	3.8	Accepté	
7	Les élèves ne font pas suffisamment les leçons en grammaire dans une classe de langue.	300	3.81	Accepté	25	3.52	Accepté	
8	Structure syntaxique d'adjectif épithète n'est pas facile.	300	3.45	Accepté	25	3.8	Accepté	
ΜΟΥ	ENNE GLOBALE	3.19		Accepté		3.26	Accepté	

Selon le tableau 2, les élèves rejettent que leurs professeurs ne comprennent pas bien l'enseignement et l'apprentissage d'adjectif épithète (2.1). Ils affirment qu'ils n'achètent pas des livres de grammaire pour améliorer leur connaissance d'adjectif épithète (3.41), qu'ils ne font pas suffisamment les leçons en grammaire dans la classe et que la structure syntaxique d'adjectif épithète n'est pas facile.

Même les professeurs acceptent que les élèves n'achètent pas les livres de grammaire pour améliorer

leur connaissance d'adjectif épithète (3.8), qu'ils ne font pas suffisamment les leçons en grammaire dans la classe de langue et que la Structure syntaxique d'adjectif épithète est difficile (3.8).

Malgré le rejet d'article 5 par les élèves et les enseignants, leurs moyennes globales (élèves = 3.19 et enseignants = 3.26) indiquent que les enseignants et les élèves contribuent à la cause de ces difficultés.

Question de la Recherche 3 : Quelle est la meilleure méthodologie pour enseigner des adjectives épithètes ?

Tableau 3: Réponses des enseignants

Article	Questions	s Enseignants				
		Ν	x	Décision		
9	L'emploi des approches communicative et actionnelle dans l'enseignement et l'apprentissage du français rend l'acquisition des adjectives épithètes plus facile.	25	3.8	Accepté		
10	J'emploie l'approche traditionnelle dans l'enseignement des adjectives épithètes.	25	3.52	Accepté		
11	L'emploi de la méthodologie directe dans l'enseignement et l'apprentissage du français rend l'acquisition des adjectives épithètes plus faciles.	25	2.56	Accepté		
MOYEN	NNE GLOBALE		3.29	Accepté		

Selon les réponses des professeurs, les professeurs emploient l'approche traditionnelle dans l'enseignement de l'adjective épithète (3.52). Ils pensent que l'emploi des méthodologies communicative, actionnelle et directe dans l'enseignement et l'apprentissage de l'épithète adjectif français rend l'acquisition des adjectifs épithètes plus facile.

Question de la Recherche 4 : Quelle sont les stratégies pour améliorer l'emploi des adjectifs épithètes chez les apprenants ?

Tableau 4: Réponses des élèves et les enseignants

S/N	Questions		Élève	s		Enseigna	nts
		Ν	x	Décision	Ν	x	Décision
12	L'emploi d'exemples aide à améliorer la compréhension des apprenants dans l'enseignement et l'apprentissage d'adjective épithète.	300	3.1	Accepté	25	3.28	Accepté
13	Le renforcement aide à améliorer la compréhensible des apprenants dans l'enseignement et l'apprentissage d'adjectif épithète.	300	3.36	Accepté	25	3.8	Accepté
14	La méthodologie traditionnelle est nécessaire pour améliorer l'enseignement et l'apprentissage d'adjectives épithètes chez les élèves.	300	1.66	Rejeteé	25	3.56	Accepté
15	L'emploi des approche actionnelle et communicative dans l'enseignement améliore l'apprentissage des adjectifs épithètes.	300	2.5	Accepté	25	2.56	Accepté
16	Les enseignants doivent suivre une formation constante pour améliorer leur enseignement et compréhension d'adjective épithète.	300	3.1	Accepté	25	3.52	Accepté
ΜΟΥ	ENNE GLOBALE	2.74		Accepté	3.34		Accepté

Selon les résultats, les élèves acceptent que l'emploi d'exemples (3.1) et le renforcement (3.36) aident à améliorer la compréhension des apprenants dans l'enseignement et l'apprentissage d'adjective épithète. Ils rejettent la méthodologie traditionnelle (1.66) mais acceptent que l'emploi des approche actionnelle et communicative améliorent l'enseignement-apprentissage des adjectifs épithètes. Ils indiquent que les enseignants doivent suivre une formation constante pour améliorer leur enseignement et compréhension d'adjective épithète.

Les enseignants en revanche, acceptent que l'emploi de méthodologie traditionnelle améliore l'enseignement et l'apprentissage des adjectives épithètes chez les élèves (3.56).

Discussion des résultats

Les discussions sont basées sur les résultats et sont discutés en fonction des quatre questions de recherche qui ont guidé l'étude.

Difficultés liées à l'emploi des adjectives épithètes

Le résultat principale de la Question de recherche 1 qui portait sur les difficultés liée à l'emploi des adjectifs épithètes chez les apprenants au premier cycle d'écoles secondaires ont montré que la moyenne globale pour les élèves est 2.89. Cela indique que les élèves ont du mal à identifier et à employer l'adjective épithète. En autre part, les professeurs avec la moyenne globale de 2.29 montrent qu'ils n'ont pas de difficultés avec l'emploi d'adjective épithète.

Cependant, cette étude révèle que les enseignants qui peuvent identifier et employer l'adjectif épithète ne savent pas comment transférer les connaissances aux élèves.

Causes possibles de ces difficultés

Selon les résultats, la cause possible de ces difficultés chez les élèves au premier cycle d'écoles secondaires est que les élèves n'achètent pas des livres de grammaire pour améliorer leur connaissance d'adjectif épithète, ils ne font pas suffisamment les leçons en grammaire dans la classe et ils ne comprennent pas la structure syntaxique d'adjectif épithète. Ils rejettent que leurs professeurs de français ne comprennent pas bien l'enseignement et l'apprentissage d'adjectif épithète.

Malheureusement, les professeurs attestent que les **él**èves n'achètent pas les livres de grammaire, qu'ils ne font pas suffisamment les leçons en grammaire dans la classe et que la Structure syntaxique d'adjective épithète les confondre. Mais, ils rejettent qu'ils ne comprennent pas bien l'enseignement et l'apprentissage d'adjectif épithète.

Malgré leurs rejets d'article 5, leurs moyennes globales (élèves = 3.19 et enseignants = 3.26) indiquent que les enseignants et les élèves contribuent à la cause de ces difficultés.

Meilleure méthodologie pour enseigner des adjectives épithètes

D'après les résultats, les professeurs pensent que l'emploi des méthodologies communicative, actionnelle et directe dans l'enseignement et l'apprentissage de l'épithète adjectif français rend l'acquisition des adjectifs épithètes plus facile. Mais pratiquement, les professeurs de français emploient l'approche traditionnelle dans l'enseignement d'adjective épithète.

C'est vrai que dans l'enseignement du français comme langue étrangère, les professeurs s'adressant aux méthodologies et méthodes (manuels) préparées d'après les besoins langagiers et les progrès technologiques des apprenants. Les professeurs de français en premier cycle d'école secondaire doivent être exposés aux différentes méthodologies de l'enseignement du français afin que les enseignants de français et les apprenants puissent adapter la méthode qui convient à leurs besoins.

Actuellement, on assiste à une croisée des méthodologies en didactique du Français Langue

Etrangère, il n'y a pas de méthodologie unique sur laquelle tous sera basée. C'est pour cela qu'il y'a eu une naissance d'un éclectisme méthodologique depuis une vingtaine d'années, en proposant une diversification théorique et méthodologique en classe du Français Langue Etrangère. C'est pourquoi on entend aujourd'hui l'approche ou méthode communicative/actionnelle. Aucune méthodologie n'est parfaite et donc la meilleure pour les enseignants est la méthode éclectique ou la méthode mixte.

Stratégies pour améliorer l'emploi des adjectives épithètes chez les apprenants.

Les résultats indiquent que l'emploi des techniques de renforcement et d'emploi d'exemples dans l'enseignement-apprentissage d'adjective épithète améliore la compréhension des apprenants. Les élèves rejettent la méthodologie traditionnelle mais acceptent que l'emploi des approche actionnelle et communicative améliorent l'enseignement-apprentissage des adjectifs épithètes. Les enseignants en revanche, acceptent que l'emploi de méthodologie traditionnelle améliore l'enseignement et l'apprentissage d'adjectives épithètes chez les élèves. Mais ils attestent que l'emploi des approche actionnelle et communicative dans l'enseignement améliore l'apprentissage des adjectifs épithètes.

Ce résultat montre que ces professeurs ne vivent pas à notre époque. La méthodologie a déjà fait un nouvel élan dans le domaine de l'enseignement. Les enseignants doivent suivre une formation constante pour améliorer leur enseignement et compréhension d'adjective épithète. L'enseignement/apprentissage du Français exige une pratique des méthodologies par l'enseignant, par lesquelles il va utiliser une des approches existantes en didactique de la langue française, selon les besoins et le niveau de ses apprenants, et surtout pour pouvoir s'exprimer entre eux. De même que Trương (2014), indique qu'on est arrivé à constater que chaque méthode devait répondre à un type de besoin défini, viser un objectif précis, servir un public déterminé. Le temps est bien venu où l'enseignant n'impose plus sa méthode à ses apprenants. Par contre, ce sont les apprenants qui choisissent la méthode qui convient à leur besoin.

Conclusion

Cette recherche a été basée sur les difficultés d'emploi des adjectives épithètes chez les apprenants au premier cycle d'écoles secondaires à Onitsha North dans etats d'Anambra. La population de l'étude consiste de 300 étudiants est les 25 professeurs. L'instrument utilisé pour la correction des données était une échelle de notation et les réponses ont été analysées. Selon les résultats, on a vu que les élèves au premier cycle d'écoles secondaires à Onitsha North dans l'état d'Anambra ont du mal à identifier et à employer les adjectives épithètes, ils n'achètent pas des livres de grammaire et ils ne font pas suffisamment les leçons en grammaire dans la classe et leurs professeurs emploient l'approche traditionnelle dans l'enseignement des adjectives épithètes.

C'était proposé que les enseignements de français participent aux Séminaires ou aux Ateliers afin de les exposer aux différentes méthodologies d'enseignement du français et à la manière de sélectionner les documents pour leurs leçons de grammaire. En addition, les **él**èves doivent acheter les livres de grammaire et toujours pratiquer l'épithète adjective avec leur professeur et leurs camarades de classe.

Recommandations

Après avoir identifié les difficultés liées à l'emploi des adjectives épithètes chez les apprenants au premier cycle d'écoles secondaires à Onitsha North de l'état d'Anambra, il est nécessaire de faire quelques recommandations qui peuvent guider les enseignants, les apprenants, aussi bien que tous les intervenants de l'éducation. Les recommandations suivantes sont proposées :

1. Le Gouvernement Fédéral, y compris le Gouvernement d'état d'Anambra et la Commission de l'Éducation d'état d'Anambra, devraient promulguer une législation pour augmenter la durée de

leçon pour la langue française à un minimum de 80 minutes par classe pendant une semaine.

- 2. La Commissaire d'Éducation d'état d'Anambra devrait organiser des Séminaires ou des Ateliers pour les professeurs de français afin de les exposer aux différentes méthodologies d'enseignement du français et à la manière de sélectionner les documents pour leurs leçons de grammaire.
- 3. Les enseignants devraient utiliser les techniques de renforcement et l'emploi d'exemples dans l'enseignement-apprentissage d'adjective épithète pour améliorer la compréhension des apprenants.
- 4. Les parents doivent acheter livres surtout les livres de grammaire pour leurs enfants.
- 5. Les élèves doivent toujours pratiquer l'épithète adjective avec leur professeur et leurs camarades de classe.

Références

- Asiedua. E.B. (2011) : L'impact du Twi et de l'anglais sur l'apprentissage du Français. Mémoire de licence présenté au Département de Français, UEW.
- Dubois, J. (2015). Le dictionnaire de linguistique et des sciences du langage. Larousse.
- Dumenya, J.K. (2015). L'Impact de l'approche communicative sur la performance orale des apprenants de français. Mémoire de master présenté au Département de Français, UG.
- Eluerd, R. (2010). *Grammaire descriptive de la langue française*. Armand colin.
- Frank, A. (2001). Serving the community and learning a foreign language. *Language, Culture and Curriculum*, 14(3), 120-133.
- Gass, S. M., & Selinker, L. (2001). Second Language Acquisition, an Introductory Course (2nd ed). Lawrence Erlbaum Associates.
- Grevisse, M. & Goose, A. (2005). Le bon usage (13ème ed). Duculot.
- Krashen, S. D. (1981). Principle and practice in second language acquisition. Pyramond Press.
- Michael, P. (2020). Dictionnaire de grammaire et des difficultés grammaticales. Armand colin.
- Le Petit Robert (2019). Dictionnaire Alphabétique et Analogique de la Langue Française. Le Robert.
- Abdulwasiu, H. (2023). Journée mondiale des enseignants : Pourquoi le Nigeria peine-t-il à maintenir ses enfants à l'école ? https://www.trtafrika.com/fr/africa/journee-mondiale-des-enseignants-pourquoi-le-nigeria-peine-t-il-a-maintenir-ses-enfants-a-lecole-15267514
- Trương, Q. Đ. (2014). Les méthodes d'enseignement-apprentissage du français, langue étrangère, hier et aujourd'hui. *Synergies Pays Riverains du Mékong*, 6, 161-163.

Promoting Male Enrollment In Business Education In Colleges of Education For Entrepreneurship Development In Anambra State

Okeke Chinwe S., Ph.D Department of Business Education sussano18@gmail.com; 08035412675

Abstract

Recent observation has shown a decline in enrollment of male students into business education especially in colleges of education programmes. This situation is becoming worrisome considering the social effect on the education sector and the business world. Thus, this research study was to determine how to promote male students' enrollment in business education for entrepreneurship development in Anambra State. This is because business education as a vocational course prepares its students for roles in enterprises as employees, entrepreneurs and employers. Two research questions guided the study. Descriptive survey research design was adopted for the study. The population of the study was eighty nine (89) final year business education students from Nwafor Orizu College of Education, Nsugbe (NOCEN) and Federal College of Education Technical, Umunze (FCETU). A self-structured questionnaire was the major instrument used for data collection and validated by two experts. Data analysis was done using mean and standard deviation. Findings revealed that poor scholarship programme, quest for fast money and government insensitive polices are the major factors that cause low males' enrollment in the College. As a result of these factors, entrepreneurship development is hampered since there is low risk taking, feasibility studies and inventions in the state. It was concluded that males are the bedrock of any progressing society and if care is not taken, a time will come when only females are seen in our academic institutions. Thus, the researcher recommended among others that the college management and head of department should increase their commitments in hosting events to showcase business education, instituting regular interactions with industrial experts and promoting business education through social media such as face book, twitters and blog.

Keywords: Males Enrollment, Business Education, College of Education, Entrepreneurship, and Entrepreneurship Development

Introduction

Education is one of the surest means of attaining self liberation in the society today. It is seen as a way of bringing needed change by equipping and empowering the citizens for gainful living. Through education, knowledge, skills, ideas, attitudes and patterns of behavior are transmitted to a learner. Thus, it is a major instrument for mitigating poverty and balancing social and economic inequality, as well as the foundation for maintaining sustained growth of the economy. The Federal Republic of Nigeria (2013), in its revised edition of the national policy on education noted that education is the most important instrument of change and fundamental for the construction of democratic, dynamic societies and globally competitive economies. By implication, any person, society or even nation that is knowledgeable is economically powerful. Therefore, education bestows power on people, societies or nations as it is the tool for human capital development. Undeniably, no nation can achieve meaningful development without human capital development. Education leverages on people's natural talents and abilities to produce a better and progressive society. In general, education is all involving and extends to several areas such as arts education,

primary education study, business education and so on.

Business education is an educational programme that prepares its recipients for roles in enterprises as employees, entrepreneurs or employers. As part of general education, it provides distinctive skills, knowledge, aptitude and attitudes necessary for occupational competence to match the labour market situation in the country. Okeke (2020) described business education as a skill driven course poised to distinguish students from among other graduates in the labour market. Hence, it connotes all educational program geared towards equipping students with necessary skills and competences for successful establishment, operation and management of business ventures. Business education is a vocational programme that is skill-oriented and equips its graduates with saleable skills for productive engagements and service delivery. It exposes its recipients to the theories, fundamentals and processes of business. In the tertiary education system of Nigeria, business education is a discipline or academic course run in the universities under the faculty of education as well as in the colleges of education. "Business education, either in the university or college of education affords its recipients teaching mastery in business subjects, necessary competencies in professional education, functional general education for life, skills to undertake research and additional learning experiences through in-service programmes (Onyesom and Okolocha, 2013). Meanwhile, National Commission for Colleges of Education (2012) emphasized that in Nigeria educational landscape, college of education is a higher institution attended after secondary education qualification and it is particularly designed to train teachers for the teaching profession. It provides training and prepares intending teachers at the intermediate level and her graduates are awarded with the Nigerian Certificate in Education (NCE) in theories of instruction, teaching methodology and curriculum delivery. Beside the professional and general education background, colleges of education also train their students in a specific academic field or course such as home economics, mathematics, fine art, chemistry, business education amongst many others. Thus, Federal Republic of Nigeria through its policy document known as the "National Policy on Education" postulates that the least entry benchmark qualification for teachers aspiring to join the teaching profession is the Nigerian Certificate in Education (NCE). Business education as an academic discipline in the Nigerian college of education system is structured to accomplish the objectives as encapsulated by its government regulatory agency called the National Commission for Colleges of Education.

With these objectives, the programme of business education at the level of college of education is structured to train qualified and competent teaching staff that will teach pre-vocational business studies subjects at the basic and secondary schools and also become self reliant and independent entrepreneurs. This implies that the study of business education helps to enhance the spirit of entrepreneurship among its learners. The term entrepreneurship is the process of being an entrepreneur. It is a major indicator of economic development because it drives innovation and invention. In order words, through business education, many entrepreneurship businesses are developed. According to Al-Mamary et al. (2020), entrepreneurship is directly associated with self-employment.

On the other hand, entrepreneurship development is the process of enhancing entrepreneurial skills and knowledge through structured training and institution-building programs. It aims to enlarge the base of entrepreneurs to speed up the pace at which new ventures are created. Imafidon (2014) explained that entrepreneurship development is about change and innovation thinking and as such, is an integral part of the development process. This is because it is integral to the springing up of small businesses which are also seen as the seed bed for exploring the commercial viability of new ideas; new products and new market opportunities. Entrepreneurship development ensures the improvements of entrepreneurship practice. It can be related to effective cost reduction in business operations technological improvement, general welfare, improve relations among stakeholders (consumers, employees, competitors, society, government) positive movement in the direction of organization. Entrepreneurial development may also be conceived as a

programme of activities to enhance the knowledge, skill, behaviours and attitudes of individuals and groups to assume the role of entrepreneurs as well as efforts to remove all forms of barriers in the part of entrepreneurs.

However, in spite of all the objectives and importance of business education in the education industry and society at large, business education as a programme of study at the colleges of education is faced with enormous challenges which have hindered the realization of its objectives. To Osadebe and Osadebe (2020), the basic of these challenges is the declining rates of students' enrollment into the programme. Enrollment is the act of signing up for school and/or specific classes or co-curricular activities at a particular school as a Male or Female. Agu and Okeke (2018) described enrollment as the process of initiating attendance to a school. Therefore, enrollment process is completed after a student is granted admission. Female enrollment means when she- offspring initiate attendance to a school whereas Males' enrollment denotes when a heoffspring are officially registered to study in an academic institution in a particular year. According to Richard and Ember (2021), Males' enrollment over the years is declining. Women are now much more registered in most colleges of education. This gender gap started recording significantly during the Corona virus syndrome (aka, COVD-19).

In the past, business education programme has maintained a steady progressive students' enrollment pattern of both sexes and its graduates have had a productive career endeavour (Etaga, Etaga, Aforka and Okeke, 2015). This career success is indicative of the students' choice of the programme over the years (Siddiky and Akter, 2021). As observed in previous papers, Vocational Business education programme is bedeviled with low enrolment of male students as a result of public misunderstanding of the benefits, scope and contents of the programme. Meanwhile, Saldana (2016) identified some of the intervening factors as; greater interest in earning money, greater interest in practical/technical works, belief that real men work to earn and, cost-benefit analysis of studying in the present economic environment. To reverse this situation, it is important that a comprehensive strategy to attract and retain should be employed to ameliorate the declining rate. Specifically, Okwelle and Agwi (2018) suggested the use of public enlightenment and mentorship programmes to convey the endearing job prospects awaiting business education graduates. Also, Tukur, Abubakar, Omosidi, and Ijeoma (2019) established that for an increase in enrollment of students in business education, that there is need to update recruiting materials, Face book groups, Twitter, designed tshirts, and have days when students and staff wear the t-shirt. By and large, if males' enrollment continue to decline in business education, it is most likely to affect entrepreneurship activities in the real sense of it. Thus, the business environment will be flooded with mere traders who are not trained.

Statement of Problem

In Nigeria today, there are serious economic and social problems ranging from unemployment, hunger, crimes of various kinds like; child trafficking, child abuse, kidnapping and robbery. This situation requires functional education that will provide people with source of livelihood of which business education is one aspect of this education. By implication, business education leads to both self and national development if well imparted and enrollment is balanced in terms of sex. But in utmost dismay, it has been observed that males' enrollment in business education programmes is going downswing and females are the sex that mostly forms the class size and this is not encouraging at all. This scenario is now making many young males to be without skills and therefore go unemployed. Furthermore, this dearth of males in business education in no time will have great influence on entrepreneurship development generally and other jobs including the teaching profession. All these are consequences of their not being enrolled and therefore not trained in the skill areas. Based on the above problems, the researcher sought to find the causes of low males' students' enrollment, the effects and strategies to use to promote males' enrollment in business education so as to encourage entrepreneurship development in Anambra state.

Research Objectives

The broad purpose of this study was to examine promoting males' enrollment in business education in colleges of education for entrepreneurship development in Anambra state. Specifically, the study sought to:

- 1. Determine the causes of poor enrollment of male students into business education in colleges of education in Anambra state.
- 2. Examine the effects of poor enrollment of male students into business education on entrepreneurship development in Anambra state.
- 3. Ascertain strategies to promote enrollment of male students into business education in colleges of education for entrepreneurship development in Anambra state.

Research Questions

- 1. What are the causes of poor enrollment of male students into business education in colleges of education in Anambra state?
- 2. What are the effects of poor enrollment of male students into business education on entrepreneurship development in Anambra state?
- 3. What strategies would be used to promote male students enrollment into business education students in colleges of education for entrepreneurship development in Anambra state?

Methodology

The study adopted descriptive research design. The population of the study was eighty-nine (89) business education students' finalists from Nwafor Orizu College of Education, Nsugbe and Federal College of Education Technical, Umunze. The entire population was used as sample and studied because it was a manageable size. The instrument for data collection was a self-designed questionnaire divided into three parts and titled; Causes of Poor Males' Enrolment (COPME), Effect of Poor Males' Enrolment on Entrepreneurship Development (EOPMEOED) and Strategies of Promoting Males' Enrolment (SOPME). The questionnaire was structured on a four point rating scales with twenty-five (25) items all together to answer the research questions. Options for research question were structured along the line of Strongly Agree (SA-4 points), Agree (A-3), Disagree (D-2) and Strongly Disagree (SD-1). Two experts, one in test and measurement and the other in business education from Nwafor Orizu College of Education, Nsugbe validated the instrument. A test re –test reliability test was used to determine the consistency of the instrument and which yielded 0.80 to the first cluster and 0.78 for the second cluster. Spearman Rank Order was used to compare the results and a coefficient value of 0.79 was obtained thereafter. Data collected were analyzed with descriptive statistic mean rating using 2.50 as the benchmark for acceptance or rejection.

Results

Research question 1: What are the causes of poor enrollment of male students into business education in college of education in Anambra state?

Table 1: Mean rating on the causes of poor enrollment of male students into business education in
college of education in Anambra state.

S/N	Causes of poor males' enrollment	∑fx	x	Decision
1	Too much love for fast money	308	3.46	SA
2	Belief that real men work to earn and not to study	222	3.00	SA
3	More interest in practical/technical works	215	2.87	А
4	Cost- benefit of studying in the current Nigerian economy.	192	2.95	А
5	Poor scholarship programmes	132	2.70	А
6	Government insensitive polices.	222	2.82	А
7	Peer pressure	214	2.67	А
8	Parental influence	235	2.64	А
	Grand mean		2.89	А

The data presented in Table 1 above showed that items 1- 8 scored above 2.50 which were taken as the yardstick for acceptance and rejection. While the respondents strongly agreed to numbers 1 and 2, they agreed to numbers 3-8. This signifies that they are all the causes of poor males' enrollment in our colleges of education in Anambra state.

Research question 2: What are the effects of poor enrollment of male students into business education in colleges of education on entrepreneurship development in Anambra state?

Table 2: Mean ratings on the effects of poor enrollment of male students into business education on
entrepreneurship development in Anambra state.

S/N	Effects of poor enrollment of male students on	∑fx	x	Dec is ion
	entrep re neurs hip			
9.	Low risk taking ventures	256	2.88	А
10.	Poor feasibility studies	259	2.91	А
11.	Poor inventions and innovations by males folk	255	2.87	А
12.	Increase in number of untrained male entrepreneurs	255	2.87	А
13.	Shortage of entrepreneurship skills	253	2.84	А
14.	Shortage of male business and entrepreneurship educators	304	3.42	SA
15.	Increase in crime rate	240	2.70	А
16.	Poor technology use	197	2.21	D
	Grand mean		2.84	Α

Table 2 above showed that the respondents agreed that items 9, 10, 11, 12, 13 and 15 were the effects of poor male students' enrollment on entrepreneurship development in Anambra state. This was seen from their mean scores that were above 2.50. Also, item 14 was strongly agreed to while the respondents disagreed on item16 based on their respective mean scores. The implication of disagreeing on item 16 could be that poor males' enrollment in colleges would not lead to poor technology use since technology is not only used by males in the society.

Research question 3: What measures would be used to promote male students' enrollment into business education in colleges of education for entrepreneurship development in Anambra state?

Table 3: Mean rating on the measures to promote male students' enrollment into business education in colleges of education for entrepreneurship development in Anambra state?

S/N	Strategies to promote male students' enrollment into	∑f⊼	x	Decision
	business education			
17.	Embracing social media to create a wareness	246	2.76	А
18.	Creating interactive website and hosting events to showcase	258	2.90	А
	business education			
19.	Providing soft loans to business education graduates for	285	3.20	SA
	business start ups			
20.	Partnering and networking with parents, counselors and			
	advisors to change the males fast money making mind set	304	3.42	SA
21.	Redesigning curriculum with flexible courses and values	256	2.88	А
22.	Early intervention programmes in basic schools	247	2.77	А
23.	Featuring business education talks on media	238	2.67	А
24.	Providing mentorship programmes	235	2.64	А
25.	Instituting regular interactions with industrial experts	237	2.66	А
	Grand mean		2.88	SA

Table 3 above revealed that the respondents strongly agreed to items 19 and 20 while they agreed to items 17, 18, 21, 22, 23, 24 and 25 as the measures to promote male students' enrolment into business education in colleges of education for entrepreneurship development in Anambra state. This was also determined through their mean and grand mean scores.

Discussion of findings

The result of data analysis as presented in Table 1 reveals that there are many causes of poor enrollment of male students in business education in college of education in Anambra state such as too much love for fast money, belief that real men work to earn and not to study, cost- benefit of studying in the current Nigerian economy and peer pressure. This is in agreement with the views of Saldana (2016) who opined that some of the factors of low males' enrollment include, greater interest in earning money, greater interest in practical/technical works, belief that real men work and cost-benefit analysis of studying in present economic environment.

Meanwhile, the result from Table 2 indicates that there are effects of poor enrolment of male students in Business education on entrepreneurship development in Anambra state. Some of these effects are; low risk taking ventures, poor inventions and innovations by males folk, poor feasibility studies, Increase in number of untrained male entrepreneurs and many others. This is in consonance with Imafidon (2014), who affirmed that entrepreneurship development is about change and innovation thinking and as such, is an integral part of the development process. This is because it is integral to the springing up of small businesses which are also seen as the seed bed for exploring the commercial viability of new ideas, new products and new market opportunities. By implication, when there is low enrollment of students to acquire the art of entrepreneurship, there will be low or no innovations or new ideas and many opportunities will not be exploited in the business environment.

Table 3 results shows that many measures such as providing soft loans to business education graduates for business start ups, partnering and networking with parents, counselors and advisors to change the males fast money making mind set, redesigning curriculum with flexible courses and values and early intervention programmes in basic schools could help to promote male students' enrollment into business education in colleges of education for entrepreneurship development in Anambra state. This agrees with the opinion of Okwelle and Agwi (2018), who suggest the use of public enlightenment and mentorship programmes to convey the endearing job prospects awaiting business education graduates. Also, Tukur, Abubakar, Omosidi, and Ijeoma (2019), established that, for an increase in enrollment of students in business education, there is need to update recruiting materials, Face book groups, Twitter, design t-shirts, and have days when students and staff wear the t-shirts.

Conclusion

The decline in male students' enrollment into business education in colleges of education has shown great concern and the situation demands urgent attention to reverse the trend. The current research does not advocate that all men must or should enroll in business education although it is undoubtedly essential to the social and economic prosperity of individuals and society. More so, the study was not carried out to undermine the achievements of women because they are equally very significant in the development process of any economy. While the influence of other factors cannot be discounted, the data from the current research showed unequivocally that too much love for fast money and the belief that real men only work to earn and not to study are the most significant factor that cause poor male students' enrollment into business education in colleges of education in Anambra state.

As expected, the research result showed that poor male students' enrollment has effects on number of male business and entrepreneurship educators' in colleges of education in recent times. Also, it has led to low

risk taking ventures and poor feasibility studies for entrepreneurship development. On the bases of the above factors and effects, the study concluded that males are the bedrock of any progressing society and if care is not taken, a time will come when only females are seen in our academic institutions acquiring all the needed skills and knowledge to exploit and manage the economic resources.

Recommendations

On the basis of the above discoveries, the following recommendations are made;

- 1. There is need for a functional counseling office at the department, college at large and at secondary school levels to disabuse the male students' mindset of get rich quick syndrome in the society now.
- 2. The college management and head of department should increase their commitments in hosting events to showcase business education.
- 3. The college management, head of department, lecturers and the SIWES director should institute regular interactions with industrial experts.
- 4. The government should encourage business education graduates by giving them grants to build their business startup capital instead of soft loans which is repayable.

References

- Agu, P. U & Okeke, F.C (2019). Enhancement and retention of male enrollment in public secondary school of Nsukka education zone for sustainable development. *The Educational Psychologist*, vol 12, no.1, pp 63-77
- Al-Mamary, Y.H.S., Abdulrab, M., Alwaheeb, M.A. and Alshammar, N.G.M. (2020). Factors impacting entrepreneurial intentions among university students in SAUD Araba testing an integrated model of TPB and EO. *Education+ Training*, vol, 62, no7/8 pp 779- 803.https://do.org/10.110/ET-04-2020-0096
- Etaga, H. O., Etaga, C. N., Aforka, K. F. and Okeke, S. E. (2020) "Student enrolment pattern in Anambra State (2001-2015)," *African Journal of Mathematics and Statistics Studies*, vol. 3, no.4, pp. 62-71
- Federal Republic of Nigeria, (2013). *National Policy on Education*, 6th Ed. Lagos: NERDC Press.
- Imafidon, k. (2014). Entrepreneurship development for sustaining economic growth in third world nations. Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 5(7):101-108 ISSN: 2141-7024) jetems.scholarlinkresearch.org
- National Commission for Colleges of Education, (2012) *Nigeria certificate in education minimum standards for vocational and technical education*. Federal Republic of Nigeria, National Commission for Colleges of Education.
- Okwelle, P. C. & Agwi, V. I. A. (2018). Strategies for improving female students' enrolment in technical and vocational education programmes through public relations activities in Nigeria. *International Journal of Advanced Academic Research: Arts, Humanities and Education*, vol. 4, no. 1, pp. 1-13
- Okeke, C.S. (2020). 21st Century skills requirements of business education students for successful business entrepreneurship in Anambra State. *Nigerian Journal of Business Education*.8 (1).138-144

- Onyesom, M. & Okolocha, C. C. (2013). Assessment of the adequacy of instructional resources in business education programmes relative to NCCE standards in colleges of education in Nigeria," *Journal of Education and Learning*, vol. 2, no.2, pp. 165–178,doi: 10.5539/jel.v2n2p165
- Osadebe, P. U. & Osadebe, J. F. (2020). Undergraduate business education students' perception on information and communication technology use in teaching and learning *International Journal of Evaluation and Research in Education (IJERE)*, vol. 9, no. 2, pp. 359-363, doi: 10.11591/ijere.v9i2.20326
- Richard, V & Ember, S (2021). The male college crises is not just in enrollment but competition. Retrieved on 15th May, 2024 from https: //www.brookngsedu/articles/the-male-college-crss-s-not-just-n-enrollment-but-ompleton/
- Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Siddiky, M. R. & Akter, S. (2021). The students' career choice and job preparedness strategies: A social environmental perceptive," *International Journal of Evaluation and Research in Education* (*IJERE*), vol. 10, no. 2, pp. 421-431, doi: 10.11591/ijere.v10i2.21086
- Tukur, M. A., Abubakar, L. A., Omosidi, A. S. & Ijeoma, O. C. (2019). Marketing mix and students' enrolment in private universities in Kwara State, Nigeria," *Makerere Journal of Higher Education*, vol. 10, no. 2, pp. 53-63, doi: 10.4314/majohe.v10i2.5.

Entrepreneurship Incubation Centres As Predictor of Business Education Graduates Employability In Tertiary Institutions In Anambra State

¹Ngozi Loretta Nwosu, ²Ngozi Onyemaobi & ³Stella Chinyere Amobi ^{1,2,3}Department of Technology and Vocational Education, ^{1,2,3}Nnamdi Azikiwe University, Awka, Anambra State, Nigeria ¹ln.nwosu@unizik.edu.ng; 08068444009, ²on.onyemobi@unizik.edu.ng;; 08037844798, ³sc.amobi@unizik.edu.ng; 08039515201

Abstract

The study investigated entrepreneurship centres as predictor of business education graduates employability in tertiary institutions in Anambra State. One research question and one hypothesis guided the study. The correlational research design was adopted for the study. The population of the study comprised 255 (400 level) business education students in tertiary institutions in Anambra State. Two validated questionnaires were used to collect data for the study. The instruments were pilot tested and the reliability co-efficient values of 0.80 for QEIC and 0.86 for QBEGE. Simple regression was used to analyze data for the study. The finding of the study revealed that entrepreneurship incubation centres is a positive predictor of business education graduates employability in tertiary institutions in Anambra state. Furthermore, finding of the study revealed that entrepreneurship incubation centres significantly predict business education graduates employability in tertiary institutions in Anambra state. Based on these findings, the researcher recommended that administrators of tertiary institutions should invest in expanding and strengthening entrepreneurship incubation centres in their institutions.

Keywords: Entrepreneurship, Incubation Centres, Graduate, Employability

Introduction

The rising rate of unemployment in Nigeria has continued to be a major cause of concern. According to the Nigerian Bureau of Statistics (NBS) 2020 report, about 47% of the approximately 500,000 graduates of Nigerian institutions of higher learning who graduate each year fail to find work and do not go into business owing to a lack of skills (Abbas et al, 2020). Furthermore, the Nigeria's unemployment rate was 27.1 percent in 2020 (Nigerian Bureau of Statistics (NBS), and it continues to rise, with a rate of 35.3 percent in 2023 (NBS, 2023), indicating a 6.5 percent increase over the previous three years. Graduate employability is 36%, which suggests a major issue (Mahmoud & Abubakar, 2019). This appears to have a critical impact on graduate employability.

Employability relates to one's ability to find job, keep it, and find new work when needed. Fugate in Ossai and Okokoyo (2022), defined employability as a multidimensional concept that distinguishes between job acquisition and work readiness. Employability encompasses a range of skills, knowledge, understanding, and personal qualities essential for engaging in gainful employment (Imeokparia & Ediagbonya, 2019). Makinwa (2019), defined employability as a set of skills, knowledge, and personal attributes that increase graduates' chances of success in their chosen industries. This benefits individuals, the workforce, the community, and the economy. Oladokun and Gbadegesia (2017), defined employability as the capacity to maintain or get a chosen employment, taking into account all dimensions of future success and personal standing. Put simply, it pertains to the ability to obtain and retain rewarding work. Evidence abounds in Anambra State in particular that a high rate of graduate (including business education graduate)

unemployment exists, which is not due to a lack of jobs, but rather to a lack of employable skills that the labour market requires, as well as a skill gap and mismatch (Oladokun & Gbadegesia, 2017). This is sad, given the fact that business education is an academic programme that is aimed at preparing its graduates for the contemporary world of work.

Business education is concerned with the preparation of the business education students for office careers through initial, refresher and upgrading education leading to employability and advancement in office occupation, while the general business education programme provides students with information and competencies which are needed by all in managing personal and business affairs and in using the services of the business world (Oroka, et al, 2020). Edokpolor and Egbri (2017), stated that business education is a course of study that equips its recipients with the necessary skills, knowledge and value that will enable them function effectively in the world of work. Ogudo and Crossdale-Ovwido (2020), saw business education as an essential aspect of vocational education which provides students self-actualization and self-reliant skills to actively contribute to individual economy, local and national industrial growth. The failure to realize the expectation of the business education programme seem to show the low level of innovativeness, creativity and entrepreneurial abilities among business education students which has placed them at a disadvantage in the global world of work (Obiete et al., 2015). This has increased a call for more practical form of entrepreneurship education like incubation centres for improving graduates employability.

Incubation is the process of providing beginning businesses with momentary assistance in the shape of a variety of intricate offerings and unique surroundings. This is done to increase the likelihood of beginning businesses surviving the early stages of their existence and laying the groundwork for future greater expansion (Abubakar-Sadeeq et al., 2021). Incubation centres are defined as places of communication and synergy, making them effective in numerous environments (Castello, 2016). They facilitate the convergence of public and private stakeholders around a shared interest. They are often at the intersection of significant networks. They serve as hubs for group learning for external stakeholders who get a deeper understanding of the realities of entrepreneurship in addition to the entrepreneurs themselves. Through the use of seasoned and competent professional entrepreneurs, incubation centres provide mentorship services on business administration, financial risks, and business innovation to their internship incubates/trainees (Barugahara et al, 2017; Fernandez-Fernandez et al., 2015; Lukes et al., 2019).

Incubation centres in certain developed and developing nations provide coaching and mentoring services as well as access to a network of support to businesses that specialise in marketing, business planning and management skills, legal and accounting, low-cost leases, and office services (Lukes et al., 2019). By offering financial assistance, such as seed loans or startup money, vocational training business incubators in industrialised nations help entrepreneurs to effectively build sustainable small and medium-sized enterprises (SMEs) (Barugahara et al, 2017). Abubakar-Sadeeq, et al. (2021), opined that technological incubators support the expansion and advancement of Nigerian businesses. The majority of business owners use the resources provided by technological incubators. Along with initiatives to enhance society and the economy, the incubators also carried out a range of projects and programmes to support the growth and development of entrepreneurs. Similarly, Chista et al (2021), averred that business incubation improves a prospective entrepreneur's access to the tools and resources required for success. However, the link between entrepreneurship incubation centres and graduate employability have not been empirically ascertained among graduates of tertiary institutions in Anambra State. It is against this background that the researchers investigated entrepreneurship incubation centres as predictor of business education graduates employability in tertiary institutions in Anambra state.

Purpose of the Study

The main purpose of the study was to investigate entrepreneurship incubation centres as predictor of

business education graduates employability in tertiary institutions in Anambra state.

Research Question

To what extent does entrepreneurship incubation centres predict business education graduates employability in tertiary institutions in Anambra state?

Hypothesis

The hypothesis was tested at 0.05 level of significance:

Entrepreneurship incubation centres does not significantly predict business education graduates employability in tertiary institutions in Anambra state.

Conceptual Framework

The conceptual framework of the study explains the link between the independent variable and dependent variable.

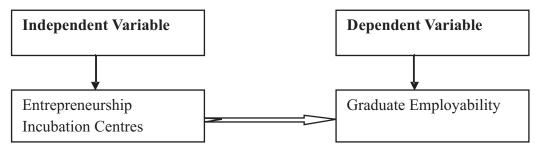


Fig 1: Conceptual representation of entrepreneurship incubation centres as predictor of business education graduates employability in tertiary institutions in Anambra State Source: Researchers, 2024

Methodology

The study adopted the correlational research design. It was conducted in Anambra State, South East, Nigeria. The population of the study comprised 255 (400 level) business education students in the 2023/2024 academic session from four public tertiary institutions offering business education programme in Anambra State. The institutions are; Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus, Nnamdi Azikiwe University, Awka, Federal College of Education (Technical), Umunze and Nwafor Orizu College of Education, Nsugbe. Two questionnaires were used to collect data for the study. The first questionnaire is titled: "Questionnaire on Entrepreneurship Incubation Centres (QEIC)." The instrument contains 10 items on entrepreneurship incubation centres. The second questionnaire is titled: "Questionnaire on Business Education Graduates Employability (QBEGE)." It contains 12 items measuring business education graduates employability. Both instruments are structured on a four point rating scale of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD). The instrument was validated by three experts in the Department of Technology and Vocational Education. To further determine the internal consistency of the instrument, a pilot study was conducted on 20 students in Federal College of Education (Technical), Asaba. The application of Statistical Package for Social Sciences (SPSS) version 21 using Cronbach Alpha reliability method on the data obtained yielded reliability co-efficient value of 0.80 for QEIC and 0.86 for QBEGE. Data for the study was administered by the researcher with the help of six research assistants. The research assistants were briefed on the mode of instruments administration and retrieval. The instrument was administered to the respondents in their lecture halls and department. The instrument was administered and retrieved on the spot. Out of 255 copies of questionnaire administered, 223 copies were returned in good condition. The 223 copies of returned questionnaire amounted to 87% questionnaire return rate and the 22 copies of questionnaire not returned amounted to 13% lose rate. Simple regression analysis was used to analyse data for the study.

In answering the research questions, the regression coefficient rule suggested by Stephen (2017), was used for judgment as thus: Negligible (0.00-0.20), Low (0.20 - 0.40), Moderate (0.40- 0.60), Substantial (0.60 - 0.80), and Very High (0.80-1.00). For regression coefficient (r); + Sign = Positive Predictor and - Sign = Negative Predictor. In interpreting the values of the null hypotheses, when p-value is less than or equal to .05 (p . .05), the null hypothesis was rejected. On the other hand, when the p-value is greater than .05 (p > .05), the null hypothesis was not rejected.

Results

Research Question

To what extent does entrepreneurship incubation centres predict business education graduates employability in tertiary institutions in Anambra state?

 Table 1: Summary of Simple Regression Analysis with Entrepreneurship Incubation Centres as a

 Predictor of Business Education Graduates Employability in Tertiary Institutions in Anambra State

		Unstandardized	Std. Dev.	Standardized
		В	β	β
Constant		38.147	6.245	
Entrepreneursh	nip	.781	.312	.724
Incubation Cen	tres			
R	.724			
R^2	.651			
Adj. R ²	.623			

The summary of the simple regression analysis as shown in Table 1 indicated that entrepreneurship incubation centres highly predict business education graduates employability in tertiary institutions in Anambra state as shown by the regression coefficient (R = .724). The coefficient of determination (R^2), .651, showed that the explanatory power of the variable was highly strong. This implies that 65% of the variations in business education graduates employability in tertiary institutions in Anambra state were accounted for by the variations in entrepreneurship incubation centres. The adjusted R^2 supported the claim of the R^2 with a value of .623 indicating that 62% of the total variation in the dependent variable (business education graduates employability) was explained by the independent variable (entrepreneurship incubation centres). Thus, adjusted R^2 supports the statement that the explanatory power of entrepreneurship incubation centres) is highly strong in determining the business education graduates employability in tertiary institutions in Anambra state. Nevertheless, the standardized beta weight ($\beta = .724$) showed that entrepreneurship incubation centres is a positive predictor of business education graduates employability in tertiary institutions in Anambra state.

Hypothesis

Entrepreneurship incubation centres does not significantly predict business education graduates employability in tertiary institutions in Anambra state.

		Unstandardized	Std. Dev.	Standardized	t-	p-
		В	β	β	value	value
Constant		38.147	6.245		49.847	.000
Entrepreneurs	ship	.781	.312	.724	52.683	.000
Incubation Ce	nt res					
R	.724					
R^2	.651					
Adj. R ²	.623					
F	54.128					.000

Table 2: Test of Significance of Simple Regression Analysis with Entrepreneurship IncubationCentres as a Predictor of Business Education Graduates Employability in Tertiary Institutions inAnambra State

The summary of the test of significance of simple regression analysis as shown in Table 2 revealed that the simple regression coefficient (R) is .724 while the R^2 is .651 and Adjust R^2 is .623. The F-ratio associated with regression is 54.128, the t-test is 52.683 and the P-value = .000. Since p-value (.000) is less than the specified level of significance .05, the study therefore rejected the null hypothesis which states that entrepreneurship incubation centres does not significantly predict business education graduates employability in tertiary institutions in Anambra state. Hence, entrepreneurship incubation centres significantly predict business education graduates employability in tertiary institutions in Anambra state.

Discussion

The finding of the study revealed that entrepreneurship incubation centres is a positive predictor of business education graduates employability in tertiary institutions in Anambra state. The finding of the study might have resulted because entrepreneurship incubation centres provide students the opportunity to improve their entrepreneurial abilities, receive practical experience, and meet with mentors and industry experts. This exposure provides students with the required skills sought for by businesses, boosting their employability. This finding is in consonance with Chista et al (2021), who revealed that business incubation improves a prospective entrepreneur's access to the tools and resources required for success. In the same vein, Lukes et al. (2019), asserted that incubation centres provide coaching and mentoring services as well as access to a network of support businesses that specialise in marketing, business planning and management skills, legal and accounting, low-cost leases, and office services. Furthermore, finding of the study revealed that entrepreneurship incubation centres significantly predict business education graduates employability in tertiary institutions in Anambra state. Abubakar-Sadeeq, et al. (2021), stated that incubators support the expansion and advancement of Nigerian businesses.

Conclusion

Based on the findings of the study, the researchers conclude that entrepreneurship incubation centres positively predicts business education graduates employability in tertiary institutions in Anambra state. It is important for stakeholder in business education programme to adopt measures for exploiting the opportunities for improving business education graduates employability through entrepreneurship incubation centres.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

- 1. Administrators of tertiary institutions should invest in expanding and strengthening entrepreneurship incubation centres in their institutions. This could involve increasing funding, resources and mentorship support to ensure that students have access to comprehensive entrepreneurial training and guidance.
- 2. Administrators of business education programmes and curriculum planners should ensure that curriculum design should incorporate more practical learning experiences, such as internships, projects, and case studies, to complement theoretical knowledge. This integration will better prepare students for the demands of the job market and enhance their employability.

References

- Abbas, M. K., Osunsan, O. K., & Kibuuka, M. (2020). Social norms and entrepreneurial intent of graduating university students in North West Nigeria. *European Journal of Business and Management Research*, 5(2). https://doi.org/10.24018/ejbmr.2020.5.2.232
- Abubakar-Sadeeq, A., Othman, A.U., Audu, A.S., Ramalan, M.I., &Abdullahi, I. (2021). The impact of the technology incubation program on entrepreneurship promotion in Nigeria. *Economics*. 10(4), 105-111.
- Barugahara, F., Maumbe, B. & Nzaro, R. (2017). Developing a business incubator model for an entrepreneurial university: The case of Bindura University of Science Education. 10.4108/eai.20-6-2017.2270037
- Chitsa, B. Mpofu, J. & Moyo, G. (2021). Effectiveness of vocational training incubation centres in creating sustainable small to medium enterprises (SMEs) in Bulawayo Metropolitan Province. *International Journal of Research and Innovation in Social Science (IJRISS)*, 5(1), 125-132.
- Costello, G.J. (2016). Incubation centres and the teaching of entrepreneurship: Bridging theory and practice. *AISHE Journal*, 8(1), 1-24.
- Edokpolor, J. E. & Egbri, J. N. (2017). Business education in Nigeria for value re-orientation: A strategic approach for poverty alleviation and national development. *Journal of Educational Research and Review (JERR)*, 5 (3), 41-48.
- Fernandez-Fernandez, M. T., Blanco Jiménez, F. J., & Cuadrado Roura, J. R. (2015). Business incubation: Innovative services in an entrepreneurship ecosystem. *Service Industries Journal*, 35, 783–800, doi: https://doi.org/10.1080/02642069.2015.1080243
- Imeokparia, P.O. & Ediagbonya, K. (2019). Employability skills. *International Research Journals*, 3(5), 2141–5161.
- Lukes, M., Longo, M. C., & Zouhar, J. (2019). Do business incubators really enhance Entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. *Technovation*, 82/83, 25–34. https://doi.org/10.1016/j.technovation.2018.07.008
- Mahmoud, A.M. & Abubakar, S. G. (2020). Factors influencing entrepreneurial intention of university students in Nigeria. *Covenant Journal of Entrepreneurship (CJoE), 3*(2), 1-15.

Makinwa, E. (2019). *What is skill acquisition*. https://www.legiting/2019/03/25/1089233 - what-skill-acquisition.

Nigerian Bureau of Statistics (NBS) (2023). Nigerian labour force statistics report Q2 2023. NBS

- Obiete, I. A., Nwazor, J. C. & Vin-Mbah, F. F. (2015). Strategies for teaching business education students in Nigerian tertiary institutions for cooperate governance. *Journal of Education and Practice*, 6(18), 170-175.
- Ogudo, P. A. & Crossdale-Ovwido, J. (2020). Globalization of business education curriculum experiences for enhanced students' employability status in Nigeria. *Nigerian Journal of Business Education* (*NIGJBED*), 7(2), 387-392.
- Oladokun, S.O & Gbadegesin, J.J (2017). Adequacy of core knowledge and soft skills in the performance of professional employees of real estate firms in Nigeria property management. https://www.emerald.com/insight/content/doi/10.1108/PM-02-2016-0008/full/html.
- Oroka, O.V., Atarere, L.O.I. & Okifo, J. (2020). Reinventing business education through quality and information communication technology (ICT) for global competitiveness among selected universities in South-South and South-East Nigeria. *International Journal of Innovative Information Systems & Technology Research*, 8(4), 32-43.
- Ossai A.G. & Okokoyo, I. E (2022) Managing university education for employability in Nigeria: the way forward. *British Journal of Education*, 10(6), 37-45

Emploi De Chanson Dans L'apprentissage De La Langue Francaise Chez Les Apprenants Français

Chitoo Doris Obikwelu

Department of French Nwafor Orizu College of Education, Nsugbe, Anambra State obikwelu.chitoo.doris@nocen.edu.ng

Résumé

Cette étude est basé sur l'importance de la chanson dans l'enseignement et l'apprentissage de la langue française. la chanson comme l'une des méthodes d'enseignement aide les apprenants à retenir ce qui leur a été enseigné. cela se fait en obligeant les apprenants à répéter longtemps le contenu de la leçon, cette répétition constante les aide à retenir le contenu de la leçon. Avec l'utilisation de la chanson dans l'enseignement et l'apprentissage, l'apprenant apprend les mots nécessaires, leur prononciation et leur signification. L'utilisation de chansons contribue également à attirer l'attention de l'apprenant sur le sujet et à le faire participer activement à la leçon. Naturellement, les enfants apprennent facilement les chansons et les oublient à peine. Ainsi, lorsqu'un sujet en français est enseigné avec des chansons, il est bien retenu et mémorisé.

Mots clés : apprenant, enseignment, chanson, apprentissage, répéter.

Introduction

L'emploi de la chanson pour l'enseignement de français langue étrangère (FLE) a sert a donné plusieurs bénéfices chez les élèves et chez les professeurs. La chanson est parmis les plusieurs techniques et méthodologies utilisées par des professeurs pour rendre claire l'apprentissage aux élèves des écoles secondaires ou primaires, précisément sur l'apprentissage d'une nouvelle langue. La chanson comme une méthode d'enseignement facilite les processus d'apprentissage et d'enseignement plus vite chez les élèves et chez les enseignants. Pour Amanda (2004), l'emploi de la chanson en classe encourage les élèves de faire attention au cours et aussi à cause de la répétition et la nature de la chanson, les élèves sont bien capables to maîtriser toutes les règles de la langue qu'ils sont en train d'apprendre.

La chanson facilite l'enseignement avec des matériaux pédagogiques, c'est-à-dire que, avec la chanson, les professeurs peuvent expliquer les messages, qui s'abordent sur le sujet de la leçon à apprendre, Udanko (2013) dit que l'usage de la chanson pour attirer les attentions des élèves, pour les guider dans les processus d'apprentissage, pour apprendre ce qui est désigné sur un instrument ou des matériaux pédagogiques est une réalité très intéressante. Voilà pourquoi Ihento (2014), à affirmé que pour enseigner un élève qui a trois (3) ans jusqu'à Sept (7) ans, vous devrez utiliser la chanson parce que les élèves répètent toujours ce qu'ils ont appris à l'école et cette action de répétition facilite l'apprentissage plus vite que des autres méthodes d'enseignement chez les élèves. Alors, pour bien enseigner des élèves avec des chansons, on doit un environnement qui encourage l'apprentissage de la chanson. Si l'environnement d'apprentissage qui est la classe n'est pas bien organisé avec des instruments comme ; le TV (télévision), La radio, ainsi de suite, parfois on va trouver que l'apprentissage et aussi l'enseignement avec des chansons peut être difficile. La chanson aide à apprendre les nouveaux vocabulaires, les structures des phrases en français et prononciation des mots.

La chanson comme une méthode d'enseignement dans l'apprentissage de la langue française.

Boiron (1997), à dit que la chanson comme une méthode l'apprentissage pour une langue étrangère

rend l'apprentissage de grammaire de la langue que les élèves sont en train d'apprendre très facile à comprendre et très simple à utiliser. Pour Calvet (2011), les professeurs utilisent des chansons pour enseigner les sujets aux élèves des écoles primaires et secondaires parce que ces chansons aident les professeurs à enseigner les sujets aux élèves sans avoir la situation où la plupart des élèves ne comprennent pas le sujet en considération de leur âge et de leurs niveaux de compréhension. Selon l'avis de Max (2011), l'usage de chanson comme la méthode d'enseignement aide à attirer et maintenir les attentions des élèves dès le début de processus d'enseignement jusqu'à la fin d'enseignement. Selon lui, la chanson utilise quelques techniques d'enseignement comme ; la répétition, la question de sondage ou le «stimulus variation», ainsi de suite. C'est à cause de cette raison que Louis (1980), à encouragé, les enseignants qui enseignent les langues étrangères au cadre éducation primaire et secondaire d'utiliser des chansons pour enseigner les langues parce que ces élèves ne vont pas oublier ces chansons. Pour lui, ces élèves vont continuer de répéter la chanson jusqu'à ce que les mots de la chanson deviennent simple et facile à lire et prononcer. Ça veut dire, ce que les élèves vont apprendre avec l'aide de chanson doivent rester dans leurs cerveaux pour jusqu'à longtemps avant qu'ils ne les oublier. C'est-à-dire que la chanson est une méthode d'enseignement et d'apprentissage qui reste très important dans l'enseignement et d'apprentissage de la langue française. C'est donc important à encouragé tous les étudiants français qui vont faire leurs stage pratique (teaching practice) précisément au cadre primaire et secondaire d'avoir les connaissances des chansons en français qui vont les aider à attirer les attentions des élèves au cours.

L'emploi de chanson comme les matériels pédagogiques dans l'apprentissage de la langue française.

La chanson et les matériaux pédagogiques marchent tête à tête pour la réalisation du but de l'éducation qui est d'étudier et d'éduquer l'enfant. Pierre (1998), à dit que l'usage de chanson dans l'enseignement d'un sujet comme « Les parties du corps» aide les élèves à comprendre ceux qui sont désignés sur les matériaux pédagogiques comme des chartes. Pour Wallace (1994), les matériaux pédagogiques qui comprennent les chartes sont constitués avec des désignes qui peuvent être difficiles pour quelques élèves à compris mais avec la chanson qui rendre claire le message de charte qui est parmi des matériaux pédagogiques les élèves vont apprendre le message du cours très simplement facile sans avoir la difficulté de compréhension. Donc, voilà pourquoi Dolean (2016), a encouragé des enseignants et étudiants d'utiliser les chansons pendant leurs périodes ou processus d'enseignement aux écoles secondaires et primaires. Ces chansons aident à retenir la compréhension de ce que les élèves ont déjà appris en classe à travers l'aide des matériaux pédagogiques. À cause cela, et à mon avis, c'est vraiment important d'utiliser la chanson pour enseigner les élèves avec l'aide des matériaux pédagogiques parce que ces deux éléments aider le professeur pour accomplir son but en classe.

L'environnement pédagogique et la chanson dans l'apprentissage de la langue française

Pour Eze (2021), dans son cours au cercle français, la chanson pour elle, aide à créer un environnement intéressant d'enseignement et d'apprentissage de la langue française. Pour Joëlle 2012), la chanson dans un environnement d'enseignement qui est la classe aide tous les élèves à participer dans le processus d'apprentissage de la langue française parce que quand le professeur enseigne et demande tous les élèves de faire attention et de répéter la chanson d'après lui, c'est tous les élèves qui font ces activités en même temps sans avoir l'un qui font des activités en même temps et ensemble sans avoir l'un qui fait des activités différentes de ce que les autres font. L'environnement comme cela montre un environnement qui est plus efficace pour les activités d'enseignement et d'apprentissage. Pour Ahamuefula (2010), la pratique de la chanson dans la classe crée un environnement bien cordonné qui donne la chance au professeur d'identifier des élèves qui ont quelques problèmes ou qui ne font pas attention au cours. C'est pourquoi Lukas (2013), a encouragé des directeurs et directrices des écoles primaires ou secondaires de fournir leurs écoles avec tous les éléments d'enseignement qui prouvent encourager l'usage de chanson dans la classe pour enseigner les

élèves.

La théorie du behaviourisme. Les pères fondateurs de cette théorie sont ; Watson (2001), Edward (2001), Ivan (2003), Skinner (2002).

Les assomptions de cette théorie selon Munoz (2011) et Mcleod (2017) sont :

- Le comportement est en relation avec l'observation, ça veut dire qu'on apprend mieux par l'observation.
- Les activités qui se passent dans l'environnement où on vit influencent le comportement.
- Ils ont dit que l'homme est né vide «tabula rasa ».
- Le comportement est le résultat de «réponse- stimulus».

Selon la théorie, les comportements des êtres sont les résultats de leur apprentissage. Le behaviourisme est de stimuler et de renforcer tout les comportements observables. C'est de conditionner, c'est-à-dire faire apprendre un comportement involontaire et le conditionnement opérant qui est réalisable quand les comportements sont volontaires. Selon le psychologue Watson, le vice qui n'est pas observable ne peut pas être étudié. Il a dit aussi que la théorie du behaviorisme est seulement bonne pour les plus jeunes du point de vue linguiste, et en particulier de Chomsky : l'apprentissage d'une langue ne peut être un apprentissage mécanique au même titre.

La théorie du behaviourisme est présentée dans la classe où les enfants doivent faire la répétition des phrases. Le comportement se manifeste dans l'enseignement d'une nouvelle langue. Chaque fois qu'un élève apprend une nouvelle phrase ; il reçoit une récompense verbale espérant que cette élève continue (le conditionnement opérant, renforcement positif). Le behaviourisme est favorable chez les élèves parce que les élèves peuvent apprendre par la répétition mais quelque fois, la répétition est très importante dans d'apprentissage d'une nouvelle langue, comme le français parce qu'elle aidera les élèv++es à bien prononcer.

Dans cette théorie aussi, Skinner a fait l'expérience avec une boîte qui contient le repas d'une souris. Pour avoir l'accès au repas, la souris doit s'appuyer sur un bouton, et une boulette de repas sorte de la bonne pour que la souris mange. Il y a le renforcement parce qu'au début, la souris le trouve difficile d'appuyer le bouton qui contient son repas mais après quelques tentatives elle découvre la manière de le faire et cela devient très facile. Ainsi, la souris s'est familiarisée elle-même avec le bouton qui porte son repas dans la boîte. C'est expérience de réponse-stimulus (RS). La souris a répondu au stimulus qui va satisfaire la faim qu'est le facteur motivateur.

Donc, cette théorie est relevant à cette étude parce que quand les élèves essaient de répéter la chanson, ils doivent savoir à chanter la chanson et comme ça ils ont apprendre des nouveaux mots et phrases en français avec l'aide de la chanson. Donc, les élèves doivent être familiarisés avec des chansons françaises pour apprendre à utiliser la langue effectivement.

Cette etude suggèrent quelques implications pédagogiques concernant les apprenants, les enseignants, les administrateurs éducatifs, le gouvernement et les membres administratifs de l'école. A savoir :

- 1. Les membres administratifs de l'école vont apporter les instruments qui vont aider les professeurs pour enseigner les chansons française aux élèves comme ; la télévisons, la radio, les casques française, ainsi de suite.
- 2. Les professeurs doivent essayer d'enseigner la langue française avec des chansons française pour aider les élèves à comprendre la langue.
- 3. Les élèves doivent essayer de chanter les chansons françaises pour faciliter leurs compréhensions dans l'apprentissage de la langue.
- 4. Les instruments audio-visuels suffisants sont importants dans l'apprentissage de la chanson française en classe.

Conclusion

Cette étude a porté sur l'emploi de chanson dans l'apprentissage de la langue française chez les

apprenants francais. Parmi des problemes que nous avons constate, l'environnement d'enseignement et d'apprentissage, les matériaux pédagogiques et les méthodes d'enseignement ne sont pas bien arranges et assez. La chanson aide à apprendre les niveaux vocabulaires, les structures des phrases en français et prononciation des mots.

Pour encourage l'apprentissage de la langue française, le professeur doit essayer d'utiliser des chansons française qui vont aider les étudiants à savoir la langue très vite.

Les recommandations

Nous proposons les recommandations suivantes:

- 1. Les professeurs vont encourager les élèves de chanter en françaises.
- 2. Le professeur doit essayer d'utiliser les audio-visuels pour enseigner les chansons françaises aux élèves.
- 3. Les membres administratives de l'école doivent organiser les programmes qui vont éduquer les professeurs sur les méthodes qu'ils vont choisir dans les processus d'enseignement.
- 4. Les membres administratifs doivent établir un environnement qui faciliter l'enseignement et l'apprentissage de la chanson française.
- 5. Les professeurs doivent organiser la salle de classe pour encourager l'apprentissage de la chanson.

Les suggestions

Pour cette étude, on suggère que ;

- 1. Les membres administratifs de l'école doit essayer d'organiser des programmes qui encouragent l'usage des documents audio-visuels chez les professeurs.
- 2. Les étudiants doivent considérer l'âge des élèves sur le type de chanson qu'ils voudraient enseigner en classe.
- 3. Les professeurs doivent choisir des matériaux pédagogiques en considération le sujet et les niveaux de la connaissance des élèves.
- 4. Les professeurs doivent aussi encourager les élèves de chanter les chansons à la maison.
- 5. Les élèves doivent utiliser les audio-visuels en classe pour pratiquer les chansons françaises.

Références

Ahamuefula .P. (2010), un journal sur l'environnement d'apprentissage, la publication de l'Arise, Benin.

- Boiron, M. (1997). L'usage de la l'apprentissage de la langue française http://tv5.org/T5site/uploadimage/appdoc/26/Fichierapprochechansonpdf.
- Calvet, L.J. (2011). La musique et la langue française quelques notes sur la sémiologie de la chanson » Dans synerges Espagne vol, 4 p.45.
- Dolean, D. (2016). The effects of teaching songs during foreign language classes on students language teaching research. 20(5), 638-653.
- Eze, M. (2021). L'Usage de la chanson dans un environnement de la langue française du Nigeria Badagry.
- Ihento .G. (2014). Le concept de la relation entre la chanson et les méthodes d'enseignement, un article sur l'internet. http://www.wikipedia.com/fr/les matériaux pédagogiques/trouvé 12/07/22
- Jackson .U. (2011), les importances de la chanson sur l'environnement d'enseignement de langue étrangère, un article non publié.
- Louis-Jean Calvet (1980). La chanson dans la classe de Français langue étrangère.
- Lukas .E. (2013). L'environnement d'apprentissage et enseignement,
- Pierre, D. (1998). Le Français par enseignement de la langue.

- Max.R. (2011). Les rôles de cansons dans l'apprentissage de la langue étrangère un article publié 04-05-22
- Ojionu, (2011). Les influencent de chanson française sur l'apprentissage de la langue française chez les élèves des écoles secondaires dans la municipalité d'Iche.
- Udanko .M. (2013). http://www.piloter.org/homework-help/la chanson dans sur l'apprentissage de la langue français-533921 retrouvé le 20-02-22.
- Wallace, W.T. (1994). "Memory for music effect of melody or recall of text" *In journal of Experimental Psychology: Learning, Memory and Cognition* 147-1485.

Hybrid Workplace Arrangements Among Business Educators In Anambra State, Nigeria For Sustainable Workforce Development: Benefits And Challenges In Nigeria.

Obinegbu Chinyere Tochukwu Nwafor Orizu College of Education, Nsugbe Department of Business Education chinyereobinegbu@gmail.com; 08036769248

Abstract

The study investigated the benefits and challenges of hybrid workplace arrangements for sustainable workforce development in Nigeria. Two research questions guided the study. The descriptive survey research design was adopted for the study. The population of the study comprised 109 business educators in tertiary institutions in Anambra State. The instrument for data collection was a structured questionnaire developed by the researcher and validated by three experts from the department of business education, NwaforOrizu College of Education, Nsugbe. The application of the Cronbach Alpha reliability test on the returned data vielded coefficient values of 0.84 and 0.82 for section A and section B respectively with an overall reliability coefficient of 0.83. The data collected for the study were analyzed using mean and standard deviation. The findings of the study revealed that the benefits of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria are that; it reduces gaps in employment possibilities throughout the nation, eliminates geographical barriers in discharge of work functions, increases employees levels of productivity when given the freedom to work remotely and makes organisations more appealing to top talent among others. Findings also showed that the challenges of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria include lack of access to reliable internet services, pressure of immediate result by management, absence of social connections, limited financial resources, absence of legal framework and erratic power supply among others. The researcher therefore recommended among others that Government at all levels and private sector players should work together to increase access to dependable internet services, especially in rural areas.

Keywords: Hybrid Workplace, Arrangement, Sustainable, Workforce, Development

Introduction

Global work arrangements have changed dramatically as a result of the coronavirus (COVID-19) pandemic. The virus has compelled businesses to quickly adjust from typical office settings to remote work in order to maintain company continuity while putting employee health and safety first. Conventional employment models that prioritise the in-office environment found it difficult to comply with the needs for social and physical distance (Trivediand Patel, 2022). In reaction to the risks presented by the Covid-19, employee safety became a widely recognised work ethic (Junglas, et al (2022). This was particularly for enterprises, the COVID-19 epidemic marked a sea shift since it significantly altered long-standing procedures (Beno, 2021). After the COVID-19 pandemic, the predominant work setup for knowledge workers has shifted towards a hybrid workplace arrangement (SaadandWigert, 2021). This model entails a flexible approach where individuals divide their time between working in the office and remotely. Such arrangements offer workers greater flexibility and autonomy in deciding both the location and timing of their job tasks, potentially enhancing their work-life balance.

Hybrid work arrangements refer to a versatile work framework that seamlessly integrates both remote work and on-site work in a cohesive manner. A hybrid work arrangement merges traditional "in-office" work

with remote work done "out-of-office" or telework (Cook et al 2020). This blended approach enables employees to perform their duties either from a designated office space or from various remote locations such as home, coffee shops, or coworking spaces, among others. This flexibility is not contingent upon the use of information and communication technologies. Hybrid work arrangement reshapes the dynamics of work, organization, and management across household, organizational, and cyberspace domains. This type of work arrangement was repeated essentially grant employees the autonomy to establish their preferred blend of remote and on-site work, tailored to their unique circumstances and specific job duties (PutriandAmran, 2021). This work place arrangement promotes flexibility and adaptability, allowing organizations to optimize productivity while accommodating the diverse needs of their workforce.Recent studies indicate that hybrid working presents numerous benefits for both employers and employees. These studies suggest a 35% reduction in attrition rates, with no adverse effects on performance or opportunities for promotion, and notably enhanced employee experience scores (Pickert, 2022; Moglia, Hopkins and Bardoel,2021). There are enormous benefits of the hybrid work place arrangement. For instance, United Nations (UN) (2023) in their Sustainable Development Goals (SDGs), listed 17 objectives which aimed at addressing poverty, protecting the environment, and promoting peace and prosperity by 2030. Also, they are committed to decent work, gender equality, good health and wellbeing. Consequently, flexible work arrangements (FWAs), such as telework and hybrid working have tremendous potential to achieve these SDGs (Moglia et al., 2021).

However, despite these advantages, negative impacts have also been documented. Some workers report experiencing stress due to factors such as the lack of job visibility and predictability, social isolation, and increased uncertainty associated with hybrid working (Da Silva et al (2022). Hopkins and Bardoel (2023) reported that Jeremy Stoppelman, CEO of Yelp, famously criticized hybrid offices as 'the hell of half measures' and 'the worst of both worlds,' announcing his organization's intention to transition fully to remote work instead.Putriand Amran (2021)averred thatthe hybrid workplace model comes with its fair share of challenges that organizations and employees must navigate. Dimitriu (2023) also noted that employees often find themselves needing to maintain two separate workspaces – one at home and one at the employer's premises. This duality can incur higher expenses for individuals, especially when it comes to furnishing and equipping both spaces adequately. Additionally, since work is carried out using information and communication technology, duplicating equipment at both locations may be necessary, adding further logistical complexities. (Wong et al (2022). Furthermore, hybrid meetings and collaborative work sessions may inadvertently favour certain participants over others due to what is termed as "proximity bias." This bias can result in hybrid teams operating at different speeds, with those physically present often having an advantage over remote colleagues.

Furthermore, the frequent change of workplace in a hybrid setup poses risks related to data protection and the potential leakage of confidential information. The need to transfer and handle sensitive data between home and office environments increases the vulnerability to breaches, necessitating robust security measures and protocols (Rožman et al(2021). Other challenges concerns the well-being of employees engaged in remote work (Juchnowicz and Kinowska, 2021; Wierzchowska, 2021). Both researchers and managers have discussed various challenges, including managing work-life balance (Yang et al (2021), the absence of social connections (Tuzovic and Kabadayi, 2021), difficulties with effectiveness, time management, and task prioritization, often referred to as the "always-on" lifestyle (Risi and Pronzato, 2021), among others. Also, managers face challenges such as insufficient employee engagement, considering wellbeing initiatives as temporary trends, limited financial resources, absence of legal frameworks, inadequate managerial support, and pressure for immediate results (Radonić et al (2021). However, these views have not been empirically proven. It is therefore against this background that the researcher investigated the benefits and challenges of hybrid workplace arrangement for sustainable workforce development in Nigeria.

Statement of the Problem

Nigeria's business environment is characterized by high operational costs, including expenses related to infrastructure, utilities, and logistics. The cost of maintaining traditional office spaces, commuting allowances, and overhead expenses for in-person work significantly adds to the financial burden on businesses. This high cost of doing business limits investment in workforce development initiatives and constrains organizations' ability to remain competitive in the global market. Nigeria heavily relies on petroleum products for energy generation, transportation, and industrial activities. Fluctuations in global oil prices and domestic policies affecting fuel subsidies have led to frequent increases in the cost of petroleum products such as petrol and diesel. These increases have a cascading effect on transportation costs, electricity tariffs, and the overall cost of doing business, making it increasingly challenging for organizations to sustain traditional workplace models.

The rising costs associated with traditional workplace arrangements have necessitated cost-cutting measures and operational adjustments, impacting office processes and workflows. Employers may be compelled to reduce workforce size, freeze hiring, or implement salary cuts to mitigate financial pressures. Additionally, employees may face challenges related to commuting expenses, resulting in decreased productivity, morale, and job satisfaction. Given the economic constraints and challenges posed by traditional workplace models, there is a pressing need to explore viable alternatives that can lessen the burden of rising costs on both employers and employees.

Purpose of the Study

The main purpose of the study was to determine the benefits and challenges of hybrid workplace arrangement for sustainable workforce development in Nigeria. Specifically, the study:

- 1. Ascertained the benefits of hybrid workplace arrangement among Business Educators in ensuring sustainable workforce development in Nigeria.
- 2. Investigated the challenges of hybrid workplace arrangement among Business Educators in ensuring sustainable workforce development in Nigeria.

Research Questions

The following research questions guided the study:

- 1. What are the benefits of hybrid workplace arrangement among Business Educators in ensuring sustainable workforce development in Nigeria?
- 2. What are the challenges of hybrid workplace arrangement among Business Educators in ensuring sustainable workforce development in Nigeria?

Methodology

The descriptive survey research design was adopted for the study. The study was carried out in Anambra State. The population of the study comprised 109 business educators in selected five tertiary institutions in Anambra State (Nnamdi Azikiwe University, Awka (16), Chukwuemeka Odumegwu Ojukwu University, Igbaria Campus (5), Federal College of Education (Technical), Umunze (66), Nwafor Orizu College of Education, Nsugbe (15) and Madonna University, Okija (7) in the State. The instrument for data collection were two rating scale developed by the researcher. The instrument was titled "Hybrid Workplace Arrangement for Sustainable Workforce Development Questionnaire (HWASWDQ)". The instrument contained 20 items spread in two sections; A and B.While section A had 10 items on the benefit of hybrid workplace arrangement in ensuring sustainable development, Section B consisted 10 items on the

challenges of hybrid workplace arrangement in ensuring sustainable development. The instrument was structured on a 4- point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The instruments were validated by three experts in the Department of Business Education, Nwafor Orizu College of Education, Nsugbe. Further the instruments were subjected to a pilot test using 20 business educators in Enugu State. The application of the Cronbach Alpha reliability test on the returned data yielded coefficient values of 0.84 and 0.82 for section A and section B respectively with an overall reliability coefficient of 0.83.

The researcher administered the questionnaire by sending copies of the questionnaires to the e-mails and Whatsapp messages of the business educators. In cases where it was difficult administering the instrument electronically, an appointment was made and the instrument was administered on the spot and retrieved. Out of the 109 copies of questionnaire administered, 94 copies were returned in good condition. This amounted to 86 percent return rate. The data collected from the respondents were analyzed using mean rating and standard deviation. The mean values were employed to address the research questions, while the standard deviation was used to determine the level of homogeneity among the respondents' ratings. Any item with a mean score of 2.50 or higher was considered as Agree; while any item with a mean score below 2.50 was regarded disagree.

Results

Research Question 1: What are the benefits of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria?

Table 1: Respondents Mean Rating of the Benefits of Hybrid Workplace Arrangement in Ensuring
Sustainable Workforce Development in Nigeria

S/N	Item Benefits	Mean	SD	Remarks
1.	The hybrid structure allows employees to better manage their job roles	3.22	0.90	Agree
2.	Eliminates geographical barriers in discharge of work functions	3.38	0.87	Agree
3.	Helps to reduce gaps in employment possibilities throughout the nation	3.44	0.83	Agree
4.	Employee often enjoy increased levels of productivity when given the freedom to work remotely.	3.30	0.86	Agree
5.	The hybrid arrangement may lead to cost savings for employers	3.18	0.80	Agree
6.	The hybrid arrangement may lead to cost savings for employees	3.21	0.85	Agree
7.	Offering hybrid work arrangements may make organizations more appealing to top talent	3.30	0.82	Agree
8.	Hybrid work arrangement leads to better work life balance for employees	2.70	0.89	Agree
9	Remote working might be seen as a chance to decrease exposure to dangerous pollutants.	2.80	0.74	Agree
10	Reduced transportation with hybrid work arrangements may help to reduce carbon emission.	3.25	0.81	Agree
	Cluster Mean	3.18		Agree

Data in Table 1 showed that the respondents agreed on all items, 1-10 as the benefits of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria with mean ratings ranging between 2.70 and 3.44. The standard deviation scores ranged between 0.74 and 0.90 indicate that the respondents' opinions were related. The cluster mean scored of 3.18 indicates that the benefits of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria are that it reduces gaps in employment possibilities throughout the nation, eliminates geographical barriers in discharge of work functions, increases employees levels of productivity when given the freedom to work remotely and makes

organisations more appealing to top talent among others.

Research Question 2: What are the challenges of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria?

Table 2: Respondents Mean	n Rating of the Challenges of Hybrid Workplace Arrangement in Ensuring
Sustainable Workforce Dev	velopment in Nigeria

S/N	Item Benefits	Mean	SD	Remarks
11.	Lack of access to reliable internet services	3.55	0.88	Agree
12.	Erratic electric power supply	3.42	0.82	Agree
13.	Absence of social connections	3.48	0.83	Agree
14.	Difficulty in maintaining work-life balance	3.33	0.84	Agree
15.	Increases the vulnerability to breaches	3.29	0.79	Agree
16.	Limited financial resources	3.48	1.01	Agree
17	Difficulties with time management	3.37	0.82	Agree
18.	Lack of managerial support	3.40	0.86	Agree
19.	Pressure for immediate results by management	3.52	1.02	Agree
20.	Absence of legal frameworks	3.51	0.94	Agree
	Cluster Mean	3.18		Agree

Data in Table 2 revealed that the respondents agreed that all items, 11-20 are the challenges of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria with mean ratings ranging between 3.33 and 3.55. The standard deviation scores ranging between 0.79 and 1.02 indicate that the respondents' opinions were related. The cluster mean of 3.43 indicate that lack of access to reliable internet services, pressure of immediate result by management, absence of social connections, limited financial resources, absence of legal framework and erratic power supply are some of the challenges of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria.

Discussion

The finding from table 1 revealed that the benefits of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria are that it reduces gaps in employment possibilities throughout the nation, eliminates geographical barriers in discharge of work functions, increases employees levels of productivity when given the freedom to work remotely and makes organisations more appealing to top talent among others. This finding is in agreement with Pickert (2022) who reported that hybrid work arrangement allows employees to perform their tasks from either a designated physical office or workplace, as well as from a remote location such as their home. Putri and Amran (2021) earnestly stated that hybrid workplace arrangement gives employees the freedom to determine their preferred mix of remote and on-site work, customized to their individual circumstances and job requirements. This workplace arrangement fosters flexibility and adaptability, enabling organizations to maximize productivity while catering to the diverse needs of their workforce (Radonić et al., 2021). Cook et al. (2020) noted that the flexibility promoted by the hybrid workplace arrangement adds to increased employee satisfaction. This is because employees love the ability to work from multiple places, which reduces the monotony of a typical office environment (Moglia et al., 2021). This enhances satisfaction and results in stronger morale, better retention rates, and a more positive organisational culture. The opportunity to work remotely may boost productivity for many workers. Employees may find that removing the need for a daily commute and reducing workplace interruptions allows them to concentrate on their jobs and complete them more effectively. Furthermore, the opportunity to work remotely allows for unbroken periods of intense work, resulting in higher-quality results (Wierzchowska, 2021).

The result from table 2 revealed that lack of access to reliable internet services, pressure of immediate result by management, absence of social connections, limited financial resources, absence of legal framework and erratic power supply are some of the challenges of hybrid workplace arrangement in ensuring sustainable workforce development in Nigeria. This finding is in line with Rožman et al. (2021) who revealed that the frequent change of workplace in a hybrid setup poses risks related to data protection and the potential leakage of confidential information. Juchnowicz and Kinowska (2021) opined that theneed to transfer and handle sensitive data between home and office environments increases the vulnerability to breaches, necessitating robust security measures and protocols. Dimitriu (2023) stated that employees often find themselves needing to maintain two separate workspaces – one at home and one at the employer's premises. This duality can incur higher expenses for individuals, especially when it comes to furnishing and equipping both spaces adequately. Radonić et al. (2021) suggested that since work is carried out using information and communication technology, duplicating equipment at both locations may be necessary, adding further logistical complexities and costs. Yang et al. (2021), Tuzovic and Kabadayi (2021) asserted that other challenges include the absence of social connections difficulties with effectiveness and time management. Tabor-Błażewicz (2021) noted that insufficient employee engagement, considering wellbeing initiatives as temporary trends, limited financial resources, absence of legal frameworks, inadequate managerial support, and pressure for immediate results were some of the challenges faced by managers in offices were hybrid workplace arrangement is implemented.

Conclusion

Based on the findings of the study, the researcher concludes that hybrid workplace arrangement has significant benefits in ensuring sustainable workforce development in Nigeria. The adoption of hybrid workplace arrangement offer some benefits like increasing work flexibility, reduction of cost of commuting to work thereby reducing carbon emissions and helps organization to attract top talents. Despite these benefits, the successful implementation of hybrid workplace arrangement is faced with certain challenges such aslack of access to reliable internet services, pressure of immediate result by management, absence of social connections, limited financial resources, absence of legal framework and erratic power supply.

Recommendations

The researcher makes the following recommendations based on the findings of the study:

- 1. Government at all levels and private sector players should work together to increase access to dependable internet services, especially in rural areas. Investing in infrastructure development and broadband expansion activities may contribute to fair access to digital resources for all workers. This will enable them to work freely and easily from any location they are at anytime.
- 2. Heads and Managers of organisations should invest in solid remote work infrastructure, which includes hardware, software and cybersecurity. This might include supplying staff with the required equipment, adopting secure communication platforms and training on remote work best practices.
- 3. Government agencies should collaborate with stakeholders to create policies and legal frameworks that encourage the adoption of hybrid workplace arrangements. This might include amending labour laws to reflect remote work concerns, developing data protection and privacy rules, and ensuring regulatory compliance.

References

- Beňo, M. (2021). Commuting to work versus e-commuting: Data from an Austrian company in Pre-COVID-19 era, during 1st lockdown, after easing and during 2nd lockdown. *Journal of Interdisciplinary Research*, 11(1), 25-31.
- Cook, J., Mor, Y. & Santos, P. (2020). Three cases of hybridity in learning spaces: Towards a design for a Zone of Possibility. *British Journal of Educational Technology*, 51, 1155–67.
- Da Silva, A.B., Castelló-Sirvent, F. &Canós-Darós, L. (2022).Sensible leaders and hybrid working: Challenges for talent management. *Sustainability*, 14, 16883.
- Dimitriu, R. (2023). The new challenges of hybrid working (part office, part home). SHS Web of Conferences, 177, 01002, https://doi.org/10.1051/shsconf/202317701002.
- Hopkins, J. and Bardoel, A. (2023). The future is hybrid: How organisations are designing and supporting sustainable hybrid work models in post-pandemic Australia. *Sustainability*, 15(4), 3086; https://doi.org/10.3390/su15043086
- Juchnowicz, M. & Kinowska, H. (2021). Employee well-being and digital work during the covid-19 pandemic. *Information*, 12(8), 293.https://doi.org/10.3390/info12080293.
- Junglas, I., Goel, L., Rehm, S. V., & Ives, B. (2022). On the benefits of consumer IT in the workplace. An IT empowerment perspective. *International Journal of Information Management* 64, 102478.
- Moglia, M., Hopkins, J., Bardoel, A. (2021). Telework, hybrid work and the United Nation's sustainable development goals: Towards policy coherence. *Sustainability, vol, 13*, 9222.
- Pickert, R. (2022). *Hybrid work reduced attrition rate by a third, study shows. 2022.* Retrieved fromattrition-rate-by-a-third-new-study-shows?sref=QnKyEnuc&lead Source=uverify%20wall (accessed on 23March, 2024).
- Putri, A., & Amran, A. (2021). Employees' work-life balance reviewed from work from home aspect during COVID-19 pandemic. *International Journal of Management Science and Information Technology*, *1*(1), 30–34.
- Radonić, M., Vukmirović, V. & Milosavljević, M. (2021). The impact of hybrid workplace models on intangible assets: The case of an emerging country. *Amfiteatru Economic*, 23(58), 770-786. https://doi.org/10.24818/EA/2021/58/770.
- Risi, E., Pronzato, R. (2021). Smart working is not so smart: Always-on lives and the dark side ofplatformisation. *Work Organisation*, *Labour&Globalisation*. https://doi.org/10.13169/workorgalaboglob.15.1.0107.
- Rožman, M., Peša, A., Rajko, M. & Štrukelj, T. (2021). Building organisational sustainability during the COVID-19 pandemic with an inspiring work environment. *Sustainability*, 13(21). https://doi.org/10.3390/su132111747.
- Saad, L.andWigert, B. (2021). Remote work persisting and trending permanent. Gallup News Insights, 13.
- Trivedi, S., & Patel, N. (2022). Mining public opinion about hybrid working with RoBERTa. *Empirical Quests for Management Essences*, 2(1), 31-44.
- Tursunbayeva, A. (2021). Human resource management-related responses of health organizations to Covid-19. *Strategic HR Review, 20*(3), 78-83. https://doi.org/10.1108/SHR-11-2020-0091.
- Tuzovic, S. & Kabadayi, S. (2021). The influence of social distancing on employee wellbeing: A conceptual framework and research agenda. *Journal of Service Management*, 32(2), 145-160. https://doi.org/10.1108/JOSM-05-2020-0140.

- United Nations (UN) (2023). *What are the sustainable development goals*? Retrieved from https://www.undp.org/sustainable-development-goals (accessed on 11 January 2024).
- Wierzchowska, A.M. (2021). Advantages and disadvantages of home office in Polish banking Sector during the Coronavirus Pandemic. European Research Studies, 24(3), 957-969.
- Wong, S. I., Berntzen, M., Warner-Søderholm, G.& Giessner, S. R. (2022). The negative impact of individual perceived isolation in distributed teams and its possible remedies. *Human Resource Management Journal*, 32(4), 906–927. https://doi.org/10.1111/1748-8583.12447.
- Yang, E., Kim, Y. & Hong, S. (2021). Does working from home work? Experience of working from home and the value of hybrid workplace post-COVID-19. *Journal of Corporate Real Estate*.https://doi.org/10.1108/JCRE-04-2021-0015.

Strategies For Improving Business Education Students' Entrepreneurship Skills For Better Standard of Living And Economic Development In Anambra State

Okeke Chinwe S., Ph.D Department of Business Education Nwafor Orizu College of Education, Nsugbe sussano1@gmail.com

Abstract

This paper examined the strategies for improving entrepreneurship skills of business education students in tertiary institutions for better standard of living and economic development in Anambra State. Descriptive research design was adopted for the study. The population of the study was 96 lecturers and was used for the study because the size was manageable. The major instrument used to gather needed data was structured questionnaires which followed a four point scale format. The instrument contained 20 items designed in line with the research questions. This research questionnaire was validated by two experts and a reliability test was done using a test re test method. Pearson Product Moment Correlation was used to analyze the test result and a coefficient value of 0.79 was obtained. Data analyses were done using mean rating and the base for agree or disagree was 2.50. Findings revealed that many factors impede improvement of entrepreneurship skills of business education students and strategies; such as, adjustment in the business education curriculum, provision of startup fund, employment of professional and pedagogical competent entrepreneurship educators and many others could be used to manage these identified factors. Hence, it was concluded that when the entrepreneurship skills of business education students are improved, they get empowered for self employment which invariably boosts their living standard and economic development of the state. Thus, it was recommended among others that proper and regular supervision of business education graduate entrepreneurs is needed after mentoring and training to checkmate their activities. More so, little adjustment is needed on the business education curriculum to increase the number of skill related courses and their credit hours such as ICT, industrial experience, seminars and workshops. This will boost the level of seriousness by both the students and lecturers.

Keywords: Entrepreneurship, Entrepreneurship skills, Standard of living and Economic Development.

Introduction

Business education is a sub-set of Vocational and Technical Education (VTE) and is geared towards the economic and technological development of the nation. As an aspect of VTE offered in colleges of education, it is designed to equip the learners with necessary knowledge, skills and attitude required to meet labour challenges either as an employer or employee. More so, it is a programme that builds learners' confidence if properly designed and implemented. This is because it is designed for skill acquisition, knowledge and competences and which makes the recipient or learner proficient and self reliant. Okeke (2020) asserts that business education is a skill driven course of study which has the capacity to distinguish its recipients from among other graduates in other fields of study in the labour market. This is due to the content and design of business education programme. Akpan (2013) asserts that business education is the most critical factor in the process of economic development. He maintains that economic development depends on how wide-spread business education and entrepreneurship activities take place in an economy. Oriola (2016) affirms that business education is a training that gives occupational identity to its learners. Accordingly, Business education touches all aspects of human life through its broad curriculum and can be a

very good tool in the hands of government for solving the problem of economic development. Thus, the teachings and contents of business education permeate the entire life of a nation. This is because it helps people to acquire skills that can help them participate as responsible citizens in society. With business education, people are equipped with saleable skills which enable them to effectively contribute to the development of the nation, thereby creating employment, reducing poverty and hunger.

On the other hand, entrepreneurship is the activity of venturing into new enterprises. It involves the creation of new enterprises to meet new challenges and opportunities presented by a given situation. Dandra and Azmy (2020), assert that entrepreneurship is the process of bringing together creative and innovative ideas and comparing them with management and organizational skills in order to combine people, money and resources to meet any identified needs and at the same time create wealth. He also sees it as a process of bearing a non-insurable risk to achieve business objectives. To Emejulu (2017), entrepreneurship is viable and reliable enough to be one's life endeavour. Through education, entrepreneurship is taught to students at all levels of schooling from primary, secondary to tertiary schools. What makes entrepreneurship education distinctive is its focus on realization of opportunities, where management education is focused on the best way to operate existing hierarchies (Okoye, 2016). He maintains that entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. He buttressed that entrepreneurship education equips individual with entrepreneurial skills, knowledge, attitudes and competencies needed to discover business opportunities in a dynamic environment, ventures into the risk of business, create an enabling business relationship and become a successful entrepreneur. Thus, it is geared towards developing a strong, innovative, risk venturing, well motivated and highly enterprising individual. Paul (2020), emphasized that, entrepreneurship education is structured to make its students: self-employed and self-reliant through ownership of small and medium size business, being creative and innovative as well as risk managers.

Entrepreneurial skills can encompass a broad range of various skill sets like technical skills, leadership and business management skills and creative thinking. This is because entrepreneurial skills can be applied to many different job roles and industries, so developing entrepreneurial skills can mean developing several types of skill sets (Mkpa, 2014; Ugwoke and Abidde, 2014). According to them, for an entrepreneur to become a successful business owner, there is need to develop certain entrepreneurial skills such as; customer service skills, financial skills, analytical and problem-solving skills, critical thinking skills, strategic thinking and planning skills, technical skills, time management and organizational skills, branding, marketing and networking skills. Apparently, when these skills are developed, economic activities are likely to increase and there will be reduction in poverty, rural-urban migration, unemployment as well as a boost in the standard of living of the people. Above all, it may lead to growth and economic development in the state. Standard of living is the level of material comfort, or quality of life, enjoyed by an individual, a household or groups. Standard of living refers to the level of material well-being enjoyed by an individual or group. According to Lankard (2016), standard of living is generally measured by the collective cost of goods and services that is considered to represent the essential consumption of any society's members. By some measures, the standard of living will also include certain publicly provided services, such as education, health services, transportation, and intangible quality of life factors like clean water and air, and cultural and leisure activities (Inegbenebor, 2015). Hence, standard of living is a measure of the material aspects of a national or regional economy. It counts the amount of goods and services that are produced and available for purchase by a person, family, group, or nation.

The term standard of living may also refer to the goals that individuals or groups obtain for themselves as consumers in terms of services, housing, furnishings, or automobiles. The standard of living is different from other measures of quality of life such as non-material characteristics, like relationships, freedom, and

satisfaction (Emejulu, 2017). Nevertheless, a common index to measure quality of life also includes the material standard of living measurement. Narrowly, standard of living is focused on the value of goods and services produced and consumed in a country. There are many factors that determine standard of living such as income, physical health, and quality of the environment, housing availability, life expectancy, personal safety, and access to education, medical facilities, and social service, gross domestic product (GDP), life expectancy, and economic opportunity. Dandra and Azmy (2020) add factors such as economic and political stability, political and religious freedom, environmental quality, climate, and safety. In essence, standard-of-living measurements are typically used to gauge the level of material comfort attained by the ctzens of a country.

It is obvious that it is when entrepreneurship skills are acquired that the business education students are empowered to own businesses and create utility. But, there are certain challenges that affect acquisition of salable entrepreneurship skills required to establish business enterprises and become self-reliant as well as improve standard of living. Lankard (2016) identifies them as; inadequate provision of infrastructural facilities, insufficient fund, late preparation of entrepreneurs and unstable economic environment such as perennial power problems, corruption, insecurity, laxity. However, Motomura (2019), explained that different methods can be used to develop entrepreneurial skills sets of the students. To him, some of these methods include taking a specialist course on entrepreneurship, attending events and workshops, seeking for experienced entrepreneurs as mentors and so on. In addition, Awojobi (2016), states that for entrepreneurship skills to be developed, that there is need to give adequate attention to the business education curriculum, build entrepreneurship development centres in schools, employ competent entrepreneurship educators, provide startup capital for young graduates and start early to prepare prospective entrepreneurs via business and vocational subjects from primary schools level. All these will go a long way to help attain the level of entrepreneurship skills needed for economic growth and development. This is because according to Lee and Wong (2018), entrepreneurship education is a catalyst for economic development and job creation in any society and business education being a skill oriented course is taught to students to become entrepreneurs too. Therefore, it is synonymous to economic development.

Statement of the Problem

Business education is an education programme that equips students with skills necessary to perform particular functions in an office and equally use their understandings and knowledge navigate in the business world. The mandate of business education is to ensure that students are educated for and about business. This means that students are guided through carefully planned experiences that offer them the opportunity to master the knowledge, skills, competencies and attitudes needed, not only to succeed in business but also have equal opportunity to succeed in life by ensuring good standard of living. Thus, Business education is vital in nation building and economic development because it prepares its learners for self-reliance and empowerment.

However, it seems that the curriculum has not taken adequate care of the development of entrepreneurship skills of the student to facilitate creation of meaningful entrepreneurship ventures capable of boosting their standard of living and economic development in the State. This is why this study emanates to ascertain possible challenges and strategies to improve entrepreneurship skills of the business education students.

Purpose of the study

The major purpose of the study is to investigate the strategies for improving the entrepreneurship skills of business education students for better standard of living and economic development in Anambra State. Specific purpose include to:

1. Determine the factors that hinder the development of entrepreneurship skills of business education students in Anambra State.

2. Describe likely strategies to employ for improving the entrepreneurship skills of business education students for better standard of living and economic development in Anambra State.

Research questions

The following research questions guided the study.

- 1. What are the factors that hinder the development of entrepreneurship skills of business education students in Anambra State?
- 2. What strategies would be used to improve entrepreneurship skills of business education students for better standard of living and economic development in Anambra State?

Methodology

The research design employed in this study is descriptive research design. The population of the study was ninety-six (96) business education lecturers from three tertiary institutions namely; Federal College of Education Technical, Umunze, Nwafor Orizu College of Education, Nsugbe and Chukwuemeka Odumegwu Ojukwu University Igbariam Campus (COOU), The entire population was used for the study because it was a manageable size. The instrument for data collection was a self-designed Questionnaire titled: Strategies for Improving Entrepreneurship Skills of Business Education Students for Better Standard of Living and Economic Development. The questionnaire was structured on a four point rating scale with twenty (20) items to answer the research questions. The research questions followed the line of: Strongly Agree (SA-4 points), Agree (A-3), Disagree (D-2) and Strongly Disagree (SD-1). Two experts, one in Measurement

and Evaluation, the other in Business Education both from Nwafor Orizu College of Education, Nsugbe validated the instrument. A test re –test reliability test was used to determine the consistency of the instrument and which yielded 0.79 to the first cluster and 0.84 for the second cluster. Pearson Product Moment Coefficient (PPMC) was used to compare the results and a coefficient value of 0.77 was obtained after. Data collected were analyzed with descriptive statistics of mean and standard deviation to answer the research questions and 2.50 was used as the benchmark for acceptance or rejection.

Result

Research question 1: What are the factors that hinder the development of entrepreneurship skills of business education students in Anambra State?

 Table 1: Mean rating and standard deviation on the factors that hinder the development of entrepreneurship skills of business education students in Anambra State.

 N=96

			TN-	-90
S/N	Items	$\sum f x$	x	Decision
1	Poor fund	259	2.70	SA
2	Inadequate power supply	249	2.60	А
3	Unavailability of smart board for classroom instruction	232	2.42	D
4	No standard workshop	244	2.55	А
5	Poor security system in schools	255	2.66	А
6	Unavailability of relevant training equipment	241	2.52	А
7	Short training duration	253	2.64	А
8	Inadequate practical entrepreneurship training	253	2.64	А
9	Poor collaboration with outside entrepreneurs	259	2.70	SA
10	Poor technology and laboratories	264	2.75	SA
	Grand mean	2509	2.61	А

Source: Field survey, 2024

The data presented in Table 1 above shows that items 1, 9 and 10 are strongly agreed with the mean scores of 2.70, 2.70 and 2.75. Besides item 3 with a mean score of 2.42 and which was disagreed upon, all other items were agreed on by the respondents because each of the items score above 2.50 which stood at the base line for agree or disagree. This signifies that they are factors that hinder development of entrepreneurship skills of business education students in tertiary institutions in Anambra State.

Research question 2: What strategies would be used to improve entrepreneurship skills of business education students for better standard of living and economic development in Anambra State?

			N=90	6
S/N	Items	∑fx	Х	Decision
11.	Adjustment in the Business education curriculum	240	2.50	А
12.	Provision of startup fund	279	2.91	SA
13.	Employment of professional and pedagogical competent entrepreneurship and business educators	276	2.87	SA
14.	Providing constant power supply in tertiary institutions	276	2.87	SA
15.	Encouragement of ICT literacy level and technical ability of			
	business education.	273	2.84	SA
16.	Early preparation of prospective entrepreneurs from primary			
	schools through vocational and business subjects.	244	2.54	А
17.	Building entrepreneurship development centres in schools	279	2.91	SA
18.	Attending entrepreneurship events and workshops by both			
	lecturers and students	253	2.64	А
19.	Seeking for experienced entrepreneurs as mentors.	247	2.57	А
20.	Installation of smart board for entrepreneurship and business			
	education classes	227	2.36	D
	Grand Mean	2538	2.64	А

 Table 2: Mean ratings on the strategies to improve entrepreneurship skills of business education students for better standard of living and economic development in Anambra State

Source: Field survey, 2023

Table 2 above shows that the respondents strongly agreed that items 12, 13, 14, 15 and 17 are the ways to improve entrepreneurship skills of business education students for better standard of living and economic development in Anambra State. This was seen from their mean scores that were highly above 2.50. Also, items 11, 16, 18 and 19 was agreed upon while the respondents disagreed on item 20 because it has a mean score of below 2.50

Discussion of findings

The result of data analysis as presented in Table 1 revealed that there are many factors that hinder development of entrepreneurship skills of business education students such as poor funding, no standard workshop, and poor security system in schools and so on. This is in agreement with the views of Lankard (2016), who listed some of these factors as inadequate provision of infrastructural facilities, insufficient fund, late preparation of entrepreneurs and unstable economic environment such as perennial power problems, corruption, insecurity, laxity.

Meanwhile, the result from Table 2 revealed that there are ways to improve the entrepreneurship skills of business education students in tertiary institutions. They include adjustment in the business education curriculum, provision of startup fund, employment of professional and pedagogical competent entrepreneurship and business educators, seeking for experienced entrepreneurs as mentors among many others. This agrees with what was said by Motomura (2019), that different methods can be used to develop

entrepreneurial skills sets of the student such as taking a specialist course on entrepreneurship, attending events and workshops, seeking for experienced entrepreneurs as mentors and so on. More so, Awojobi (2016), states that for entrepreneurship skills to be developed, that there is need to give adequate attention to the business education curriculum, build entrepreneurship development centres in schools, employ competent entrepreneurship educators, and provide startup capital for young graduates of business education.

Conclusion

The Nigerian educational system from recent developments and observations in the country has failed to achieve the goal of equipping individuals with skills and competencies needed to develop economically and become self-reliant citizens. To this effect, the country is faced with crises of graduates' unemployment and societal poverty due to lack of appropriate skills and competencies required for gainful employment and economic development. Business education as a course of study in tertiary institutions was introduced to bring new ideas to life through development of entrepreneurship skills such as innovation, creativity and many other skills. This is expected to promote the desire to build something of lasting value and help the students to be self-reliant and useful members of the society on graduation. But this dream for development of entrepreneurship skills from the analysis was thwarted by many factors such as poor funding or inadequate start-up capital, no standard workshop, and poor security system in schools among many others. However, the analysis showed that certain measures like adjustment in the business education curriculum, provision of startup fund and seeking for experienced entrepreneurs as mentors could help to improve the expected entrepreneurship skills of business education students. Therefore, it can be concluded that when the entrepreneurship skills of business education students are improved, they get empowered for self employment which invariably boosts their living standard and economic development of the state.

Recommendations

Based on the above revelations, the following recommendations are hereby put forward.

- 1. Business education lecturers should brace up in the teaching of entrepreneurial related courses in tertiary institutions to be able to impart the needed skills that will ensure self employment of the students on graduation.
- 2. The government, school management and other stakeholders should create conducive learning environment needed for improving entrepreneurship skills of business education students in tertiary institutions.
- 3. Proper and regular supervision of business education graduate entrepreneurs is needed after mentoring and training to checkmate their activities.
- 4. Business education curriculum needs little adjustment to increase the number of skill related courses and their credit hours such as ICT, industrial experience, seminars and workshops. This will boost the level of seriousness by both the students and lecturers.

References

Akpan, T. (2013). Business Education in Nigeria Future Directions: Business Studies Review, 3(2), 11-21.

- Awojobi, A. O. (2016). Entrepreneurship as an aspect of vocational education. *Business Education Journal*, 5(2), 8-14.
- Dandra, D & Azmy, A (2020). Understanding definition of entrepreneurship. *Journal of Management* Accounting And Economics, 7(5)
- Emejulu, G. A. (2017). Concept of entrepreneurship in E. A. Egboh and C. M. Ile (Eds). Fundamental Issues in Entrepreneurship. An Overview. Awka: Chika Okoli Centre for entrepreneurial Studies, Nnamdi Azikiwe University.

- Inegbenebor, A. U. (2015). Education for entrepreneurship: Experience at the University of Benin, Benin City, Nigeria. *A paper presented at the inaugural conference of the academy of management, Nigeria* held at Abuja on November 22nd & 23rd 2005.
- Lankard, B.A. (2016). *Encouraging future innovation: Youth entrepreneurship education*. Columbus: ERIC Clearing House.
- Lee, S.H., & Wong, P.K. (2018). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, 19(1), 7-28.
- Mkpa, A.M.(2014).Education for global competitiveness in job creation: inclusion of entrepreneurship in Nigeria higher education: challenges and prospects. *International Journal of Educational Research*, 13(1), 1-13.
- Motomura, S.C. (2019). Sustainability in entrepreneurship. Global Success and Local Development The case of Mastiha in Chivs, Greece.
- Okeke, C.S. (2020). 21st Century skills requirements of business education students for successful business entrepreneurship in Anambra State. Nigerian Journal of Business Education.8 (1).138-144
- Okoye, A. C. (2016). Strategies considered effective by business educators for teaching entrepreneurship education in tertiary institutions in Anambra State. *Global Journal of Applied, Management and Social Sciences* (GOJAMSS); source incomplete.
- Oriola, A. (2016). Business Education: Utility Education in Developing Economy. *Journal of Business and* Office Education 3 (1), 22-35
- Paul, V.C (2020). Entrepreneurship in Nigeria; Port Harcourt: Nice print International.
- Ugwoke, S.C. & Abidde, E (2014). Entrepreneurial skill development in basic education for wealth creation. *International Journal of Educational Research*, 13(1), 65-0

The Indispensability of The English Language For The Acquisition of Formal Education For Sustainable Development In Nigeria

Vera Chioma Okoli, Ph.D Department of English Language/Literature, Nwafor Orizu College Of Education, Nsugbe okoliverac@gmail.com; 08032608946

Abstract

The study concentrated on the indispensability of the English Language for teaching and learning. The researcher visited some Secondary Schools in Orumba South and North Local Government Area. The researcher had interviews with some teachers and students who served as the sample population for the study. Some teachers were also observed as they taught the students. The researcher discovered that some of the teachers could not use the English language effectively in teaching. It was also discovered that those teachers were not advanced speakers of the English language. Recommendations were made on how to improve the teaching and learning of English as a second language in Nigeria.

Keywords: Indispensability, English, Teaching, Learning.

Introduction

The English Language had her contact with the West African people through the Portuguese sailors who came as merchants and traded slaves, Ivory, and gold. This was in the 15th C and lasted till 18th C. Slavery was abolished and legitimate trade on goods and commodities was introduced. Language was a vehicle for communication in trade. The slaves served as laborhands in the European Industries. But there was no need for them in the 18th C because of the Industrial Revolution which brought about the use of machines for better production inindustries. Consequently, many world powers came to Africa to trade goods and commodities. Some of the Europeans who fought for the abolition of slave trade were Wilberforce, Thomas Clarkson, etc.

Some unhealthy competition arose among the world powers in the legitimate trade in Africa. These world powers wanted to stop the unhealthy commercial competition in Africa and trade harmoniously with them. This led to the Berlin Conference of 1885. In the conference, Africa was divided on paper among those world powers. Britain got Nigeria as part of her booties. Baldeh F (1990 P64) records that Britain brought their colonial administration with them and by so doing, brought about the introduction of the English Language which served as a vehicle for communication and administration. She remarks that any citizen who could speak the English language well was placed high on the social ladder.

The emergence of colonial administration in Nigeria led to the introduction of formal education. The missionaries came with the colonial master and built churches and schools to evangelizeand educate the citizens. There was therefore the need for the official acceptance of the English Language as a vehicle for preaching the word of God in the Bible and for the education of the people. Ude (2021 P.70). The Colonial masters could not understand the vernacular of the natives. English became officially accepted as the language of communicationin1826.In1882, it was enshrined in the national policy on education for official teaching and learning from upper primary to tertiary levels of education in Nigeria. It therefore became an indispensable vehiclefor communication in a multi-ethnic and multi-linguistic country like Nigeria. It penetrated allthe lives of Nigerians and featured prominently in education, religion, governance, massmedia, business administration, and so on. Ukiwe P (2021 P.70) observes that Nigerians would have

found it very difficult to co-exist as people from one country without the introduction of the English Language.

Statement of the problem

Nigeria is a multi-ethnic and multi-linguistic country. Recent linguistic researches reveal that Nigeria is made up of more than five hundred linguistic communities. Mutual communication was therefore a problem. Secondly, the colonial masters and missionaries who brought formal education and religion could not also understand the vernacular of the natives. There was then an absolute need to introduce a language that should help to educate and evangelize the people. English therefore came to serve all these purposes, but it is lamentable to note that despite the fact that English is an indispensable language for the harmonious existence of the Nigerian people, it has some problems which include.

- 1. Lack of adequate qualified teachers of English.
- 2. Lack of adequate instructional materials.
- 3. Lack of impressive motivation of teachers.
- 4. Mother tongue interference in the English language.

The problems listed above have constituted serious problems in the effective teaching and learning of English as a second language in Nigeria.

Purpose of the study

This study is aimed at finding out the indispensable functions of the English language in the acquisition of education for sustainable development in Nigeria. The study is aimed at finding out the problems that are facing the teaching and learning of English as a second language in Nigeria and how to solve those problems.

Significance of the study

The study is important because it will help the government who are the educational policy makers to appreciate the importance of the English language to the acquisition of formal education for sustainable development. It will also help them to provide the necessary things needed in teaching and learning the English language as a second language in Nigeria.

Area of the study

The study concentrated on two Local Government Areas in Anambra State, namely Orumba North and Orumba South.

Sample Population

10 Secondary Schools weres elected from the two Local Government Areas as the sample for the study. Through simple random sampling, the 10 Secondary Schools were selected. Senior Secondary School (SS1) was selected as the target population for the study. Fifty students were picked from each school and five teachers were also picked from each of the schools.

Methodology of the research

Visitation to the schools, observation, and oral interviews were used as the methods for the collection of data for the study. Three research questions guided the interview and the observation during the research. The analysis of these helped the researcher in her analysis and summary of the findings.

Research Questions

The following research questions guided the study.

- 1. To what extent is the English language serving her functions in the effective teaching and learning of other subjects in Senior Secondary Schools in Anambra State?
- 2. How competent are the teachers of Senior Secondary Schools (SS1) in the use of English for teaching and learning?
- 3. What are some of the problems that face the effective use of English for teaching in Senior Secondary Schools and how can these problems be solved?

Summary of findings

The researcher after interrogating teachers and observing teaching and learning in the schools which served as the sample population for the study came up with the following:

The English language is indispensable in teaching and learning in Nigerian Schools. The teachers of all the subjects use it in teaching, and all the textbooks used were written in the English language.

The researcher observed that some of the teachers could not use the English language effectively. There were a series of grammatical errors. There were also problems of effective communicability and comprehensibility among the teachers and students respectively. Consequently, some of the teachers resorted to the use of code-switching and code-mixing. Sometimes, they resorted to the use of vernacular and pidgin language.

Conclusion

Education is a very vital tool for the sustainable development of any country. There are two types of education, namely, Formal and informal education. Informal education is that which the learner acquires from the home and formal education is that which he learns in the school. The colonial masters and the missionaries brought formal education to Nigeria. They built churches and schools but they could not understand the vernacular of the natives. They therefore introduced the English language to the natives. The clever ones who could learn it quickly were given jobs as clerks, messengers, interpreters, and even teachers. The English language was officially accepted as the language of communication in 1826 and as the official language of instruction in schools in 1882.

Baldeh, F (1990 P 76) records that the English language became so important and indispensable that it was used as a status symbol and he who could speak it well was placed high on the social ladder penetrated the lives of Nigerian sandplayed vital roles in education, mass media, religion, business, administration, and governance. Eze, P (2021P.76) opines that as the English language gained popularity, the vernacular waned and pupils who spoke them in schools were punished. Those who spoke English were praised and rewarded. As a multi-ethnic and multi-linguistic country, English plays a very vital role in mutual communication among its citizens. It is necessary to note that some of the teachers who served as samples for the population of the study did not do well in their use of English for teaching their various subjects. Some of them had a very weak foundation of the English language during their acquisition of formal education. Commenting on the teacher and the English language, Ibekwe, C.F (2021, P.65) opines that the English language is so important in education that all subjects are taught with it. He therefore advises that teachers should have a good command of the English language so as to be effective in their teaching. He suggests that the government should organize regular conferences and workshops for teachers so as to update and upgrade their knowledge of the English language. Also commenting on the position of the English language in the basic levels of education in Nigeria, Belonwu, O. C (2020 P.52) laments that the idea of a teacher teaching all the subjects including the English language in Nigeria is not a welcome development. He is oftheopinionthatteachersinprimaryschoolsshouldteachthesubjectsthey are knowledgeable in because nobody gives what he has not got.

Anusi, P. A (2021 P.65) states that many teachers who did not study English teach the wrong concepts in primary schools. According to her, this is very dangerous to formal education because it has been a herculeant ask trying to correct the wrong concept sand to give the learners accurate concepts. During error

analysis in the English language, Ibeze, P. (2021P.65) discovers that most of the errors committed by students are a result of wrong teaching by teachers in primary and secondary schools. A house with a weak foundation is bound to collapse within a short time.

Recommendations

The English language is an indispensable language in the effective teaching and learning of all subjects from upper primary to tertiary institutions. It is lamentable to note that the language is facing a lot of problems. The following recommendations are made inorder to solve some of the problems that are facing the teaching and learning English as a second language

- 1. Employment of qualified teachers of English, especially at the basic level of education.
- 2. Provision of adequate Instructional materials. For example, a language laboratory should be built in each school, especially at the basic levels so that the learners will learn directly from native speakers.
- 3. Provision of impressive motivation and incentives to teachers and learners.

References

Baldeh, F. (1990). Better learning and teaching of English language in Nigeria, nsukka:

Fuladu. Belonwu, O. C. (2020). Problems of education in Nigeria. lagos: Bibi press

Ekwe, P. C.(2020). Colonial administration in Nigeria, lagos: Econs press

Eze, P. P (2021). The multi-ethnic and multi-linguistic nature of Nigeria. Onitsha: Mens press

Ibeze, P.P. (2021). The problems of formal education in Nigeria. nsukka: Y. press

Igboanusi, C. C. (2021). English as the official language in Nigeria. Onitsha: Meks press

Ike, C. C. (2021). The history of English in Nigeria. onitsha: Y-press.

Onwubiko, P. C. (2021). The history of English in Nigeria. Owerri: P. C Press

Ude, C. C. (2021). The English language in Nigeria. enugu: PLC Press

Appraisal of the Impediments and Obstacles Confronting Guidance Counsellors in Secondary Schools in Anambra State

Marcel Sunday Obiorah

Department of Educational Psychology/Guidance& Counselling, Nwafor Orizu College of Education, Nsugbe Marcelsunday14@gmail.com; 07065496640

Abstract

The study was sought to appraise the impediments and obstacles confronting guidance counsellors in our schools system and was carried out in six education zones in Anambra state. The sample 300 respondents made up of 150 male and female practicing guidance counsellors selected through random sampling in the six education zones through purposive sampling techniques. Three research questions guided the study. Five null-hypotheses were tested, four were accepted and one rejected. The instrument for data collection was a questionnaire constructed by the researcher with a reliability coefficient of 0.76 obtained using Cronbach Alpha. Z-test and ANOVA were used for the analysis of data. The findings showed that, inappropriate recognition of counselling as a discipline, un-specified guidance counsellors' roles and functions were obstacles facing the profession and counselors in Nigeria. Lack of funds, rivalry by school heads and other personnel, clients' preferred matured guidance counsellors, among others were challenges encountered. The study, revealed no significant differences in the obstacles experienced by guidance counsellors based on age. The study recommended that campaign by CASSON and the government through media, seminars and workshops on guidance counsellors' roles in schools and the society should be intensified.

Keyword: Appraisal, Guidance counselor, Impediments, Obstacles, Confidentiality, Counsellling

Introduction

Nigerian educational system has experienced some bias towards over reliance on educational programmes that are academically-oriented rather than vocationally-oriented. Academically-oriented curricular provide the base for the development of skilled manpower. Participation in the regular academic programmes increases aspiration of the youths towards more administrative and congenial occupations which emphasize paper qualification rather than the cultivation of useful skills which is the objective of vocational education.

The Nigerian secondary school educational system expects that students are to be properly guided on their educational activities, vocational choices, emotional and socio-personal problems. Therefore, to overcome life inadequateness, guidance and counselling provides appropriate assistance to students to better understand and accept themselves their personalities, endowment, their attitudes and worth as unique individuals. The students are also helped through guidance and counselling to acquire better decision-making skills, identify their unique needs, the needs of other people and the society in general. The present situations in Nigeria society and educational system are the fundamental reasons for the introduction of guidance and counselling services. The National Policy on Education (2004) stresses the pressing need for guidance counselors in Nigerian educational system, to cater for the sensitive disturbed academic and societal problems. Instead, the guidance counsellors are assigned to do jobs outside their profession.

The impediments and obstacles confronting counsellors are not peculiar to Nigerian alone, but it is at global level. In most countries in the world today counselling has moved from the confinement of the school

to industries, remand homes and other settings due to unemployment distress and economic problems (David,2018).

Watanable and Herr (2016), Daniel (2019), in their researches discovered that, professional counsellors are faced with serious challenges like lack of acceptance, lack of instruments for psychological tests for appraisal and placement purposes, lack of vocational information, economic, cultural and language barriers. Teachers see counsellors as rivals, and that, they also perform the services of the counsellors. For counselling to be effective, local traditions, customs, culture and religion must be taken into consideration. One of the major problems is the difficulty in finding a period for counselling in the school time table.

Counselling services are the services rendered by the counsellor to an individual or group of persons in an organized institution or setting. A professional counsellor is one that is academically trained in the field of guidance and counselling in a recognized tertiary institution. Therefore, the educational counselling service of the counsellor takes care of all aspects of educational matters as applicable to schools setting (Brown and Joshua, 2021).

Professional guidance counsellors in schools are confronted with series of obstacles. The obstacles range from lack of appraisal tools for counselling; poor physical facilities for counselling; inadequate communication by guidance counsellors with teachers, administrators, students and parents; high ratio of students to guidance counsellors, and counsellors' lack of power to influence change in the school; lack of sufficient funding for guidance activities; lack of time allotment for counselling; free choice versus national manpower need, and what exact roles counsellors should play in schools as counsellors and reasons for their existence in the school settings; the challenges of sex inequality and occupational counselling in Nigeria; counselling and tradition, and more recently poor Information Communication Technology (ICT) compliance of counsellors. According to Denga (2018), the public have a lazy, confused and blurred perception of counsellor's roles and functions. Abraham and Brown (2017), asserted that when guidance counsellors are posted to schools, principals assign duties to them according to their schools need. Most of the times, the counsellors posted to some schools maybe asked to play the role of vice principals, to teach as full time teachers, to act as guidance counsellors, to perform the role of career master and mistress, to act as school clerk or cashier among others.

According to Udom (2020), no meaningful services are cheap. Funds are needed for the purchase of counselling materials like psychological test, collection and keeping of information. The location of the counsellor's office affects the attitude of students towards counselling. Mkpouto (2018) revealed an account of a school where the counsellor was given a room directly opposite the staffroom and students seen going in were questioned by members of staff. The students felt disturbed. Many schools do not provide a befitting room for guidance and counseling services. Some of the counsellor's rooms are in the administrative blocks, while others are close to the principal's office. The counsellors office should be located in a separate block distance away from the administrative and principal's office preferably by the entrance of the school. This will give room for confidentiality.

Another obstacles is in terms of the counsellor's age. The public, according to Olayinka (2018) have created problems concerning age. Some people have come to the conclusion that, older counsellors are better than the young ones because of their experiences and their commitment to duties. This attitude shown by some principals and teachers has also influenced the students to behave awkwardly towards the counsellors. Most students would rather seek counselling assistance from older counsellors than the younger ones (Joseph, 2018). It is very disheartening to notice that, some counsellors are the architects of their own problems in the school system. If the school personnel liaise with the counsellors duties in schools, it is necessary on the part of the councellors to work harder and pull their weight to negate the ill feelings and suspicion about them instead of standing aloof and being lazy. For the smooth functioning of guidance and counselling services, the importance of psychological tests cannot be overemphasized for the counsellors usage. The limitation however, is that most of these tests are foreign, some counsellors find it difficult to interpret and also, if applied on people in this environment, it may lead to cultural bias. There is need for more

indigenous psychological tests. These and many other issues and challenges call for this present research.

The students that the guidance counsellors are supposed to guide and assist in their educational, vocational and personal social development are not aware of guidance counsellor's existence, and even when they realize that, they are not sure of the exact role the guidance counsellor plays. Possibly, Nigeria is aware of the importance of guidance and counselling, hence its entrenchment in the National Policy on Education (2004). However, such awareness is still limited to the school setting. Joseph (2018) noted that, even in the school setting, effective guidance programme has not emerged in a large scale. This possibly may be due to some challenges facing guidance and counselling which is a dilemma to the educational sector, which are still not solved.

Statement of the Problem

Lack of clarification of role has led to some unpleasant experiences especially by young and training counsellors sent to schools. Some principals of schools are not too clear of the role of guidance counselors, and some vice principals even viewed counsellors as rivals. These young guidance counsellors are regarded with suspicion even by other teachers, as such, they are offered very little or no cooperation. Some guidance counsellors, due to addition to teaching loads to their counselling activities decide to forsake counselling.

Also, the kind of organization or school structure according to Mkpouto (2018) determines very much the kind of reception the introduction of counselling services will receive. The structure of most school systems is such that, authority is vested on the principal of which, nobody could question. Again, obstacles such as finance, schedule of time, location of counsellor's office and keeping of records cannot be overlooked. Funds for the innovative efforts of counsellors had not usually been forthcoming since school heads find it difficult to release funds for counselling activities in school. Due to inadequate arrangement of rooms, the counsellor often becomes the clerical staff, and even the cashier. Keeping of records is a forgotten issue in some schools, because it is not easy for the guidance counsellor to combine counselling services with the clerical duties.

Confidentiality of given information is very paramount in counselling programmes. Students need to be assured that, their secrets will not be unveiled. Some principals and teachers expect the counsellors to divulge this information when they are required; this is absolutely against the ethics of the profession. If the counsellor insists on keeping such information secret, his relationship with other members of staff and the principal will be shaky. If he divulges the secrets, he looses the respect and confidence the students have for him. The students' confidence in the counselling programme goes a long way to enhance, the effectiveness of the school counsellor.

Purpose of the Study

The main purpose of this study is to appraise the impediments and obstacles encountered by guidance counsellors in secondary schools in Anambra state.

Scope of the Study

The study was delimited to six education zones in Anambra state where practicing guidance counsellors were found to give room for generalization. The study in it's content scope will appraise the impediments and obstacles encountered by guidance counsellors in secondary schools in Anambra state.

Research Questions

The following research questions guided the study.

- 1. What are the impediments confronting practicing guidance counsellors in the schools in Anambra state?
- 2. What are some of the obstacles distorting effective counsellors activities in schools in Anambra state?

3. Do the obstacles facing older counsellors differ from those faces by the younger ones?

Hypotheses

The following null hypotheses guided the study and were tested at 0.05 level of significance.

- 1. There is no significant difference in the impediments confronting guidance counsellors in schools in Anambra state based on location.
- 2. There is no significant difference in the obstacles facing guidance counselors in schools setting based on location.
- 3. There is no significant difference in the impediments confronting practicing counselors on the basis of gender.
- 4. There is no significant difference in the obstacles facing counselors in schools setting on the basis of gender.
- 5. There is no significant difference in the obstacles facing counselors in schools setting based on age.

Method

The study adopted descriptive survey research design. It made use of perceptions of the sample from the population of practicing guidance counsellors. The study used a sample of 300 subjects (150 males and 150 females) made up of 50 practicing guidance counsellors (25 males and 25 females) in each of the six education zones in Anambra state. Random sampling technique was used in selecting the subjects. The instrument for data collection was a structured questionnaire constructed by the researcher, and vetted by three experts in the areas of Guidance and Counselling and Educational Measurement and Evaluation. The reliability coefficient of the instrument was 0.83, using the Cronbach Alpha. At the end of data collection, all the 300 questionnaires administered were found to be completely responded to and usable. Z-test and Analysis of Variance (ANOVA) were used in analyzing the data collected at .05 level of significance.

Results

Table 1: Impediments Confronting Guidance Counsellors in Schools Anambra State

S/N	Items	Agree	Percentage	Disagree	Percentage
	The Counsellors are faced with issues of:				
1	Inappropriate recognition of Counseling as a discipline	227	76%	73	24%
2	The specific roles and functions a Guidance Counselor should play	222	74%	78	26%
3	Poor cooperation among school Head and other personnel	212	71%	88	29%
4	The level of education counseling Should start	202	67%	98	33%
5	Whether it is ethical for counsellor to get into the inner feelings of Client with the use of psychological Test or not?	200	67%	100	33%
6	Whether a counselor be an active Member of school disciplinary Committee	196	65%	104	35%
7	Culture differences	196	65%	104	35%
8	The explicit and implicit forms of Communication with clients.	186	62%	114	38%
9	Whether guidance counselors are Technicians or professionals	180	60%	120	40%
10	Diagnostic and remediating Procedures	174	58%	126	42%

Data in Table 1 reveals that practicing guidance counsellors in the Anambra schools system are faced with various issues as seen in the table. The reason was that all the ten (10) items tested have scores above 50%.

S/N	Items	Agree	Percentage	Disagree	Percentage			
	The Counsellors are faced with the challenges of:							
1	Lack of funds	260	87%	40	13%			
2	Teachers' rivalry	260	87%	40	13%			
3	Principals un supportive attitudes	240	80%	60	20%			
4	Students' lack of self-disclosure	232	77%	68	23%			
5	Lack of psychological test to diagnose students' burdering Issues	210	70%	90	30%			
6	Lukewarm attitudes of the Government towards counseling programmes	205	68%	95	32%			
7	Non-inclusion of counseling in School timetable	200	67%	100	33			
8	Parents inadequate knowledge of details about guidance counsellors and their programmes	198	66%	102	34%			
9	Non-supportive by schools for guidance Counsellors extensive research Work	180	60%	120	40%			
10	Lack of data bank unitto Coordinate research activities	170	57%	130	43%			

Table 2: Obstacles distorting effective counsellors activities in schools in Anambra State

Table 2 shows that all counsellors in the state are facing challenges in their schools, because all the ten (10) items on challenges investigated have scores above 50%. From the analysis in table 1 and 2, it was cleared that counsellors are faced with several impediments and obstacles. Table 1 items 1 to 5 revealed this with percentage scores of 76%, 74%, 71%, 67% and 67% respectively. Items 8, 9 and 10 were scored 62%, 60% and 58% respectively.

Table 2 shows the challenges faced by counsellors from 1^{st} to 6^{th} with percentage scores of 87%, 87%, 80%, 77%, 70% and 68% respectively, while items 9 and 10 scored 60% and 57% respectively. The indication from these findings are that, cooperative efforts and assistance must be put in place by all educational stakeholders and well meaning Nigerians to boost the morale of guidance counsellors.

	Sex		
Awka	Male	25	8.33%
	Female	25	8.33%
Aguata	Male	25	8.33%
-	Female	25	8.33%
Ogidi	Male	25	8.33%
•	Female	25	8.33%
Onitsha	Male	25	8.33%
	Female	25	8.33%
Otuocha	Male	25	8.33%
	Female	25	8.33%
Nnewi	Male	25	8.33%
	Female	25	8.33%
Total	Counsellors	300	100%

 Table 3: Distribution of Respondents by Sex and Age in Each of the Six Education Zone in Anambra

 State

		Age	Frequency	Percentage
Awka	Younger counselors	18-35 yrs	15	5%
	Older counsellors	36 and above	35	11.67%
Aguata	Younger counsellors	18-35 yrs	21	7%
	Older counsellors	36 and above	29	9.67%
Ogidi	Younger counsellors	18-35 yrs	20	6.67%
-	Older counsellors	36 and above	30	10%
Onitsha	Younger counsellors	18-35 yrs	24	8%
	Older counsellors	36 and above	26	8.67%
Otuocha	Younger counsellors	18-35 yrs	28	9.33%
	Older counsellors	36 and above	22	7.33%
Nnewi	Younger counsellors	18-35 yrs	18	6%
	Older counselors	36 and above	32	10.67%
Total			300	100%

It could be seen from Table 3 that, equal number of guidance counsellors were selected from each of the education zone in the state; equal number of gender (25 male and female) were also randomly chosen while in terms of age, 15 (5%) of the total chosen in Awka were young and the rest 35(11.67%) were older. Out of 50 counsellors selected in Aguata,21(7%) were between age 18 and 35 years while 29 (9.67%) were 36 years and above from the 50 counsellors selected. In Ogidi, out of the 50 counsellors, the young counsellors were 20 (6.67%) while 30 10%) were older; out of those from Onitsha, 24 (8%) were between ages 18 and 35 years, while 26 (8.67%) of the counsellors were 36 years and above; from the 50 counsellors chosen in Otuocha, 28 (9.33%) were older of ages 36 years and above; out of the 50 counsellors from Nnewi, 18 (6%) were young and 32 (10.67%) were older (36 years and above).

Hypothesis 1

There is no significant difference in the impediments confronting guidance counsellors in schools in Anambra state based on location.

Table 4: Analysis of Variance(ANOV schools in Anambra state based on loca			, I	pediments conf	confronting guidance counsellors		
 Source	of	Sum of	Mean of	Degree of	Calculated	Critical	

Sum of Squares (SS)	Mean of Square (MS)	Degree of Freedom (DF)	Calculated f-value	Critical f-value
270.4962	54.0992	5		
8122.2237	32.6194	298	1.66	2.60
8392.7199		298		
	Squares (SS) 270.4962 8122.2237	Squares (SS) Square (MS) 270.4962 54.0992 8122.2237 32.6194 8392.7199	Squares (SS) Square (MS) Freedom (DF) 270.4962 54.0992 5 8122.2237 32.6194 298 8392.7199 298	Squares (SS) Square (MS) Freedom (DF) f-value 270.4962 54.0992 5 8122.2237 32.6194 298 1.66 8392.7199 298 298 1.66

p>.05 level of significant

Data in Table 4 indicates that there is no significant difference in the impediments confronting counsellors in Anambra schools based on location, because the calculated f-value of 1.66 is less than the critical f-value of 2.60 at .05 level of significance. Therefore hypothesis one is not rejected.

Hypothesis 2

There is no significant difference in the obstacles facing guidance counselors in schools setting based on location.

Table 5: Analysis of Variance (ANOVA) on the obstacles facing guidance counselors in schools setting based on location.

Source of Variance	Sum of Squares (SS)	Mean of Square (MS)	Degree of Freedom (DF)	Calculated f-value	Critical f-value
Between Groups	222.1922	44.4384	5		
Within Groups	8170.5277	27.7909	298	1.60	2.60
Total	8392.7199		298		

p>.05 level of significant

Data in Table 5 reveals that, there is no significant difference in the obstacles facing guidance counsellors in schools in Anambra state based on location. This is so because the calculated f-value of 1.60 is less than the critical f-values of 2.60. Therefore hypothesis 2 was not rejected.

Hypothesis 3

There is no significant difference in the impediments confronting practicing counselors on the basis of gender.

Table 6: Analysis of Variance (ANOVA) on the impediments confronting practicing counselors on the basis of gender.

Gender	No.	—	SD	DF	Cal.t-value	Critical value t-
		X				
Males	150	87.8523	5.533			
				298	0.24	1.96
Females	150	87.7086	4.983			

Not significant at .05

Datain Table 6 shows there is no significant difference on the impediments confronting practicing counsellors in Anambra state based on gender. The reason was that, the calculatedt-value of 0.24 is less than the critical t-value of 1.96. Therefore hypothesis 3 is not rejected.

Hypothesis 4

There is no significant difference in the obstacles facing counselors in schools setting on the basis of gender.

Table 7: Z-Test Analysis Showing the obstacles facing counselors in schools setting on the	basis of
gender.	

Gender	No.	_	SD	DF	Cal.t-value	Critical Z-value
		X				
Males	150	86.8441	4.598	298	.70	1.96
Females	150	87.5742	5.735			

Not significant at.05

Data in Table 7 shows that, there is no significant difference in the obstacles facing counsellors in schools in Anambra state based on gender because the calculated z-value of .70 is less than the critical z-value of 1.96 at .05 significance level. The hypothesis is therefore accepted.

Hypothesis 5

There is no significant difference in the obstacles facing counselors in schools setting based on age. **Table 8: Showing Z-Test Analysis on the obstacles facing counselors in schools setting based on age.**

Age	No.	X	SD DF	Cal. z- value	Critical z- valu
Young(18-35yrs)	126	50.86	10.274	2.72	1.96
Older (36yrs & above)	174	47.231	12.855 298	2.12	1.90

Significant at.05

Table 8 shows that, there is significant difference in the obstacles facing young counsellors in schools in Anambra state compared with their counterpart that are older due to the fact that, the cal.z-value of 2.72 is more than the critical z-value of 1.96. Therefore hypothesis 5 is rejected. The mean values indicate that older counsellors face significantly more challenges than their younger counterpart.

Discussion of Findings and Implication

Hypotheses 1 and 2 were accepted as seen in tables 4 and 5. This means that, the responses were insignificant in the impediments and obstacles confronting guidance counsellors in schools. The implication for this is that, guidance counsellors are faced with impediments and obstacles which include un-identification of exact role to play, lack of cooperation from schools personnel, expectation of divulging of clients secret, rivalry from the school head, confusion as to whether the school counsellor is a technician or is a professional among others. The obstacles that have restricted their effective functioning include insufficient funds for programmes, students' inability to open up during counselling, un-conducive counselling environment, lack of psychological tests for appraisal and placement purposes, problem encountered in allotting time for counselling activities, lukewarm attitudes of parents, teachers and students among others. The reasons for all the issues and challenges that the counsellors are confronted with might be because majority of people and public are yet to realize that, the counsellor is the only one member of a team of pupils/students personnel workers; who performs a coordinative function directed towards the establishment of optimal conditions in the school. The finding is in support of Mohammed (2021) who opined that, the rivalry and other problems encountered by counsellors could not end because both the teachers and administrators expect guidance counsellors to do more than counselling. The findings is also in support of Watanable and Herr (2016) who explain that, in Japan, teachers and school administrators did not recognize the need for professional counsellors. As such, no cooperation was given to guidance counsellors.

Hypotheses 3 and 4 were accepted because the results of the hypotheses showed insignificant differences in the impediments and obstacles facing guidance counsellors based on gender. This imlies that gender was not a determining factor to impediments and obstacles faced by guidance counsellors. This finding could emanate from the fact that both the male and female counsellors are viewed as being competent with enriched skills to handle all duties and problems that come to their desks without hesitation. Moreso, despite the facts that some principals and teachers lack skill with which to handle students'problems, particularly in the effective realms, they still rival with the school counsellors. Also, the government, and other education stakeholders forget that, to achieve education aims and objectives as stated in the National Policy on Education (2004), function of guidance and counselling is very paramount. For this to happen, funds, necessary facilities, full corporations among others must essentially be put in place. The findings is in support of Joseph (2018) with the view that the rapid growth and spread of counselling

activities is inhibited by greater poverty, slow economic development, weak government, educational dilemma, cultural setting and people uncared attitude to something good and helpful.

Hypothesis 5 was rejected showing significant difference between obstacles encountered by younger and older or matured counsellors. This implies that the younger counsellors faced more challenges than the matured ones. This might be due to the fact that, the older counsellors are more matured and more patient during counselling sessions and other activities with the clients than younger counsellors. More so, due to length of counselling experiences the older counsellors have; they might be able to cope and adjust well with problems associated with their jobs than the younger ones without coping strategies. The findings support Daniel (2019) assertion that, clients prefer having their counseling session and intimate interaction with well principled and matured counsellors who understand their nature and bore with their behaviours.

Conclusion

Based on the findings of this study, it is concluded that guidance counsellors in Anambra school system are faced with many obstacles ranging from role classification, uncooperative attitudes of school heads and other school personnel. Again, counsellors in schools in Anambra state encountered series of obstacles such as lack of funds, inability of clients to open up, lukewarm attitude of government and other stakeholders to counsellors and their discipline.

Both male and female counsellors are faced with similar obstacles in schools, while more obstacles are faced by younger counsellors than the older ones. Guidance Counsellors need to prospect for human talent and offer maximum managerial service in helping channel the educational and vocational resources of youths into appropriate tracks for effective economic, social, political and cultural development. The government and the educational sectors should therefore, give Guidance Counsellors the opportunity to practice their profession in order to effectively contribute their quota educational system.

Recommendations

Based on the findings of this study, following recommendations were made.

- 1. Guidance counsellors in various states in Nigeria should organize moral counselling and advocate sensitization programmes for the heads of the school, teachers, parents and entire society on proper awareness and re-orientation about counselling as discipline, roles and functions of counsellors, its importance and contributions to the achievement of educational objectives.
- 2. Intensive counselling re- orientation for the young counsellors should be made urgently.
- 3. Every counsellor must learn about coping and adjusting strategies. The knowledge will stimulate interest and empathic understanding client's needs cross culturally, thus destroying the counsellor's insularity and ethnocentrism. Also, whatever the situation in schools, the counsellor should encourage cooperation with school heads and other school personnel.
- 4. There is need for guidance and counselling services to move out of the school confinement to noneducational setting such as industries, prisons, hospitals, churches, mosques, remand homes and rehabilitation centers for proper advocacy of the profession.

References

- Abraham, J. A. & Brown, C. J. (2021). *The role of the counsellor in Nigeria Secondary Schools*. Rapid Publishers.
- Brown, C. M. & Joshua, M. T. (2017). Comparative benefits of counselling services among secondary school adolescents in Uyo Metropolis, Akwa Ibom State, Nigeria. *An International Journal of Counselling, Education and Psychology*, 2(2), 43-52.

Daniel, D. J. (2019). The Spirit of the Counsellor. Van Nostrand Company.

David, M. B. (2018). The reciprocal of influence and challenges by counsellors in schools. *Journal of Psychological Thought*, 8(3), 10-22.

- Denga, D. I. (2021). *Guidance and Counselling in school and non-school settings*. Double Diamond Publications.
- Mohammed, J.A. (2021). Counselling and counselors situation in AkwaIbom State. *The International Journal of Education*, 10(3), 37-47.
- Elvis, J. B. (2017). Guidance and counselling in primary education in Botswana. *The International Speaking Spring*, 4(2), 18-23.
- Graham, J.W. (2021). Guidance in Nepal. Journal of International Speaking Spring, 12 (7), 12-18.
- Heart, P. W. (2021). *The counsellors strength*. Double Diamond Publications.
- Jospeh, A. E. (2012). Issues and problems affecting guidance and counselling programme in Nigeria. *International Journal of Social Education*, 11(9), 73-78.
- Mamman, A. M. (2018). *Guidance and Counselling for Schools* (3rdEd.). Paraclete Publishers.
- Mkpouto, C. B. (2018). Resistance of principals and teachers to the introduction of Guidance and Counselling Services in Schools in Akwa Ibom State. *The Educators*, 6(3), 23-33.
- Federal Republic of Nigeria (2004). National Policy on Education. Lagos: Government Printer.
- Olayinka, M.S. (2018). Guidance and Counselling for Nigerian Schools. Literamed Publishers.
- Richard, D.& Lumilda, C.B. (2021). Guidance and counseling services in the Republic of South Africa. *The Personnel and Guidance Journal*, 16 (1), 430-444.
- Shahmirzadi, A. (2020). Counselling Iranians. *The Personnel and Guidance Journal*, 15(2), 487-489.
- Torbad, M.A. (2019). *The roles of counsellors in schools*. Literamed Publishers.
- Udom, J.E. (2017). Introduction of guidance and counseling services in schools. Rapid Educational Publishers Ltd.
- Watanable, A. & Herr, E.C. (2016). Guidance and counselling in Japan. *The Personnel and Guidance Journal*, 10(15), 462-465.

Influence of Powerpoint Presentation On Academic Performance of Office Technology And Management/Business Education Students In Webpage Design, Study of Federal Polytechnic, Okoh

Umelue Ogochukwu Gloria Ph.D Department of Business Education Nwafor Orizu College of Education, Nsugbe, Anambra State, Nigeria. cedar 4christ3@gmail.com

Abstract

The study examined the influence of PowerPoint Presentation on academic performance of Office Technology and Management/ Business Education Students in Webpage Design in Federal Polytechnic, Okoh. In order to achieve this, two specific purposes and two research questions were raised while two null hypotheses were formulated for the study. The study adopted quasi-experimental research design; specifically, pretest/ posttest non-equivalentcontrol group research design was used. The accessible population comprised of 54 Final year Students of Office Technology and Management/ Business EducationStudents, Federal Polytechnic, Okoh, the entire population was used for the study. The instrument adopted for data collection was the advanced Webpage Design Performance Test (AWDPT). The instrument consisted of two sections. Section A was the pre- test while section B was the post-test. The instrument was dully validated by two experts. A reliability coefficient of 0.05 level of significance was obtained, using Cronbach Alpha reliability. . The data collected for the research questions were analyzed using mean and Standard Deviation. The hypotheses of the study were tested using Analysis of Covariance at 0.05 level of significance. The findings of the study revealed that teaching with PowerPoint has positive effect in Improving Office Technology and Management/ Business Education students' academic performance in Webpage Design. Based on the findings, it was concluded that teaching with PowerPoint presentation positively affects the performance of students in Webpage Design. Recommendations were made by the researcher among which are; Business education and management teachers should integrate the use of PowerPoint instructional packages in teaching Webpage design as it enhances academic performance of their students and again, teaching without PowerPoint should be reduced, because it is considered to be ineffective in improving students' performance in Webpage Design.

Keywords: Office Technology and Management, Business Education, PowerPoint Presentation, Advanced Webpage Design.

Introduction

The advent of information and communication Technology led to a comprehensive review of the secretarial studies curriculum, resulting in its evolution into Office Technology and Management. The OTM curriculum was introduced in 2004 by the National Board for Technical Education (NBTE). The review of secretarial studies curriculum was to make its recipients to walk with long ICT complaint and fit appropriately in the world of work most especially, in modern offices that are characterized by various types of state of the art communication technology equipment (Atueyi 2010). The objectives, theoretical and practical contents of the new curriculum are geared towards integrating students of OTM/ BEprogramme into the world of technology. It is believed that Nigerian Polytechnics are not just another set of institutions of higher learning as they are not only center of learning and research but also institutions where the problems facing the society could be resolved with knowledge, skills and competencies acquired though using modern technologies. The success of any curriculum depends on the way it is being implemented in terms of teaching.

According Udo and Udosen (2010), most of our teachers are used to chalk-talk methods of teaching, making the students to be passive learners and this contradicts the students centered learning approach recommended by the Federal Ministry of Education (Federal Republic of Nigeria, 2014) Meanwhile, interest in the use of modern technology in every discipline is increasing inall nations of the world.Countries, strive to produce more and better trained students through the adoption of various educational technologies and innovative techniques. Educational technologists believe that if educational institutions are to prepare the students to meet the challenges of the new millennium, then, teaching must be done using educational technology that are relevant to the 21st century world of work. (Bartsch & Cobem, 2008). This therefore, calls for teachers to incorporate educational technology in the teaching and learning process to give the students opportunity to engage actively in the lesson technical skills and explore in more details the content taught. This will enhance academic performance especially in office technology and management/Business Education.

The growth of information and Communication Technology (ICT) is reshaping teaching and learning processes in higher education (Pukkinen, 2007). There are a lot of teaching facilities and techniques among which include PowerPoint presentation.

PowerPoint is an information and Communication Technology (ICT) program developed by Microsoft in 1987. It as an application program of presentation bundled in Microsoft office (El-Ikhan, 2010). Information prepared on a computer could be better projected for larger audience using a Liquid Crystal Display (LCD) or Digital Light Processing (DLP) Projector. PowerPoint presentation could be used in the classroom for supporting students, learning by combing computer and projector to display slides for illustrating a lesson.

Although, Microsoft PowerPoint has not been around for long, many feel like they have always had PowerPoint because it seems ubiquitous, from business and education to politics and leisure. The world appears to be fast approaching the situation in which one must have a PowerPoint presentation when presenting at local, national or international conferences. In the corporate world, PowerPoint has become an indispensable tool such that appearing at a meeting without PowerPoint would be unwelcome and vaguely pretentious, like wearing no shoes (Parker, 2001).

The use of PowerPoint as a teaching tool is becoming more and more widespread with instructors in teacher education, especially with those who wish to integrate multimedia technology into their teaching and model technology use in the classroom, especially the office technology and management. The sheer popularity of this presentation tool comes from the belief that representation of information using auditory and visual inputs improves learning, (Mayer& Moreno, 2003).

In the present era called "The Computer Age", Microsoft PowerPoint could be used to teach any topic. This will reduce abstractness and motivate students thereby enhancing better understanding on the part of learners. PowerPoint special effects and features can be used to make an outline presentation exciting and complete. Such things as slide transitions, timings, movies, sound animation and hyperlinks can be used for this purpose.

With the advancement in information and communication technology, PowerPoint presentation have been extensively used in higher education because of its ease of use, user friendliness, structured presentation and multimedia approach. PowerPoint helps the teacher present (and illustrate, demonstrate, among others) large amounts of information to large audiences in limited time. It gives the teacher total control of content, pace, organization and direction. While non-projected method of teaching has its own advantages, it has been criticized for its lack of student engagement and inability to stimulate higher order thinking. Student learning occurs through active engagement with the subject matter and therefore, non-projected method of teaching is ineffective for such engagement (Ramsden, 2008)

Furthermore, transmission of information and its transformation into knowledge are not the same (Race, 2007). For transformation to occur, students need an opportunity to be engaged in deep processing of the subject matter. It is clear that the simple transmission of information through a projected (PowerPoint) technique of teaching is an effective approach for meeting the goals of helping students become

independent, critical problem solvers, able to interact with their peers in social and employment situations.

Statement of the Problem

The office technology and management curriculum was designed to replace the old secretarial studies curriculum. It has been noted that most Nigerian teachers use talk-chalk/traditional method of teaching which makes the students passive in learning. This traditional method makes the students passive in class, which contradicts the student-centered – learning- approachrecommended by the federal ministry of education(FRN, 2004). This situation may be responsible for the poor academic performance of students in webpage design in polytechnics. In confirmation of this statement, researchers' assessment of the recent performance of OTM/ BE students in webpage design in the polytechnics revealed that students' performance in the course is poor. It was also discovered that a good number of students do not pass webpage design at first sitting. It could be that the manner in which subjects are taught by teachers in the classroom has been affecting students' performance. Could this be attributed to the teaching method adopted by the teachers, most of whom do not utilize the new instructional teaching techniques, especially the application of PowerPoint? This study is conducted to fill that gap.

Objective of the Study

The main aim of this study is to examine the influence of PowerPoint presentation on academic performance of office technology and management students in webpage design in Federal Polytechnic Okoh. Specifically the study intends to examine:

- 1. The influence of teaching with PowerPoint presentation on OTM/BE students' academic performance in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria.
- 2. The influence of teaching without PowerPoint presentation on OTM/BE students' academic performance in webpage design Federal Polytechnic Okoh, Anambra State, Nigeria.

Research Questions

The following research questions were formulated to guide the study:

- 1. What is the effect of teaching with PowerPoint presentation on OTM/ BE students' academic performance in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria?
- 2. What is the effect of teaching without PowerPoint presentation on OTM/BE students' academic performance in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria?

Research Hypotheses

The following research hypotheses were formulated to guide the study;

- 1. There is no significant difference in the mean response of students on the influence of teaching with PowerPoint presentation on OTM/BE students' academic performance in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria
- 2. There is no significant difference in the mean response of students on the influence of teaching without PowerPoint presentation on OTM/BE students' academic performance in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria.

Method

These study aims to examine the influence of teaching with PowerPoint presentation on OTM/BE students' academic performance in webpage design. The design of the study was quasi- experimental research design. Specifically, non-equivalent control group research design with pretest and posttest involving two intact classes were used for the study. Quasi-experimental research design is normally used were the researcher cannot randomly sample and assign the subjects to groups. The subjects in this type of design were not randomly assigned; rather intact classes were randomly assigned to the treatment groups. The target

population of the study comprised of all the final year students in the department of Office Technology and Management/Business Education, Federal Polytechnic Okoh. This is because it is believed that they have been introduced to the ICT courses in their previous levels. The total number of the students was 54. Advanced Webpage Design Performance Test (AWDPT), designed by the researcher was the instrument used for data collection. Advanced Webpage Design Performance Test (AWDPT), comprised 30 objective questions with four options. The topics ranges from networking, internet to introduction to HTML (Webpage Design). The score obtainable is 0-30 marks. Advanced Webpage Design Performance Test was duly validated by two experts and has a Cronbach Alpha reliability coefficient of 0.80. the students were pretested before the treatment. The treatment (teaching with PowerPoint) was given to the experimental group for a period of one month while the control group was taught without PowerPoint for the same period. Posttest was given to the students after the treatment. The data collected were analyzed using mean and standard deviation for the research questions. The hypothesis was tested using Analysis of Covariance (ANCOVA) at 0.05 level of significance.

Results

Research Question 1: What is the effect of teaching with PowerPoint presentation on OTM/ BE students' academic performance in Webpage design at Federal Polytechnic, Okoh?

To answer this research Question 1, the test obtained from students in Advanced Webpage Design Performance Test (AWDPT) and analyzed using the mean and standard deviation for experimental group were calculated and presented in Table 1 below.

Table 1: Mean of pre-test and post-test scores of treatment group taught Webpage Design with Power	•
Point (Experimental Group)	

Group	Ν	Pretest		Posttes	t	Mean
		Mean	SD	Mean	SD	Difference
Experimental group (with PowerPoint)	37	14.43	4.23	2451	1.61	10.08
Control group (without PowerPoint)	17	13.8	4.72	12.24	0.90	-1.64
Mean & Standard Difference		0.55	0.49	12.27	0.71	

Source Field Experiment

The data presented in Table 1 reveals that the group taught webpage design with PowerPoint presentation had mean and standard deviation scores of

(mean = 14.43; SD = 4.23) in the pretest and mean and standard deviation scores of (mean = 24.51; SD = 1.61) in the post-test. This gives a mean difference of 10.08. the control group taught without PowerPoint had mean and standard deviation scores of (mean = 13.88; SD = 4.72) in the pre-test and (mean = 12.24; SD = 0.90) in the posttest. This gives a mean difference of -1.64. the mean difference between the experimental and control groups is (mean = 0.55; SD = 0.49) for the pre-test and (mean = 12.27; SD = 0.71) for the posttest. This shows that the group taught with power point performed better than the group taught without power point. This means that teaching webpage design with power point is effective in improving the academic performance of final year students.

 Ho_1 : There is no significant treatment influence of teaching with power point on the academic performance mean scores of OTM/ BE riance(ANCOVA) For Test of Significance of influence of Treatment (Teaching with Power Point) on Academic Performance of OTM/BE students in Webpage Design. students in webpage design.

	Sum of Squares	Df	Mean	F	Sig
	1762.159a		Square		
Covariate		2	81.080	448.653	.000
Intercept	1723.697	1	1723697	877.720	.000
Pretest	6.147	1	6.147	3.130	.083
Treatment	1762.159	1	1762.159	97.305	.000
Gender	112.444	1	112.444	1.439	233
Treatment * gender	43.053	2	21.527	.275	.760
Error	100.156.	51	1.964		
Total	24885.000.	54			
Corrected	1862.315	53			
a. R Squared = $.946$ (A	djusted R Squares $=$.	.944)			

Table 2: Summary of analysis of Cova

The data presented in Table 2 shows F-calculated value for effects of treatment on students' academic performance in webpage design. The Table shows that there was significant effect of treatment on academic performance of students in webpage design (F = 897.305; P 0.05). Hence, the null hypothesis that stated that there is no significant treatment effect of teaching with power point on the academic performance mean scores of OTM students in webpage design was therefore rejected. This implied that treatment has effect on the academic performance of students in webpage design. This means that the effects observed are due to the main treatment (teaching with power point) given to students.

Table 3:	estimated margina	l means of both	the treatment and	control groups

e		U
Groups	Mean	Std. Error
Treatment	24.527	0.231
Control	8.206	0.340
conuor	3:200	0.5 10

The data in Table 3 shows estimated marginal means for the two groups, this is the adjusted mean after the covariance. Table 3 reveals that the participants in experimental group performed better than their counterparts in control group because they had the highest adjusted post mean score (mean = 24.527). The implication here is that teaching webpage design with power point presentation is significantly effective for improving the academic performance of OTM/BE students

Discussion of Findings

This study was specifically carried out to determine the influence of power point presentation on academic performance of Office Technology and Management/ Business Education students in webpage design at Federal Polytechnic Okoh, Anambra State, Nigeria. The finding reveals that the treatment group taught webpage design with power point presentation performed better than those taught without PowerPoint as indicated in their mean score of24.51and 14.44 respectively. It was further found out that there was significant difference between those taught with power point and those taught without PowerPoint as shown in the result of the test of null hypothesis on. This finding collaborated with the findings of Ayotola and Biodun (2010) who reported that students are very happy using computer animation (PowerPoint), because they performed better in achievement of a subject than when taught using the traditional method (without PowerPoint). Based on these reason teachers are changed with the responsibility of improving the ability of the students to learn and read the information given to them. Hence the ability of the students to retain and

remember what they have been taught by the teacher depends heavily on the appropriateness of the instructional material and method of instruction used. In addition, the present study has indicated that PowerPoint-aided education enhances student's achievements and concentrates their students' attention on the webpage design course. The result also supports Gokhan (2013), who found out that students taught using computer animation performed better than their counterparts taught using the traditional method presentation.

Conclusion

Based on the findings of this study which reveals that teaching with PowerPoint has a positive influence on the academic performance of Office Technology and Management/ Business Education Students in Webpage Design at Federal Polytechnic, Okoh Anambra State, Nigeria, It is therefore concluded that teaching with PowerPoint presentation is better than the traditional method of teaching because of its enormous benefits to Students' academic performance. In this case, it means that teaching without PowerPoint Presentation is no longer effective and continuous use of it may affect the academic performance of Office Technology and Management/ Business Education students in Webpage Design at Polytechnic which will further have adverse effect on the economy at large.

Recommendation

Based on the findings of this study, the following recommendations were made:

- 1. OTM/ BE Teachers should integrate the use of Power Point instructional packages in teaching webpage design as it enhances academic performance of OTM/BE students.
- 2. Teaching without PowerPoint should be reduced, if not stopped because it is considered ineffective in improving students' performance in webpage design

References

- Akinyemi, A.O. (2010). The impact of office technology on information processing and its implications for secretarial training in the 21st century in Nigeria. *Business Education Journal* 3(4), 62-68
- Atueyi, N.C=(2010), Technology In office Technology and management. *ABEN Book of Readings* 1(10), 6-1
- Azuka, E.B. (2000), Arability and Functionality of Business Education Journal 4(1) 96-106
- Bartsch R.A; & K.M Cobem,(200), Effectiveness of PowerPoint Presentation in Lectures Computers & Education41,77-6
- Drouin, M Hile, R.E, vartanian, L.R. & Webb .J. (2013 Student Preferences for Onlines for Online Lecture Formats: *Quarterly Review of Distance Education*, 14(3)m!51-162.
- Doug , L (2014)PowerPoint 2007 for Dummies Com. , a widely Brand making Everything Easier. John Willey & Sons, Inc.
- Ei-ikhanm K. K. (2010). The advantages and Disadvantages of teaching with PowerPoint. Retrieved from *http://www.penalido,wordpresss.com/theadvantages*.
- Federal Republic of Nigeria (2004). The national policy on education, Lagos government local Reflections. *Business Communication Quaterly*67 (2) 228-231
- Gokhan, A (2013) Effect of computer animation techniques on students comprehension of the solar system and beyond unit in the Science and Technology course Mevitaria *International Journal of education* (*MIJE*) 3(1)40-46
- Mayer, R. (2009), Multimedia Learning. Cambridge University Press.
- Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43-52.
- Okoye, A. C. (2003), Effect of audio Taped instruction, Supported with picture on students achievement and retention in selected Biology content, *Unpublished M.Ed. Thesis*. UNN.

- Parker, (B; (2012). Death to power point, Bloomberg.http://www.Business week.com.
- Parker, I. (2001). Absolute powerpoint. Can a software package edit our thought? *The New Yorker* (May 28): 76-87.
- Pulkkinen, J., (2007). Cultural globalization and integration of ICT in education. In K. Kumpulainen (Ed.), *Educational technology: opportunities and challenges* 13-23. Oulu, Finland: university of Oulu.
- Race, P., (2007). The lecturers' toolkit: a practical guide to learning, third ed. Teaching and Assessment Routledge, London.
- Ramsden, P. (2008). Learning to teach in higher education, 2nd ed. Routledge Palmer.
- Ramzan. B., (2006). The effect of working with presentation software programme on students achievement, Pamu wale University, Denizlio Turkey. <u>www.rbasturk@pau.edu.tr.com</u>
- Udeji, A. U., (2007) Effect of Concept mapping on secondary school students achievement and interest in biology, *Unpublished M.Ed*. Thesis ESUT.
- UDOH, J. S., (2006) Personality Variables and the Utilization by Lecturers in the University of Uyo. *M.Sc. Thesis in the post Graduate School, University of Uyo,* Uyo State.
- Udo, A. L. &Udoson, I. R., (2010) Powerpoint Utilization and academic Performance of Biology students In Akwalbom state college of education, Afghansit, in Nigeria association for Educational Media (NAEMT) PROCEEDINGS OF THE 3RD ANNUAL CONVENTION AND NATIONAL CONFERENCE Lagos (3), 75-81.
- Umoru, T. A; &Nguwap, S. T; (2021) Effects of powerpoint presentation on academic performance of office technology and management students in webpage design. *Nigerian Journal of BusinessEducation*, 8(1), 104–110.

Analysis of Variance Step By Step Using Microsoft Office Excel

¹Akamigbo Izuchukwu Stephen and ²Eneja Remigius Uchenna

¹Department of Educational Psychology and ²Department of Science Education ¹Nwafor Orizu College of Education Nsugbe and ²University of Nigeria Nsukka ¹akamigbo.izuchukwu@nocen.edu.ng & ²uchenna.eneja.79681@unn.edu.ng

Abstract

The trust of hypothesis is to test the effects, relationship and correlation between dependents variables on independent variables through the use of statistical software to support a particular theory which applies to a population. A hypothesis test assesses how unusual the results are, whether it is reasonable chance variations s or whether the result is too extreme to be considered chance variation. Many students don't have the knowledge on the use of the statistical software for data analysis. Analysis of variance (ANOVA) is the analysis of independent variable with two or more levels. It is the extension of independent samplet-test that limi thypothesis testing to only two levels of independent variables. Students at undergraduate and postgraduate level mess up their presentation of results due to inadequate knowledge in the use of statistica lsoftware resulting in copying other research findings to present on their work. To bridge that gap, it is a decision support tool that helps students gain knowledge in data analysis using excel for analysis of variance testing. This paper gives us a step by step approach to doing ANOVA using Microsoft office eexcel software. A tool most common to Pc's based on Microsoft windows operating system and its users.

Keywords: Analysis of Variance, Hypothesis, Microsoft Excel

Introduction

Research findings are presented after data collected are analyze during the appropriate test statistic like mean, standard deviation, t-test, chi-square test, analysis of covariance and analysis of variance with the available software for analysis. Research test the effect of independent variable on the dependent variables to establish whether the test is significant or not. Independent variables are factors that affect the outcome of the research while dependent variables are the effect or outcome of the study, Jaiyeopa A. Oet.al (2020). To analyze the effect of independent variable on dependent variable, a test of hypothesis is carried out using the appropriate test statistic. The choice of appropriate test statistic is informed by the design of the study, objective of the study, research questions and hypothesis.

Hypothesis is a conjectural statement defining a population parameter. It is a statement of the researcher's expectation or prediction about relationship among study variable (Anupama, 2020). For the guess to be accepted or rejected a test must be carried out. The test is called a test of significant. The test involves using test statistic like analysis of variance. Analysis of variance is the analysis of independent variable with two or more levels. It is a test of inference set out to established the weather two or more groups of independent variables are equal or not. Gamst, Meyers and Guarino (2008) in Zhou and Skidmore (2017) argued that analysis of variance (ANOVA) is one of the most fundamental and ubiquitousuni variate methodologies employed by psychologists and behavioral scientists. The design presents the foundation of experimental design including assumptions, statistical significance, strength of effect and partitioning of the variance. Exploring the effect of one or more independent variables on a single dependent variable as well as two-way and three –way mixed design. According to Sawyer (2004) ANOVA is a statistical tool used to detect differences between experimental group means. The means could be students' achievement group according to classability, sex, location or experimental and control group. The sources of variation are between and within the group means of independent variables. ANOVA test is used to determine the influence that independent variables have on the dependent variable. Statistically speaking analysis of variance splits an

observed aggregate mean variability found inside a data set into two parts: systematic factors and random factors. The systematic factors have a statistical influence on the given data set, while the random factors do not.

In carrying out analysis of variance or data analysis researchers are opentouse statistical of tware. The software available is statistical package of social science (SPSS), STATA, Python, SAS, E- view, R etc most students don't have adequate knowledge on the use of this software for data analysis and probably don't have money to procure the software because most of them are commercial that requires licensee key. Alternatively, Microsoft offices excel can perform the analysis most of this software can do. Most computers have Microsoft office package. Excel is spreadsheet packages found within Microsoft office suit that enable users do wide range of calculations. It helps users to create charts and graphs. Microsoft Excel is an electronic spreadsheet. You can use it to organize your data into rows and columns. You can also use it to perform mathematical calculations quickly. This course teaches Microsoft Excel basics as a prelude to the use of Statistical Analysis System (SAS) software in carrying out more complex statistical analysis.

Microsoft office excel is a spreadsheet software that is use to analyze, organize, query and retrieve data. The analysis tool pack addonenable the user perform basic statistic alanalysis. The analysis tool pack and the interface are present as follows. To bring out the analysis tool pack click on Data Data Analysis, the analysis tool pack will appear as shown below

	Σ	n) (n) =		-	-			6. Main		•	1. A	Book1 - M	icrosoft Exce	1						
	Home	Insert	Page	Layout F	ormulas	Data	Revie	w View	ABB	W FineReader 12											
From Access		From Fro	m Other	Existing	Refresh All *	Conn Prope Se Edit L	erties	A Z Z A Z Z A Z J Sort	Filter	Clear CReapply CAdvanced	Text to	Remove	Data Validation	Consolida	te What-If	Group	Ungroup	÷	 Image: Show Detail Image: Hide Detail 	Data .	Analysis
		Get Externa	al Data		0	Connection	s		Sort & P	filter			Data To	ols			(Dutline	G	Anal	rsis
	A1	,	• (0	f _x					_												
1	A	В	С	D	E	F		G	Dat	ta Analysis							2	X	R	S	
2 3									A	nalysis Tools						6	OK		-		
1										Anova: Single	Eactor				1		UN				
5										Anova: Two-		/ith Ren	lication			ŝ С	Cance		-		
,										Anova: Two-				yn		l L	Callue				
3										Correlation											
5 6 7 8 9										Covariance							Help				
10										Descriptive S	tatistics							_	-		

If the analysis tool pack is not in the interface of your Microsoft excel, click on file to excel options, click on add-ins to locate the analysis tool pack and click ok as shown below

el Options		-D					
Popular	Change the most popular options in Excel.						
Proofing	Top options for working with Excel						
Save Advanced Customize	Show Man Toolbar on selection Catable pre Prevents Show Centerparts tak in the Ribbon Color scheme Bher						
Add-Ins	SigeenTip style: Show feature descriptions in ScreenTips						
Trust Center	Create lists for use in sorts and fill sequences: Edit Custge Lists						
Resources	When creating new workbooks						
	Use this feigh Body Funt III III IIIIIIIIIIIIIIIIIIIIIIIIIIII						
	Personalize your copy of Microsoft Office						
	User name: Eneja Accounts						
	Choose the languages you want to use with Microsoft Office: Language Settings						
	04	Cancel					

The analysis tool pack is the dialog box that houses all the data analysis excel can perform. In this present studywe are interested in analysis of variance. It is important to mention that excel store information inrows and columns. As a spread sheet database, the datacollected are recorded in columns and rows for data analysis to be carried out

Popular	View and manage Microsoft Office add-ins.			
Formulas				
Proofing	Add-ins			
Prooring				
Save	Name	Location	Type	
Idvanced	Active Application Add-ins			
Advanced	ABBIY FineReader 12 MSExcel COM Add-In	Clueader 12/FRIntegration.dll		
Customize	Analysis ToolPak	C1rany\Analysis\ANALYS32.XLL	Excel Add-in	
add.los	Inactive Application Add-ins			
Add-Ins	Analysis ToolPak - VBA	C\y\Analysis\ATPyBAEN.XLAM	Excel Add.in	
Trust Center	Conditional Sum Wizard	sumif alam	Excel Add-in	
	Crystal Reports 11.5 (Crystal Reports SmartTag Recognizer 11.5)	C/u.on/3.5/bin/CRSmartTag.dll	Smart Tag	
Resources	Custom XML Data	C1ffice1Office1210FFRHD.DLL		
	Date (Smart tag lists)	Cilared\Smart Tag\MOFLDLL		
	Euro Currency Tools	eurotoolalam	Excel Add-in	1
	Financial Symbol (Smart tag lists)	Cluared/Smart Tag/MOFLDLL		
	Headers and Footers	C1ffice1Office121OFFRHD.DLL	Document Inspector	
	Hidden Rows and Columns	C:_ffice\Office12\OFFRHD.DLL	Document Inspector	
	Hidden Worksheets	C1ffice\Office12\OFFRHD.DLL		
	Internet Assistant VRA	C1ffice12/Library/HTML3LAM		
	Invisible Content	C1ffice)Office12(OFFRHD.DLL		
	Lookup Wizard	lookup.xlam	Excel Add in	
	Solver Add-in	solveralam	Excel Add-in	
	Document Related Add-ins			
	No Document Related Add-Ins			
				-
	Add-in: Analysis ToolPak			
	Publisher: Microsoft Corporation			
	Location: C:Program Files/Microsoft Office/Office12/Libri	in/Analysis/ANALYS32.XLL		
	Description: Provides data analysis tools for statistical and e	ngineering analysis		
	Manage: Excel Add-ins			

In carrying out the analysis of variance in excel do the following:

- 1. Click the data tab
- 2. Click data analysis
- 3. Select the ANOVA you want to run: single factors, two-factor with or without replication and click ok
- 4. Select the input range from the excel work file or work book
- 5. Click on labels in first row (it will bring out the labels name)
- 6. Select the output range
- 7. Click ok

The practical steps are as follows. Educational researchers want to find out the influence of gender on students' achievement in science process skills. The test of science process skills was administered to students and the scores are recorded according to departments and gender as follows:

Data on Students' Achievement on Science Process Skills According to Gender and Departments

Gender	Biology	Physics	Mathematics
Male	50	55	65
Male	52	54	61
Male	62	51	46
Male	65	45	45
Male	50	61	62
Male	58	70	69
Female	55	60	70
Female	60	65	72
Female	65	62	55
Female	70	50	58
Female	72	62	72
Female	62	73	75

1. Performing the analysis of variance input the scores in excel are shown below

0	Σ 🚽 🤊	* (~ ~) =					-		B	ook1 - Microso	
	Home	Insert Pag	e Layout Formu	las Data Revi	ew Vi	ew ABB	YY FineReader	12			
	Cut	Calibri	* 11 *	A * *	*	📑 Wrap	Text	General	*		
P	aste J Format	Painter B	<u>u</u> - 🖽 - 🖉		详辞	Merge	e & Center -	\$ - %	,	Conditional Formatting * a	
	Clipboard	G	Font	G	Aligr	nment	G	Nur	nber G		
	115	• (*	f.c.								
	A	В	С	D	E	F	G	н	1	J	
1	Gender	Biology	Physics	Mathematics							
2	Male	50	55	65							
3	Male	52	54	61							
4	Male	62	51	46							
5	Male	65	45	45							
6	Male	50	61	62							
7	Male	58	70	69							
8	Female	55	60	70							
9	Female	60	65	72							
10	Female	65	62	55							
11	Female	70	50	58							
12	Female	72	62	72							
13	Female	62	73	75							
14											

2. Next click on data

From Krom Get External Data Existing Connections Refresh All + Sources + So						(~~) =	🖬 "? -	Σ	C
From From From Other Get External DataExisting ConnectionsRefresh All + >> Edit Lin ConnectionsM21Image: ConnectionsImage: ConnectionsConnectionsM21Image: ConnectionsImage: ConnectionsImage: ConnectionsM21Image: ConnectionsImage: ConnectionsImage: Connections	ita Rev	is Data	rmulas	Fo	Layout	nsert Page	ome Ir	Home	
ABCD1GenderBiologyPhysicsMathematic2Male5055653Male5254614Male6251465Male6545456Male5061627Male587069	Edit Links	resh				Sources *	eb Text		
1 Gender Biology Physics Mathematic 2 Male 50 55 65 3 Male 52 54 61 4 Male 62 51 46 5 Male 65 45 45 6 Male 50 61 62 7 Male 58 70 69					$f_{\mathcal{K}}$	- (=	21	M21	
2 Male 50 55 65 3 Male 52 54 61 4 Male 62 51 46 5 Male 65 45 45 6 Male 50 61 62 7 Male 58 70 69	D	D		С		В	А	А	
3 Male 52 54 61 4 Male 62 51 46 5 Male 65 45 45 6 Male 50 61 62 7 Male 58 70 69	ematics	Mathem	5	hysics	F	Biology	nder	Gende	1
4 Male 62 51 46 5 Male 65 45 45 6 Male 50 61 62 7 Male 58 70 69		65			55	50		Male	2
5 Male 65 45 45 6 Male 50 61 62 7 Male 58 70 69		61			54	52		Male	3
6 Male 50 61 62 7 Male 58 70 69		46			51	62		Male	4
7 Male 58 70 69		45			45	65		Male	5
		62			61	50		Male	6
		69			70	58		Male	7
8 Female 55 60 70		70			60	55	e -	Female	8
9 Female 60 65 72		72			65	60	•	Female	9
10 Female 65 62 55		55			62	65		Female	10
11 Female 70 50 58		58			50	70	e	Female	11
12 Female 72 62 72		72			62	72	•	Female	12
13 Female 62 73 75		75			73	62	•	Female	13

1. Click on data analysis. The Data analysis tool pack diaglog box will appear choose ANOVA single fator

0.	Σ	9-0-)+									Book1 - Mic	rosoft Exce	d						
9	Home	Insert Page	Layout Form	vulas Data R	eview	View	A881	Y FineReader	12										
From	s Web 1			Refresh All - See Edit Links	Z+	A Z Z A Sort	Filter	y Advanci	Text	to Remov	e Data tes Validation		te What-M Analysis -	Group	Ungroup Su	btotal	Show Detail Hide Detail		
		iet External Data		Connections	1		Sort & F	iter	1		Data Tool	8			Out	line	9	Analys	11
_	M21	• (?	fx																
	A	8	C	D	E		F	G	н	1	J	ĸ	L	M	N	0	р	Q	R
1	Gender	Biology	Physics	Mathematics	_	_					-								
	fale	50	55	65	Data A	nalysis					8	1							
M	lale	52	54	61	Analy	sis Took	5												
M	fale	62	51	46			e Factor				OK								
M	fale	65	45	45				/ith Replication /ithout Replica			Cancel								
M	fale	50	61	62	Corr	elation	Pacitor in	леконт неркса	bon	1	Lub								
M	fale	58	70	69		ariance	Statistics			1.1	Fielb								
F	emale	55	60	70	Expo	onential :	Smoothin	0											
F	emale	60	65	72		st Two-t ier Anal		x Variances											
o Fe	emale	65	62	55		gram				-									
1 Fe	emale	70	50	58	-	-	_			_									
2 Fe	emale	72	62	72															
3 F	emale	62	73	75															
4																			

On the analysis tool pack select the anaova single factor, click the input range (\$B1:\$D13), click on labels in first row and output range (\$E\$2)

0	D E 1 "	+ (* ·) +							Book1 - I	Microsoft E	cel						
	Home	Insert Page	Layout For	mulas Data Re	view Vi	ew ABI	BW FineReader 12										
	cess Web Te	om From Other st Sources		Refresh All		ort Filte		Text to Rem Columns Duple			idate What-M Analysis	Group (Angroup Su	btotal = H			
_	E2	• (*	f.														
	A	в	C	D	E	F	GH	н	J	к	L	М	N	0	P	Q	R
1	Gender	Biology	Physics	Mathematics						_	101						
2	Male	50	55	65			Anova: Single Fac	tor			8 ×						
	Male	52	54	61			Input										
	Male	62	51	46			Input Range:		\$8\$1:\$D\$13	1	ОК						
	Male	65	45	45			Grouped By:		Columns		Cancel						
	Male	50	61	62					Bows		Help						
	Male	58	70	69			✓ Labels in first	trow									
8	Female	55	60	70			Alpha: 0.05										
9	Female	60	65	72													
10	Female	65	62	55			Output options			-							
11	Female	70	50	58			Qutput Rang	je:	\$E\$2	186							
12	Female	72	62	72			 New Worksh 	eet By:									
13	Female	62	73	75			 New Workbo 	ok									
14																	
15										-							

Click ok, the summary result will display

3 at-# ysis -	up Ungroup Subtota
at-If Grou	and been theread
	Outline
J	K L
3	
1	
1	
P-value	Fcrit
8 0.60016	5 3.284918
	P-value

Follow the same process and perform the two-factor with replication of the summary result as presented below

	cess Web T	rom From Other ext Sources *	Existing Connections	Connections	X XX U	Clear Reapply Advanced	Text to Columns to	Remove Suplicates Vi	Data Consolidate Wha alidation - Analy Data Tools	1.H Greu	p Ungroup Si	ubtotal
	L17	• (*	f.									
	A	B	с	D	E	F	G	н	1	1	к	L
1	Gender	Biology	Physics	Mathematics								
2	Male	50	55	65	Anova: Two-Factor With	Replicatio	n					
3	Male	52	54	61								
4	Male	62	51	46	SUMMARY	Biology	Physics	Mathemat	Total			
5	Male	65	45	45	Mole							
6	Male	50	61	62	Count	6	6	6	18			
7	Male	58	70	69	Sum	337	336	348	1021			
8	Female	55	60	70	Average	56.16667	56	58	56.72222222			
	Female	60	65	72	Variance	41.76667	74.4	101.6	64.91830065			
	Female	65	62	55								
1	Female	70	50	58	Female							
2	Female	72	62	72	Count	6	6	6	18			
	Female	62	73	75	Sum	384	372	402	1158			
4					Average	64	62	67	64.333333333			
5					Variance	40.4	55.6	69.6	53.17647059			
16												
7					Total							-
8					Count	12	12	12				
9					Sum	721	708	750				
0					Average	60.08333	59					
1					Variance	54.08333	68.90909	99.90909				
2												
3					ANOVA							
14					Source of Variation	\$\$	df	MS	F	P-value	Ferit	
15					Sample	521.3611		521.3611	8.159725241			
6					Columns	77.05556		38.52778	0.602991044	0.55367		
7					Interaction	13.72222		6.861111	0.107381967	0.898526	3.31583	
85					Within	1916.833	30	63.89444				
29												
10					Total	2528.972	35					

The result on one way analysis of variance is not significant because the P0.60 > 0.05 level of significant, the null hypothesis is accepted and the researcher can conclude that there is no difference in the mean achievement of students in science process skills according to department. Two factors with replication is mainly introduction of interaction. For instance, interaction between gender and department with Pvalue of 0.89 is greater than level of significant of 0.05 thus the null hypothesis of no interaction between gender and dapertment is accepted. The summary of SPSS printout will give the result and interpretation as shown below:

ANOVA											
SCORES											
	Sum of Squares	df	MeanSquare	F	Sig.						
BetweenGroups	77.056	2	38.528	.5 19	.600						
WithinGroups	2451.917	33	74.301								
Total	2528.972	35									

Summary

The need to educate students' on how to carry out data analysis using Microsoft excel package is important. The software is readily available in every computer unlike other statistical software that require you to pay for the license key or code to unlock the software. However, many students don't have technical knowledge on the use statistical software for analysis, this paper was written to help students gain the skills in analyzing their research data step by step using excel. Analysis of variance was chosen to demonstrate the steps; other analysis can be performed in excel using similar procedures. The analysis excel can performed include independent sample ttest, multiple regression, analysis of covariance, correction analysis, mean, mode, median, standard deviation, Ztest and many more. Microsoft excel is a necessary software every students or researcher should learn and master, the application is synchronized with other statistical software like statistical package for SPSS, STATA, E-VIEW, Retc. You can import and export data from Microsoft excel to other program. It makes data management and analysis very simply, summaries large volume of data in a simplify way. The application can be applied to every sector of the economy but more especially for teachers, researchers and education sector.

Reference

Anupama, K.D. (2020). International Journal of Nursing Science Practice and Research, 4(2), 255-6351.

- Gamst,G.,Meyers,L.,& Guarino, A.(2008). Analysis of Variance Designs ([edition unavailable]). Cambridge University Press. Retrieved from https://www.perlego.com/book/1693645/ analysis-of-variancedesigns-a-conceptual-and-computational-approach-with-spss-and-sas-pdf (Original work published 2008).
- Introduction to excel retrieved from <u>https://www.routledge.com/downloads/C4959/</u> Introduction%20to%20Excel.pdf
- Jaiyeoba, A.O., Atanda, A.I &, Ayeni, A. O (2020). Research in Education https://www.researchgate.net/ publications
- MS EXCEL lecture note retrieved from <u>https://www.routledge.com/downloads/C4959/</u> Introduction%20to%20Excel.pdf
- Sawyer, S. F (2019). Analysis of variance: the fundamental concepts. *Journal of manual and manipulative therapy*. 17 (2), 27-38.
- Zhou.Y. & Skidmore.T (2017). Areassessment of ANOVA Reporting Practices: Are view of three APA Journals. *Journal of Methods and Measurement in Social sciences* (8) 1, 3-19

Computer Literacy As Predictor of Business Education Students Entrepreneurial Intention In Tertiary Institutions In Anambra State

Amugo Ernest Nkwachi Nwafor Orizu College of Education, Nsugbe Department of Business Education amaugoee@gmail.com

Abstract

The study investigated computer literacy as predictor of business education students' entrepreneurial intention in tertiary institutions in Anambra State. One research question guided the study and one hypothesis was tested at 0.05 level of significance. The correlational research design was adopted for the study. The population of the study comprised 261 (300 level) business education students in the 2022/2023 academic session from four public tertiary institutions offering business education programme in Anambra State. The application of Statistical Package for Social Sciences (SPSS) version 21 using Cronbach Alpha reliability method on the obtained data yielded a score of 0.84 for internal consistency. This figure was deemed reliable for the study. Simple regression was used to analyse data for the study. The finding of the study revealed that computer literacy positively predicts business education students' entrepreneurial intention in tertiary institutions in Anambra State. Based on the finding, the researcher recommended that Administrators of business education programme should engage in partnership initiatives with private technology firms that would provide business education students with internship opportunities where they can learn and acquire practical computer literacy skills.

Keywords: Computer Literacy, Business Education, Students, Entrepreneurial Intention, Tertiary Institutions

Introduction

Business education is the education that prepares individual for business competencies necessary for teaching business attitudes, concepts, skills and knowledge. Edokpolor and Egbri (2017) explained that the business education curriculum is a one-of-a-kind academic course that prepares its graduates to work freely as self-employed and employers of workers. According to Olatoye et al. (2020), the objectives of business education include, among other things, providing students with opportunities to practise job preparation or vocation studies in order to prepare them to render effective and efficient services in office, distributive, and service occupations, as well as preparing students based on their interests and aptitudes with the skills, knowledge, and attitudes required to enter, advance, and profit in a business. Umezulike (2021) defined business education programme as a broad and comprehensive discipline whose instructional programme encompasses knowledge, skills, vocation and aptitude needed by all citizens in order to effectively manage their personal businesses and also function in the economic system. Akeke et al. (2023) stated that business education is an aspect of vocational education. They further stated that the primary purpose of business education is to educate individuals on business practices and prepare them for professions in the sector. Business education, which is often provided at intermediate and higher education institutions, aims to provide students with the abilities they need for the workplace while also supporting existing workers in upgrading their skills. Sadly, the business education programme in Nigeria seems to have failed in equipping its recipients with the necessary skills required to function in the world of work. This is manifested in the high rate of unemployment among business education graduates.

It is sad to note that despite the presence of entrepreneurship study centres in tertiary institutions in Anambra State in particular and Nigeria in general, graduates of business education students are still dependent on government paying jobs rather than leverage on the entrepreneurial opportunities abound in the state. This brings to question the state of students' entrepreneurial intentions in Anambra State. Suryani and Chaniago (2023) stated intention to act as a person's preparedness to carry out particular acts. In addition to objectives, preparation for certain behaviours is necessary. Entrepreneurial intention refers to a person's self-awareness of the prospect of joining a business and their commitment to it. Suryani and Chaniago claimed that beginning a firm with passionate intentions might lead to exponential growth. According to the Theory of Planned Behaviour (TPB), individuals with greater intentions are more likely to exhibit behaviours associated with becoming one(Nguyen et al., 2022).Hmaidouch et al (2023) defined entrepreneurial intention as the conscious decision to pursue an opportunity. This is a crucial stage in the entrepreneurial process as it leads to the creation and development of a new venture. Entrepreneurial intention has a significant favourable impact on entrepreneurial behaviour. Newman et al (2019) defined entrepreneurial intention as a person's desire to establish their own firm. This according to Suryani and Chaniago (2023) could be influenced by the students' computer literacy abilities.

Computer literacy encompasses the knowledge, skills, and understanding needed to effectively operate computer systems and technology. This includes proficiency in using computer interfaces, software programs, and digital resources (Philips and Lee, 2019). It involves familiarity with basic computer tasks such as starting up and shutting down a computer, using input devices like the keyboard and mouse, and navigating the operating system. Additionally, it involves understanding popular software tools such as word processors, spreadsheets, presentation software, and web browsers. Computer literacy also involves individuals' capability to effectively utilize digital devices and resources, as well as their ability to discern, access, manipulate, integrate, analyze, and combine various digital resources (Yuan et al, 2021). It requires a thorough mastery of digital skills and competencies for individuals to engage in the digital world in an educated, responsible, and productive manner. According to Suriwulan et al (2020), computer literacy is indispensable in today's digitally advanced society. It encompasses the skills necessary to access and utilize digital technology effortlessly while ensuring safety, wisdom, and productivity. Beyond the basics, computer literacy includes understanding file management, organizing and storing digital data, and utilizing cloud storage services. Knowledge of computer hardware components, network connectivity, and troubleshooting common computer issues may also be necessary (Ragaventhar, 2016). Yuan et al (2021) stated that using digital platforms like e-commerce and social media may assist new businesses save money, time, and labour, increase market penetration, and minimise risk. Digital technologies provide several benefits to businesses and may help cut unemployment rates nationwide. According to Islami (2019) and Hmaidouch et al (2023), students who have computer literacy skills have stronger entrepreneurial goals and are more likely to succeed in their entrepreneurial endeavour. Onwubuya and Ikechukwu (2023) indicated that computer skills may boost productivity, decision-making, and overall business performance. Survani and Chaniago (2023) reported that digital literacy has a positive and significant influence on vocational students' entrepreneurial intentions. However, these views have not been empirically verified in Anambra State. It is against this background that the researcher investigated computer literacy as predictor of business education students' entrepreneurial intention in tertiary institutions in Anambra State.

Purpose of the study

The main purpose of the study was to investigate computer literacy as predictor of business education students' entrepreneurial intention in tertiary institutions in Anambra State

Research question

What is the predictive value of computer literacy on business education students' entrepreneurial intention in tertiary institutions in Anambra State?

Hypothesis

Computer literacy does not significantly predict business education students' entrepreneurial intentions in tertiary institutions in Anambra State.

Methodology

The study adopted the correlational research design. It was conducted in Anambra State, South East, Nigeria. The population of the study comprised 261 (300 level) business education students in the 2022/2023 academic session from four public tertiary institutions offering business education programme in Anambra State. The institutions are; Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus (11), Nnamdi Azikiwe University, Awka (101), Federal College of Education (Technical), Umunze (96) and Nwafor Orizu College of Education, Nsugbe (53). Two questionnaires were used to collect data for the study. The first retain on questionnaire titled: "Computer Literacy Scale (CLS)." contained 20 items computer literacy. The second questionnaire is titled: "Students Entrepreneurial Intention Scale (SEIS)." contained 15 items measuring students' entrepreneurial intentions. Both instruments were structured on a four point rating scale of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD). The instrument was validated by three experts in the Department of Technology and Vocational Education in Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus. To further determine the internal consistency of the instrument, a pilot study was conducted on 20 students in Federal College of Education (Technical), Asaba. The application of Statistical Package for Social Sciences (SPSS) version 21 using Cronbach Alpha reliability method on the obtained data vielded a score of 0.84 for internal consistency which was deemed reliable for the study on computer literacy. Furthermore, test of reliability on the instrument on business education students entrepreneurial intention yielded coefficient value of 0.82. These coefficient values indicated that the instrument was highly reliable. Data for the study was administered by the researcher with the help of three research assistants. The research assistants were briefed on the mode of instruments administration and retrieval. The instrument was administered to the respondents in their lecture halls and around their department and faculty building. The instrument was administered and retrieved on the spot. Out of 261 questionnaire administered, 238 were returned in good condition and used for the analysis of data. The 238 copies of returned questionnaire amounted to 91% questionnaire return rate and the 23 copies of questionnaire not returned amounted to 9% lose rate. Simple regression analysis was used to analyse data for the study. In answering the research questions, the regression coefficient rule suggested by Stephen (2017) was used for judgment as thus:

Negligible	0.00-0.20
Low	0.20 - 0.40
Moderate	0.40-0.60
Substantial	0.60 - 0.80
Very High	0.80-1.00

For regression coefficient (r)

+ Sign = Positive Predictor

- Sign = Negative Predictor

Hypotheses

For P-value when

P-value < .05: Reject H_0 and Accept H_1

P-value>.05: Accept H_0 and Reject H_1

Research question

What is the predictive value of computer literacy on business education students' entrepreneurial intention in tertiary Institutions in Anambra State?

 Table 1: Summary of simple regression analysis with computer literacy as predictor of students' entrepreneurial intention in tertiary institutions in Anambra State

		Unstandardized	Std. Dev.	Standardized	
		ß ??	ß ??	ß ??	
Constant	Literacy	28.156	4.367	.367	
		.638	.411	.712	
R	.712				
R^2	.608				
Adj. R ²	.601				

The summary of the simple regression analysis as shown in Table 1 indicated that computer literacy highly predict business education students' entrepreneurial intention in tertiary institutions in Anambra State as shown by the regression coefficient (R = .712). The coefficient of determination (R^2), .608, showed that the explanatory power of the variable was highly strong. This implies that 61% of the variations in business education students' entrepreneurial intention in tertiary Institutions in Anambra State were accounted for by the variations in computer literacy. The adjusted R^2 supported the claim of the R^2 with a value of .601 indicating that 60% of the total variation in the dependent variable (business education students' entrepreneurial intention) was explained by the independent variable (computer literacy). Thus, adjusted R^2 supports the statement that the explanatory power of computer literacy is highly strong in determining business education students' entrepreneurial intention in tertiary Institutions in Anambra State. The standardized beta weight ($\beta = .712$) showed that computer literacy is a positive predictor of business education students' entrepreneurial intention in tertiary institutions in Anambra State. Hence, if business education students possess computer literacy skills, their entrepreneurial intention will increase.

Hypothesis

Computer literacy does not significantly predict business education students' entrepreneurial intentions in tertiary institutions in Anambra State.

	Unstandardized β	Std. Dev.	Standardized	t-value	p-valu
Constant	28.156	4.367		28.452	.000
computer Literacy	.638	.411	.712	31.291	.000
R .712					
R^2 .608					
Adj. R^2 .601					
F 42.642					.000

 Table 2: Test of significance of simple regression analysis with computer literacy as predictor of students' entrepreneurial intention in tertiary institutions in Anambra State

The summary of the test of significance of simple regression analysis as shown in Table 2 revealed that the simple regression coefficient (R) is .712 while the R^2 is .608 and Adjusted R^2 is .601. The F-ratio associated with regression is 42.642, the t-test is 31.291 and the P-value = .000. Since p-value (.000) is less than the specified level of significance .05, the study therefore rejected the null hypothesis that Computer literacy does not significantly predict business education students' entrepreneurial intentions in tertiary institutions in Anambra State and holds the reverse that it significant predicts business education students' entrepreneurial intentions in tertiary institutions in Anambra State.

Discussion

The finding of the study revealed that computer literacy is a positive predictor of business education students' entrepreneurial intention in tertiary institutions in Anambra State. This finding indicates that business education students who possess computer literacy skills are more likely to have higher entrepreneurial intentions. This suggests that a higher level of computer literacy positively influences the ability of business education students to generate financial gains in their entrepreneurial endeavours. Moreover, the research highlights another key finding, indicating a strong positive relationship between computer literacy and the expansion of entrepreneurial businesses. This implies that business education students who possess advanced computer skills are more likely to experience successful and substantial growth in their ventures. This is in line with Survani and Chaniago (2023) who reported that digital literacy has a positive and significant influence on vocational students' entrepreneurial intentions. In the same vein, Hmaidouch et al (2023) reported that digital literacy significantly impacts on university students' success as digital entrepreneurs. Furthermore, findings of the study revealed that Computer literacy significantly predict business education students' entrepreneurial intentions in tertiary institutions in Anambra State. Yuan et al (2021) averred that computer literacy also involves individuals' capability to effectively utilize digital devices and resources, as well as their ability to discern, access, manipulate, integrate, analyze, and combine various digital resources which has significant influence on entrepreneurial creation. Islami (2019) revealed that students with computer literacy skills have higher entrepreneurial intentions and would be successful in entrepreneurial ventures. Onwubuya and Ikechukwu (2023) stated that computer proficiency can improve productivity, decision-making, and overall entrepreneurial success

Conclusion

Based on the findings of the study, the researcher concludes that computer literacy significantly predicts business education students' entrepreneurial behaviour in tertiary institutions in Anambra State. It is therefore imperative that stakeholders in business education programmes in tertiary institutions come up with strategies for improving computer literacy among students in tertiary institutions to boost the entrepreneurship intentions of business education students graduation.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

- 1. Administrators of business education programme in conjunction with curriculum designers should ensure and carry out a comprehensive curriculum review that would facilitate the development of computer literacy skills among students in the business education programme.
- 2. Administrators of business education programme should engage in partnership initiatives with private technology firms that would provide business education students with internship opportunities where they can learn and acquire needed practical computer literacy skills.

References

- Akeke M. N. G.1, Oche P. E., Akuegwu B. A. & Ushie P. U. (2023). Entrepreneurial skills for business education graduates' employability in Cross River State, Nigeria. *Educational Research and Reviews*, 17(4), 138-144.
- Edokpolor, J. E. & Egbri, J. N. (2017). Business education in Nigeria for value re-orientation: A strategic approach for poverty alleviation and national development. *Journal of Educational Research and Review (JERR)*, 5 (3), 41-48.
- Hmaidouch, I., Jafari, A., El Khaddar, H., El Meskine, L. & Chakir, A. (2023). Predicting students' digital entrepreneurial intention. *Revue de l'Entrepreneuriat et de l'Innovation*, 5(19), 1-12.
- Islami, L. H. and Hmaidouch, W. X (2019). Two-body wear performance of dental colored zirconia after different surface treatments. Journal of Prosthetic Dentistry 116(4).
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, *110*, 403-419.
- Nguyen, D. T., Tran, V. D., & Ghafoor, A. (2022). The impact of covid-19 lockdown on intention to follow preventive measures in Vietnam: Integrated protection motivation theory and theory planed behavior. *Cogent Business & Management*, 9(1), 1–20. https://doi.org/10.1080/23311975.2022.2054502
- Olatoye, A.O., Ojeyinka, A. G. & Ogunleke, M. O. (2020). Business education in Nigeria: Challenges and way forward for national development. *Journal of the Business of Education (JTBE)*, 3(5), 75-80.
- Onwubuyam, U.N. & Ikechukwu, C.O. (2023). Digital literacy and entrepreneurial intentions of business education students in tertiary institutions. *International Journal of Social Sciences and Management Research*, 9(6), 101-112.
- Philips, A. L., & Lee, V. R. (2019). Whose responsibility is it? A statewide survey of school librarians on responsibilities and resources for teaching digitial citizenship. *School Library Research, 22*, 1-20.
- Ragaventhar, R. (2016). Cashless economy leads to knowledge economy through knowledge management. *Global Journal of Management and Business Research: B Economics and Commerce, 16*(8), 1-11.
- Suriwulan, T. Suparno, S. Disman, D. Ahman, E. & Suwatno, S. (2020). Entrepreneurial performance: The role of literacy and skills. *Journal of Asian 'Financial Economic and Business*, 7(11), 1-15.
- Suryani, S. & Chaniago, H. (2023). Digital literacy and its impact on entrepreneurial intentions: Studies on vocational students. *International Journal Administration Business and Organization*, 4(2), 16-22
- Umezulike, A. N. (2021). Inhibitions and rewards of professionalization of business education programme in Nigeria. Nigerian Journal of Business Education (NIGJBED), 8(1), 32-39.
- Yuan, Y. H., Liu, C. H. & Kuang, S. S. (2021). Innovative interactive teaching model for cultivating digital literacy talent in decision making, sustainability, and computational thinking. *Sustainability*, 13(9), 1-25.

Comparative study of Junior Secondary School Students' Academic Performance in Internal and External Examination of Home Economics

¹Okadigwe Chukwujekwu John Ph.D & ²Nomeh Blessing C.

^{1,2}Department of Home Economics, Nwafor Orizu College of Education Nsugbe ¹jekwuokad@gmail.com

Abstract

This study investigated the comparative academic performance of junior secondary school students in Home Economics examinations, both internal and external, within Anambra East Local Government Area, Anambra State, Nigeria, from 2017 to 2022. The study usedmixed method of research involving descriptive research design and an ex-post facto research design. The study was guided by four research questions. The population comprises all government-owned secondary schools in the area. Twelve (12) Home Economics teachers were involved in the study while stratified random sampling was utilized to select two hundred and fifty (250) students in each year for the study. Data collection involved analyzing student results in Home Economics across the specified years, direct distribution of questionnaire among Home Economics teachers, utilizing mean scores, standard deviation, and percentage calculations. Additionally, measures to improve academic performance were explored through teacher-endorsed strategies. Results indicate a consistent performance gap between internal and external examinations, with external assessments yielding higher mean scores across all years. Measures to enhance performance include emphasizing regular practice, encouraging active participation, utilizing resources effectively, teaching effective exam preparation strategies, and promoting study schedules. The findings underscore the importance of tailored interventions to bridge performance disparities and optimize student success in Home Economics education.

Keywords: junior secondary school, students' academic performance, internal examination, external examination, Home Economics

Introduction

Academic performance in secondary schools encompasses the evaluation of predefined standards of effectiveness, efficiency, and environmental accountability. It is a multifaceted concept that extends beyond mere grades or test scores; it reflects the culmination of a student's learning journey, encompassing their ability to apply knowledge effectively (Bonghawan & Macalisang, 2024). Teachers and educational authorities gauge academic performance through various metrics such as classroom performance, graduation rates, and standardized test results. Academic performance not only serves as a measure of individual achievement but also as a yardstick for evaluating the efficacy of educational institutions (Miguéis et al., 2018).

The significance of academic performance resonates not only with students but also with schools and universities as it underscores the effectiveness of the educational process. Academic productivity denotes the progression and improvement evident in one's academic journey (Olabanjo et al., 2022). However, academic performance is not solely contingent upon innate intellect; it also reflects attributes like diligence and perseverance. Whether at the elementary, high school, or tertiary level, academic performance plays a pivotal role in advancing to higher levels of education (Ojugo et al., 2023). Assessments of academic performance encompass a spectrum of factors including classroom performance, graduation rates, grade point averages, class placements, and standardized test results. Internal examinations conducted within

schools serve as integral assessments of student progress, offering insights for both students and teachers (Onafowope et al., 2024).

In contrast, external examinations, administered by external bodies, provide standardized assessments of student performance and serve as pivotal milestones in the educational journey. In Nigeria, external examinations like the Basic Education Certificate Examination (BECE) and the National Common Entrance Examination (NCEE) play crucial roles in evaluating student aptitude and determining educational trajectories (Nkpordee & Ibinabo, 2022). Home Economics, a vocational subject within the Nigerian education system, equips learners with practical skills essential for subsequent training or entry into the workforce (Nwadi et al., 2024). It fosters decision-making abilities and self-reliance, contributing to both personal and societal development (Malama, 2023). Despite its multidisciplinary nature, Home Economics emphasizes practical application and critical thinking, empowering individuals across various contexts (McGregor, 2015).

In essence, Home Economics education transcends mere skill acquisition; it embodies a holistic approach to problem-solving, drawing from diverse disciplines to address societal challenges (Polk, 2014). Its significance in fostering self-reliance and contributing to societal well-being is unparalleled in contemporary society. The present study is both urgent and important due to several compelling reasons. Firstly, understanding the variance between internal and external assessments is critical for evaluating the effectiveness of educational systems (Austin & Steyerberg, 2014). Internal assessments, conducted by schools, may differ significantly from external examinations administered by external bodies. This difference could potentially reveal discrepancies in grading criteria, teaching methodologies, or student preparation.

Secondly, the study is essential for identifying areas of improvement in Home Economics education. Discrepancies between internal and external assessments may highlight shortcomings in curriculum alignment or teaching strategies, impacting students' ability to perform well in standardized examinations. For instance, if internal assessments primarily focus on theoretical knowledge while external exams emphasize practical application, students may struggle to bridge this gap, affecting their overall performance. Recent studies demonstrate the urgency and importance of this study. For instance, Nziku and Matogwa (2021) amplified the roles of continuous assessment and highlights the significance of external examinations in assessing student performance accurately. Conversely, Zwane and Mpofu (2022) emphasizes the practical skills imparted by Home Economics education, suggesting a potential misalignment between internal assessments and external expectations. These studies illustrate the gaps in understanding the discrepancy between internal and external assessments, underscoring the urgency and importance of conducting a comparative study to address these issues.

Research Questions

- 1. What are the level of performance of Junior Secondary School students in Home Economics Internal Examinations in Anambra East L.G.A from 2017-2022?
- 2. What are the level of performance of Junior Secondary School Students in Home Economics External Examination in Anambra East L.G.A from 2017-2022?
- 3. What are the comparism between the students' academic performance in Home Economics internal and external examinations in Anambra East L.G.A from 2017-2022?
- 4. What are measures needed to improve academic performance Home Economics students in internal and external examination in Anambra East L.G.A

Methodology

The study employed mixed method of research involving descriptive survey design and an ex-post facto research design. This approach is valuable for exploring naturally occurring differences and

understanding real-world relationships between variables. The research was conducted in Anambra East Local Government Area, known for agricultural and commercial activities, with a population comprising all the twelve (12) government-owned secondary schools in the area, totaling 12 Home Economics teachers and 1500 students. Stratified random sampling was utilized to select 250 students annually.

Data collection involved using student results in Home Economics from both internal and external examinations, with grades categorized into Excellent (70-100), Credit (50-69), Pass (40-49), and Fail (0-39). For the teacher questionnaire in research question 4, the instrument's validity was ensured through expert validation, and reliability was established via test-retest method, yielding a reliability coefficient of 0.972. Multiple data collection methods were employed, including documented materials from selected schools and mean rating to answer research questions.

Data analysis for research question 4 utilized weighted mean score, standard deviation, and percentage score formulas. For percentage calculation, the formula % = (Total of uniformed response (X))/(Total response (N)) X 100/1 was used, while the mean score was calculated using the formula Means (x) = fx/f, where denotes summation, f represents frequency or number of occurrences, and N indicates the total. A decision rule of 2.50 mean score or above was set for accepting items as positive, with those below 2.50 considered less significant responses.

Results

Research Question 1: What are the level of performance of Junior Secondary School students in Home Economics Internal Examinations in Anambra East L.G.A from 2017-2022?

e 1: Mean performance scores of Junior Secondary School students in Home Economics Internal ninations in Anambra East L.G.A from 2017-2022
Std

					Std.		
Year of		Std.		Grouped	Error of	% of Total	
Examination	Mean	Deviation	Ν	Median	Mean	Sum	Skewness
2017	1.94	.927	250	1.83	.059	17.0%	.577
2018	1.80	.850	250	1.70	.054	15.8%	.790
2019	1.96	.873	250	1.89	.055	17.2%	.443
2020	1.86	.805	250	1.80	.051	16.3%	.531
2021	1.85	.701	250	1.80	.044	16.2%	.643
2022	2.00	.942	250	1.88	.060	17.5%	.589
Total	1.90	.855	1500	1.81	.022	100.0%	.620

Table 1 outlines the performance trends of Junior Secondary School students in Home Economics across six years, from 2017 to 2022, in Anambra East L.G.A. The mean scores fluctuate slightly, starting at 1.94 in 2017, dipping to the lowest at 1.80 in 2018, and gradually increasing to reach the highest at 2.00 in 2022. The standard deviation, indicating score variability, ranges from a low of .701 in 2021 to a high of .942 in 2022, suggesting differing degrees of dispersion in student scores each year. The grouped median scores closely mirror the mean scores, with the lowest median at 1.70 in 2018 and peaking at 1.89 in 2019. The standard error of the mean shows minor fluctuations, the smallest being .044 in 2021, indicating a high precision in the mean score estimation that year, and the largest being .060 in both 2017 and 2022, suggesting slightly less precision in those years. The percentage of the total sum column reflects each year's mean score as a percentage of the total mean score over the six years, with the lowest contribution in 2018 (15.8%) and the highest in 2022 (17.5%). Skewness values across the years remain positive, ranging from .443 in 2019, indicating a moderately skewed distribution, to .790 in 2018, suggesting a more pronounced skewness

towards higher scores.

Research Question 2: What are the performance of Junior Secondary School students in Home Economics External Examinations in Anambra East L.G.A from 2017-2022

 Table 2: Mean performance scores of Junior Secondary School students in Home Economics External

 Examinations in Anambra East L.G.A from 2017-2022.

						% of	
Year of		Std.		Grouped	Std. Error	Total	
Examination	Mean	Deviation	Ν	Median	of Mean	Sum	Skewness
2017	2.49	.911	250	2.51	.058	17.0%	093
2018	2.68	.787	250	2.65	.050	18.3%	.136
2019	2.45	.927	250	2.44	.059	16.7%	.092
2020	2.25	.808	250	2.27	.051	15.4%	022
2021	2.28	.722	250	2.27	.046	15.6%	.367
2022	2.48	.945	250	2.48	.060	17.0%	.046
Total	2.44	.865	1500	2.43	.022	100.0%	.088

Table 2 presents an analysis of Junior Secondary School students' performance in Home Economics External Examinations within Anambra East L.G.A from 2017 to 2022, revealing an intricate pattern of mean scores that fluctuate over the years. Initially, scores start at 2.49 in 2017, peaking at 2.68 in 2018, indicating the highest average performance within this time frame. A subsequent decline is observed, with the lowest mean score recorded at 2.25 in 2020. The standard deviation, a measure of score spread, also varies, with 2021 witnessing the tightest distribution (.722) and 2022 the widest (.945). Grouped medians closely track the mean scores each year, reflecting a consistent distribution of student performance. The analysis showcases a dynamic performance landscape, with 2018 contributing the highest percentage (18.3%) to the overall performance and 2020 the lowest (15.4%), alongside minor skewness across years, indicating slight deviations in score distributions.

Research Question 3: The Comperism between the students' academic performance in internal and external (Home Economics) examinations in Anambra East L.G.A from 2017-2022?

Year of Examination	Exam type	Mean	Std. Deviation	Ν	Grouped Median	Std. Error of Mean	% of Total Sum	Skewness
2017	Internal	1.94	.927	250	1.83	.059	7.5%	.577
	External	2.49	.911	250	2.51	.058	9.6%	093
	Total	2.21	.958	500	2.19	.043	17.0%	.206
2018	Internal	1.80	.850	250	1.70	.054	6.9%	.790
	External	2.68	.787	250	2.65	.050	10.3%	.136
	Total	2.24	.930	500	2.21	.042	17.2%	.257
2019	Internal	1.96	.873	250	1.89	.055	7.5%	.443
	External	2.45	.927	250	2.44	.059	9.4%	.092
	Total	2.20	.932	500	2.17	.042	16.9%	.270
2020	Internal	1.86	.805	250	1.80	.051	7.2%	.531
	External	2.25	.808	250	2.27	.051	8.6%	022
	Total	2.06	.828	500	2.04	.037	15.8%	.235
2021	Internal	1.85	.701	250	1.80	.044	7.1%	.643
	External	2.28	.722	250	2.27	.046	8.7%	.367
	Total	2.06	.742	500	2.03	.033	15.8%	.461
2022	Internal	2.00	.942	250	1.88	.060	7.7%	.589
	External	2.48	.945	250	2.48	.060	9.5%	.046
	Total	2.24	.974	500	2.19	.044	17.2%	.288
Total	Internal	1.90	.855	1500	1.81	.022	43.8%	.620
	External	2.44	.865	1500	2.43	.022	56.2%	.088
	Total	2.17	.901	3000	2.14	.016	100.0%	.313

 Table 3: Analysis between the students' academic performance in internal and external (Home Economics) examinations in Anambra East L.G.A from 2017-2022

Table 3 meticulously compares the academic performance of students in internal versus external Home Economics examinations in Anambra East L.G.A from 2017 to 2022. Notably, internal examination mean scores are uniformly lower, with the smallest at 1.80 in 2018 and the highest at 2.00 in 2022, culminating in an overall mean of 1.90. External exams, however, consistently outperform with scores, peaking at 2.68 in 2018, and an aggregate mean of 2.44. This trend is mirrored in the standard deviation, suggesting greater variability in external exam scores. The skewness values indicate a slight right skew for internal exams, compared to a more balanced distribution in external exams. The percentage of total sum further emphasizes the difference, with internal exams contributing 43.8% and external exams 56.2%. This analysis underscores a significant and consistent performance gap, pointing towards a potentially higher level of challenge or differing student preparation levels between the two examination types.

Research Question 4: What are measures needed to improve academic performance of Home Economics students in internal and external examination in Anambra East L.G.A.

S/N	ITEMS	SA	A	D	SD	Ν	??	Decision
1.	Emphasizing on the importance of regular practice by assigning homework; this will help students reinforce their understanding of the subject matter and improve their problem- solving skills.	10	0	2	0	12	3.7	Ac cepted
2	Encourage students to actively participate in class discussions, ask questions, and seek clarification when needed, in other to enhance their understanding of the topics and improve their overall engagement with the subject.	12	0	0	0	12	4.0	Ac cepted
3.	Encouraging students to make use of the various resources available to them, such as textbooks, online materials, and reference books and gain a deeper understanding of the subject.	5	7	0	0	12	3.4	Ac cepted
4.	Teach students effective exam preparation strategies, such as time management during exams, understanding the question format, and practicing mock exams. This will help them feel more confident and prepared on the day of the examination.	3	5	5	0	12	3.0	Ac cepted
5.	Teaching students to create a study schedule and allocate specific time slots for each subject. This will help them prioritize their studies and ensure they cover all the necessary topics.	12	0	0	0	12	4.0	Accepted

 Table 4: Mean rating on the measures needed to improve academic performance of Home Economics

 students in internal and external examination in Anambra East L.G.A

Source: Field study 2024

From Table 4, it was discovered that all item were accepted by the teachers the measures needed to improve academic performance Home Economics students in internal and external examination in Anambra East L.G.A. this measure includes emphasizing on the importance of regular practice by assigning homework this will help students reinforce their understanding of the subject matter and improve their problem-solving skills. Encourage students to actively participate in class discussions, ask questions, and seek clarification when needed, in other to enhance their understanding of the topics and improve their overall engagement with the subject. Encouraging students to make use of the various resources available to them, such as textbooks, online materials, and reference books and gain a deeper understanding of the subject. Teach students effective exam preparation strategies, such as time management during exams, understanding the question format, and practicing mock exams. This will help them feel more confident and prepared on the day of the examination. Teaching students to create a study schedule and allocate specific time slots for each subject. This will help them prioritize their studies and ensure they cover all the necessary topics.

Discussion of Findings

The academic achievements of Junior Secondary School students in Home Economics Internal Examinations within Anambra East L.G.A displayed variability from 2017 to 2022. Mean scores oscillated between 1.80 in 2018 and 2.00 in 2022, demonstrating slight fluctuations on an annual basis. Notably, students exhibited commendable and moderate performance levels across the internal Home Economics assessments. These observations align with prior research conducted by Oh **et al.**, (2017), who noted similar trends despite certain schools facing challenges in learning resource availability, indicating students' ability to excel under such circumstances. Variations in standard deviation across the years further indicated differences in score dispersion, with the highest deviation observed in 2022 at .942, and the lowest in 2021 at .701. These trends echo the findings of Asiegbu and Amojo (2021) and Nne and Ekene (2019) showcasing fluctuating patterns in academic performance among secondary school students in Anambra State. Conversely, studies by Onafowope **et al.**, (2024) reported more consistent performance levels among students in Ogun local government areas. Despite these fluctuations, the mean scores generally mirrored the grouped median scores, suggesting relative consistency in students' overall performance trends throughout the years.

The assessment of Junior Secondary School Students' performance in External (Home Economics) Examinations in Anambra East L.G.A from 2017-2022 revealed commendable and moderate achievements. Mean scores exhibited variations, commencing at 2.49 in 2017, reaching a peak of 2.68 in 2018, and marginally decreasing to 2.48 by 2022. These findings resonate with the analysis conducted by Adebayo **et al.**, (2018), which examined the Academic Performance of Home Economics Students in Junior Secondary School Certificate Examination, indicating that the majority of students pass the course with an average score, while a few exceed expectations. Similarly, fluctuations in the standard deviation indicated differing levels of score variability annually, with the highest deviation observed in 2019 at .927 and the lowest in 2018 at .787. These trends align with the research conducted by Alumona **et al.**, (2023), highlighting fluctuating academic performance patterns due to emergence of cultism in rural secondary schools in Anambra state. Furthermore, minor fluctuations in the standard error of the mean suggested varying degrees of precision in score estimation across the years. Overall, while fluctuations in performance were evident, there was no clear trend indicating improvement or decline in mean scores over the years.

In examining the academic performance of students in internal and external (Home Economics) examinations in Anambra East L.G.A from 2017-2022, it was evident that external examination mean scores consistently surpassed internal examination scores. For instance, in 2017, the mean score for external examinations stood at 2.49, whereas for internal examinations, it was 1.94. This pattern persisted throughout the years. Furthermore, standard deviations for external examinations generally exhibited lower values compared to internal examinations, indicating less variability in scores among students. This finding is corroborated by Egede and Omiegbe (2022), who observed similar trends in academic performance between internal and external examinations among secondary school students. Moreover, total mean scores, encompassing both internal and external examinations may significantly influence overall performance, internal assessments also hold considerable importance. This assertion resonates with Naliaka **et al.**, (2015), who argued that students tend to excel in internal examinations compared to external examinations due to the alignment of questions with the taught curriculum by teachers.

Research Question 4 was on the measures needed to improve academic performance of Home Economics students in internal and external examination in Anambra East L.G.A. the results showed that encouraging regular practice through homework assignments is crucial to enhance academic performance in Home Economics among students. This approach, as highlighted by Obi & Ezeudu (2021), helps reinforce understanding and problem-solving skills. Additionally, fostering active participation in class discussions and seeking clarification, as also emphasized by Nworgu & Ezeliora (2022), deepens comprehension and

engagement with the subject. Moreover, the utilization of diverse resources such as textbooks and online materials provides students with a broader understanding of the subject matter. In contrast, Onyema & Ugwoke (2021) highlighted the importance of personalized learning approaches tailored to individual student needs. Nonetheless, by implementing these measures, students can develop a robust foundation in Home Economics, leading to improved academic performance.

Conclusion

In conclusion, this comparative study of junior secondary school students' academic performance in internal and external examinations of Home Economics reveals several noteworthy findings. The analysis demonstrated that while there were fluctuations in performance over the years, external examination mean scores tended to be higher than internal examination scores. Additionally, standard deviations for external examinations were generally lower compared to internal examinations, indicating less variability in scores among students. These findings underscore the significance of both internal and external assessments in evaluating students' understanding and proficiency in Home Economics. Moreover, the study highlights the importance of implementing various strategies to enhance academic performance, such as regular practice, active participation in class discussions, utilization of resources, and effective exam preparation strategies. By incorporating these measures, educators and policymakers can work towards fostering a conducive learning environment that nurtures students' holistic development and ensures their success in both internal and external assessments of Home Economics.

Recommendation

Based on the findings of this study, the following recommendations were made:

- Adequate number of permanent qualified teachers should be recruited. It was discovered that students' performances in the external examinations does not only lie on the personal ability of the students individually or collectively but, it depends also on the impact from the teachers.
- Adequate libraries should be built in schools to enable the students prepare themselves very well for external examinations
- Adequate and well equipped laboratory should be built in schools to enable the students manipulate the equipment and know how to use them.
- There should be proper supervisions of teachers attendance to class.

References

- Adebayo, O. O., Daniel, O. O., & Oladipupo, F. C. (2018). Impact of School Location on Academic Performance of Home Economics Students in Junior Secondary School Certificate Examination. *IJRAR-International Journal of Research and Analytical Reviews*, 5(2).
- Alumona, I. M., Onwuanabile, K., Iwuoha, V. C., & Aniche, E. T. (2023). Old problem, new manifestation: the emergence of cultism in rural secondary schools in Anambra state, Nigeria. *Security Journal*, 36(3), 498-529.
- Asiegbu, C. E., & Amojo, C. O. (2021). School plant and academic performance of students in public secondary schools in Nnewi education zone of Anambra State. *Journal Plus Education/Educa?a Plus*, 29(2),174-189.
- Austin, P. C., & Steyerberg, E. W. (2014). Graphical assessment of internal and external calibration of logistic regression models by using loess smoothers. *Statistics in medicine*, *33*(3), 517-535.
- Bonghawan, R. G. G., & Macalisang, D. (2024). Teachers' Learning Reinforcement: Effects on Students' Motivation, Self Efficacy and Academic Performance. *International Journal of Scientific Research* and Management (IJSRM), 12(02).

- Egede, B., &Omiegbe, O. (2022). Are the Internal Selection Examinations Justified? Rethinking The Prediction of Students' Academic Performance Using Ordinary-Level Credit Passes. *OIDA International Journal of Sustainable Development*, *15*(03), 11-22.
- Malama, E. (2023). Challenges of Teaching and Learning of Home Economics in Selected Colleges of Education in Zambia. *Journal of Lexicography and Terminology (Online ISSN 2664-0899. Print ISSN 2517-9306*)., 7(2), 85-99.
- McGregor, S. L. (2015). Vanguard next practice for home economics: Complexity thinking, integral thinking, and the human condition. *International Journal of Home Economics*, 8(1), 64-77.
- Miguéis, V. L., Freitas, A., Garcia, P. J., & Silva, A. (2018). Early segmentation of students according to their academic performance: A predictive modelling approach. *Decision Support Systems*, *115*, 36-51.
- Naliaka, P., Odera, P., & Poipoi, M. (2015). Perceived psycho-social and school factors contributing to malpractices in internal examinations among secondary school students in Kakamega-Central Subcounty: Implications for counseling. *International Journal of Psychology and Counselling*, 7(2), 18-23.
- Nkpordee, L., & Ibinabo, M. O. (2022). On the multivariate analysis of students' academic performance in WASSCE in public senior secondary schools in Rivers state (2018-2020). *Journal of Mathematical Sciences & Computational Mathematics*, *3*(4), 441-491.
- Nne, A. A., & Ekene, E. K. (2019). Relationship among secondary school students' technological experience, academic engagement and academic achievement in mathematics in Anambra state. *Journal of Pedagogical Thought*, 85.
- Nwadi, C.L., Ede, M.O., Nwakpadolu, G.M., Okoro, J.O., Onu, E.A., Emeghebo, U.M., Ezeanwu, A.B., Ogbonna, K.A., Agu, P. U., Nkemjika, O. & Nwosu, N.(2024). Impact of stress coping strategy in modifying perceptions of school stress among adult learners enrolled in Home Economics and Indigenous Textiles Education in Nigerian Universities. *Medicine*, 103(12), p.e37392.
- Nworgu, B. G., & Ezeliora, B. (2022). Strategies for improving academic performance in Home Economics among secondary school students in Southeast Nigeria. *Journal of Education and Practice*, 13(3), 27-36.
- Nziku, D., & Matogwa, C. B. (2021). Investigation of The Roles of Continuous Assessment Towards Students' Performance in Secondary School National Examinations. *African Journal of Applied Research*, 7(2), 123-136.
- Obi, U. C., & Ezeudu, S. C. (2021). The impact of regular practice on academic performance in Home Economics among secondary school students in Anambra State, Nigeria. *Nigerian Journal of Educational Research*, 14(2), 75-86.
- Oh, K., Ha, J., & Lee, S. H. (2017). Review and alternatives to the internal consistency of home economics curriculum components: Focused on the clothing & textiles area. *Journal of Korean Home Economics Education Association*, 29(3), 49-75.
- Ojugo, A. A., Odiakaose, C. C., Emordi, F. U., Ako, R. E., Adigwe, W., Anazia, K. E., & Geteloma, V. (2023). Evidence of Students' Academic Performance at the Federal College of Education Asaba Nigeria: Mining Education Data. *Knowledge Engineering and Data Science*, 6(2), 145-156.
- Olabanjo, O. A., Wusu, A. S., & Manuel, M. (2022). A machine learning prediction of academic performance of secondary school students using radial basis function neural network. *Trends in Neuroscience and Education*, 29, 100190.
- Onafowope, M. A., Egwunyenga, E. J., & Anho, J. E. (2024). Work Climate and Students' Academic Achievement in Catholic Secondary Schools in Ogun State, Nigeria. *International Journal of Education, Learning and Development*, 12(3), 37-47.

- Onyema, I. E., & Ugwoke, P. O. (2021). Personalized learning approaches and academic performance in Home Economics among secondary school students in Anambra State, Nigeria. *Nigerian Journal of Educational Research*, 15(1), 55-66.
- Polk, M. (2014). Achieving the promise of transdisciplinarity: a critical exploration of the relationship between transdisciplinary research and societal problem solving. *Sustainability science*, *9*, 439-451.
- Zwane, P. E., & Mpofu, M. (2022). Decolonisation of home economics curriculum in Eswatini at high school and tertiary education. *International Journal of Home Economics*, 15(1), 44-54.

Leveraging Artificial Intelligence (AI) Technologies For Enhancing The Teaching of Business Subjects In Senior Secondary Schools In Anambra State, Nigeria

¹Amaugo Ernest Nkwachi & ²Anuka Chijioke Bernadine ^{1,2}Business Education Department, ^{1,2}Nwafor Orizu College of Education, Nsugbe, Anambra State ¹07036424660 & ²08062323605

Abstract

This study was carried out to determine the level of utilization of AI technologies to enhance the teaching of business subjects in senior secondary schools in Anambra State, Nigeria. Two research questions and two null hypotheses guided the study. The study adopted descriptive survey research design and 249 male and female business subjects teachers were studied without sampling. A-21 structured questionnaire tiled "Level of Utilization of AI Technologies for Enhancing Teaching of Business Subjects (LUAIT-ETBS)" was used for data collection. The questionnaire was validated by three experts in the field of business education and measurement and evaluation. The reliability of the instrument was established using trial-testing and data collected were calculated using Cronbach alpha which yielded coefficient values of .88 and .82 for clusters B1 and B2 respectively with an overall index of .85 obtained. A total of 249 copies of questionnaire were distributed to the respondents, 238 copies were correctly filled, retrieved and used for data analysis. Data collected were analyzed using mean and standard deviation to determine the homogeneity of the respondents' ratings while t-test was used to test the null hypotheses at 0.05 level of significance. Findings revealed that business subjects teachers do not utilize AI technologies for enhancing lesson preparation and delivery. The findings also showed that gender was not a significant factor on respondents' ratings of level of utilization of AI technologies for enhancing lesson preparation and teaching delivery. The researchers concluded that business subjects teachers are not leveraging AI technologies in enhancing their instructional delivery to prepare students for the higher education and the labour markets. It was recommended among others that; Ministry of Education in Anambra State should provide comprehensive training and professional development programmes for business subjects teachers to familiarize them with AI technologies and how they can be integrated into teaching practices effectively. These programmes should cover both the theoretical understanding of AI and practical skills in using AI tools and platforms.

Key Words: Artificial Intelligence, Business Subjects, Teaching Delivery, Secondary Schools

Introduction

Secondary education is an important phase in students' educational journeys globally. It acts as a link between primary education and higher education, or the workforce. Secondary education provides students with basic academic knowledge, skills, and chances for social growth (United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2020). Its main aim is to prepare pupils for future academic pursuits, job paths, and active participation in society. In Nigeria, Ile and Ikechukwu (2021) noted that secondary education plays a vital role in the nation's educational system, acting as the starting point for both academic and personal growth. Ile and Ndubuisi stated that the significance of secondary education in Nigeria stems from its ability to mold people's academic background, encourage critical thinking, and get them ready for new challenges.

Secondary education is slit into Junior Secondary School (JSS) and Senior Secondary School (SSS),

normally lasting six years (Federal Republic of Nigeria (FRN, 2013). The Upper Basic and Post Basic secondary levels of secondary education are provided by the FGN. Business studies at the JSS level include typewriting, shorthand, bookkeeping, office work, and commerce, while business subjects offered in SSS include Financial Accounting, Keyboarding, Economics, Commerce, Insurance, Marketing, Salesmanship, and Office Practice (Ile & Ikechukwu, 2021). Students can choose two or three business subjects in addition to other subjects to prepare for the West African School Certificate Examination (WAEC). Business subjects aim to equip students with a solid foundation in business principles, which can prepare them for further education in business-related fields or for entry-level positions in the workforce. Similarly, the subjects promote critical thinking, problem-solving, and entrepreneurial skills essential for success in the business world.

Business subject teachers must teach the subjects' contents effectively for students to acquire the requisite knowledge and skills. Teaching is the act of imparting knowledge and skills to students. Killen (2019) defined teaching as a variety of strategies intended to facilitate students' understanding and ease their learning. Formal and informal settings, including schools, colleges, and universities, can be used for teaching. Effective teaching of business subjects necessitates the use of digital technologies, which are currently transforming the field of education. Hew and Cheung (2019) claimed that digital technologies are changing the way students study, and teachers teach. An and Reigeluth (2020) posited that digital technologies and students to collaborate, fostering greater engagement and interaction regardless of geographical location. One of the digital technologies that are currently transforming teaching, learning, research and administration in education is Artificial intelligence (AI) (Manyika et al., 2018).

Artificial intelligence (AI) is the science and engineering of creating intelligent machines. AI was first mentioned by John McCarthy at a conference in 1956, who proposed the use of the term to describe computer with the ability to mimic or duplicate the functions of the human brain (Alabi, 2022). AI as defined by Benhamou and Janin (2018) is the collection of technologies that enables machines to act with a very high level of intelligence similar to humans. As noted by Alabi (2022), AI has several specialty areas, such as expert system, robotics, vision system, natural language processing and voice recognition, learning systems and neural networks. AI is gradually transforming the education sector. Leveraging AI in teaching business subjects in secondary schools can help in achieving the objectives of business subjects curriculum faster.

AI can improve the quality of teaching of business subjects. AI technologies can be utilized in educational areas of personalized learning, immersive learning experiences, and intelligent tutoring systems (World Economic Forum, 2018). When utilized effectively, AI can help business subjects teachers to analyze large data to identify patterns in students' performances, which will help the teachers to adjust their teaching strategies. Similarly, business subjects teachers can leverage AI technologies in preparing for lessons as well as actual lesson delivery. AI technologies can facilitate lesson planning, organization of contents to be taught, sourcing of lesson materials, teaching delivery, and assessments of students on a particular topic (Adnan et al., 2020). AI technologies can enhance lesson preparation Text Analysis Tools (NLTK, SpaCy), Learning Management Systems (LMS) with AI Features (Canvas, Moodle), Smart Sparrow, and Knewton as Adaptive Learning Platforms, and Content Creation Tools such as Articulate Rise, Quillionz.

Similarly, AI technologies that can be utilized by business subjects teachers for teaching delivery include: PowerPoint, Chatbots and Virtual Assistants tools, Virtual Reality (VR) and Augmented Reality (AR) tools, AI grading tools such as **Edulastic**, **Mika**, Quillionz, Gradescope, Albert, Cognii, **Read &** Write, Knewton, and Boddle Learning. In the same vein, Data Analytics Platforms such as Google

Analytics for G Suite, Tableau Public, Microsoft Power BI, Edmodo Insights and ClassCharts can help business subjects teachers to analyze students' performance, identify students' learning patterns, assess the effectiveness of teaching strategies, and make decisions to improve teaching delivery (Kizilcec et al., 2015).

In Nigeria, the utilization of AI in teaching by secondary school teachers has become a topic of interest to experts (Sallam et al., 2024). Business subjects should no longer be taught with traditional methods. Many AI technologies are now available to assist the instructional efforts of business subject teachers. Business subjects curriculum in order to continuously respond to changes in technology advances, requires business subjects teachers to leverage AI technologies in teaching so that students get accustomed to the technologies. As noted by Muhammed (2017), low utilization of digital technologies by teachers is a cause for concern to educational stakeholders. Ubulom and Ogwunte (2017) decried the low utilization of modern technologies for teaching by business subjects teacher. Ile and Ikechukwu noted that business subjects are operating at a pseudo level, a situation that negates the basic tenets of vocational education. Additionally, Thomas et al. (2023) observed that business subjects teachers in Nigerian secondary schools have faced criticism for their over reliance in traditional teaching methods which cause poor teaching delivery. Thomas et al (2023) reported low adoption of AI technologies in teaching by business educators. In agreement, Nannim et al. (2018), and Onah et al. (2020) found that educators in Nigerian schools use AI technologies for teaching at a low extent. The situation is not different in Anambra State as Ile and Ikechukwu (2021) and Ugwu (2016) earlier revealed that the high rate of poor performance of students in business subjects was as a result of low utilization of modern technologies by the teachers.

Gender may moderate the extent to which business subjects teachers use AI technologies for teaching. Gender norms and preconceptions may influence how business subjects teachers see AI technology. For example, female business subjects teachers may be hesitant to use AI for teaching if they perceive the field is dominated by men or is terrifying. On the other side, due to social pressure to be tech-savvy, male business subjects teachers may be utilizing AI in for instructional delivery more than their female counterparts. In relation to this, Ile and Ikechukwu (2021), and Ngeru (2015) found out that a significant difference existed between male and female business subjects teachers on the level of utilization of modern technologies for teaching. It is against this background that this study determined the level of utilization of AI technologies for enhancing teaching of business subjects in senior secondary schools in Anambra State, Nigeria.

Statement of the Problem

Business subjects are skill-oriented education that cannot be taught effectively without the use of traditional teaching materials, but with digital technologies. Business subject curriculum must adjust to technology advancements and educate students for future jobs in the economy. However, stakeholders, particularly parents and employers, are concerned about the teaching and learning of business subjects, as well as students' performance in such disciplines. Some teachers in Nigerian secondary schools frequently use traditional teaching approaches that may not fully capitalize on the promise of AI technologies to improve teaching. As a result, students (including business subjects students) may not have enough exposure to digital technology to succeed in the job or in higher education. Business subjects teachers in Nigerian public secondary schools have been chastised for failing to adequately prepare students for lucrative employment or self-employment in digital workplaces after graduation. The problem of business subjects students' low performance in internal and external examinations has yet to be remedied. This poor performance has been linked to a variety of issues, including inadequate teaching methods, a lack of laboratories, and the absence and ineffective use of new technologies in the majority of Nigeria's secondary schools. As a result, teachers of business subjects face the difficulty of providing the necessary manpower for the workplace while also preparing students for higher education in business-related fields. Hence, the necessity to determine the extent business subjects teachers leverage AI technologies for enhancing teaching of business subjects in senior secondary schools in Anambra State, Nigeria. Specifically, the study ascertained the level of (1) utilization of AI technologies for enhancing lesson preparation by business studies teachers in senior secondary schools in Anambra State, Nigeria (2) utilization of AI technologies for enhancing teaching delivery by business subjects teachers in senior secondary schools in Anambra State.

Research Questions

The following research questions guided the study;

- 1. What is the level of utilization of AI technologies for enhancing lesson preparation by business studies teachers in senior secondary schools in Anambra State, Nigeria?
- 2. What is the level of utilization of AI technologies for enhancing teaching delivery by business subjects teachers in senior secondary schools in Anambra State, Nigeria?

Null Hypotheses

The following null hypotheses were tested at 0.05 level of significance;

- 1. There is no significant difference in the mean ratings of male and female business subjects teachers on the level they utilize AI technologies for enhancing their lesson preparation in senior secondary schools in Anambra State, Nigeria.
- 2. Male and female business subjects teachers in senior secondary schools in Anambra State, Nigeria do not significantly differ in their mean ratings on the level they utilize AI technologies for enhancing teaching delivery.

Method

The design adopted for this study was the descriptive survey. The study was conducted in Anambra State, Nigeria using 249 business subjects teachers in the 261 public secondary schools in the State where business subjects are taught. Information obtained from Post Primary Secondary School Commission, Awka Anambra State as at June, 2024 showed that Awka zone has 50 secondary schools with 37 business subjects teachers, Nnewi zone has 40 schools with 31 teachers, Ogidi zone with 28 schools and 17 teachers, Onitsha zone with 61 schools and 73 teachers and Otuocha zone with 32 schools and 52 business subjects teachers There was no sampling since the population was manageable. Self-developed questionnaire titled "Level of Utilization of AI Technologies for Enhancing Teaching of Business Subjects (LUAIT-ETBS)" was used for data collection. The questionnaire consisted of two sections A and B. Section A contained item on demographic information of the respondents such as gender while Section B contained 20 items structured on five points rating scale, with response categories as Very Greatly Utilized (VGU), Greatly Utilized (GU), Moderately Utilized (MU), Rarely Utilized (RU) and Not Utilized (NU) with assigned weighted values of 5, 4, 3, 2, and 1 respectively. The face validity of the instrument was established using the opinions of experts in Business Education and Measurement and Evaluation from the Chukwuemeka Odumegwu Ojukwu University Igbariam. The reliability of the instrument was established using trial test and data collected were calculated using Cronbach alpha which yielded coefficient values of .88 and .82 for clusters B1 and B2 respectively with an overall index of .85 obtained. The researcher administered the questionnaire to the respondents in their schools with the help of four research assistants who were adequately briefed on the method of administration and retrieval of the questionnaire. On the spot distribution and collection of questionnaires was employed and those who did not fill their copies immediately were revisited on another agreed date. Out of 249 copies of questionnaire distributed, 238(96%) were correctly filled and returned and used for data analysis. Mean and standard deviation were used to answer the research questions and determine the homogeneity of the respondents' mean ratings while an Independent t-test was used to test the null hypotheses at a 0.05 level of significance. In testing the null hypotheses, when the p-value is less than 0.05 (p < 0.05), the null hypothesis was rejected otherwise, the null hypothesis was not rejected. Data

analysis was carried out using Statistical Package for Social Science (SPSS) version 23.0.

Results

 Table 1: Respondents' Mean Ratings and Standard Deviation on the Level of Utilization of AI

 Technologies for Lesson Preparation by Business Subjects Teachers

S/N	Utilization of AI Technologies for Lesson Preparation	X	SD	Remark
	I utilize;	-		
1	ScribeSense AI Tool to convert handwritten text into digital			
	format and assist in organizing and categorizing lesson content			
		1.35	.68	Not Utilized
2	SpaCy AI Text Analysis Tool to analyze subjects textbooks for			
	planning of lessons	1.30	.60	Not Utilized
3	GoConqr AI Tool to plan engaging lessons and assess student			
	understanding	1.28	.75	Not Utilized
4	Text Analysis Tools to generate summaries to aid lesson			
	planning	1.46	.86	Not Utilized
5	Fishtree AI Tool to create customized lesson plans that cater to	1.44	.58	Not Utilized
	the individual needs of my students			
6	Moodle AI technology to track students progress which helps			Not Utilized
	me in developing lesson contents	1.36	.87	
7	Cognii Virtual Learning Assistant to get suggestions for lesson			Not Utilized
	content, teaching strategies, and assessment methods	1.40	.68	
8	Smart Sparrow AI Tool to customize subject content and			Not Utilized
	assessments based on students' individual learning needs	1.43	.71	
9	Brightspace, an AI tool to create lesson plans	1.34	.68	Not Utilized
10	Google Dialogflow AI Tool to obtain guidance on subject			
	materials preparation	1.41	.82	Not Utilized
11	Smart Sparrow AI tool to design lesson plans that adjust to			
	each student's learning pace and style.	1.29	.59	Not Utilized
	Cluster Mean	1.37		Not Utilized

Table 1 shows a cluster mean score of 1.37 which indicates that business subjects teachers do not utilize AI technologies listed in the study for enhancing their lesson preparation. The item by item analysis reveals that all the 11 items listed are not utilized for business subjects lesson preparation with mean scores ranging from 1.29 to 1.45. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

S/N	Utilization of AI Technologies for Teaching Delivery	Χ	SD	Remark
	I utilize;			
12	Chatbots to facilitate communication with students during classes	1.35	.58	Not Utilized
13	Chatbots and Virtual Assistants technologies to provide instant			
	support to students during class activities	1.52	.85	Rarely Utilized
14	AI-powered Tutoring Systems to provide personalized tutoring			5
	to students and offer tailored explanations	1.48	.84	Not Utilized
15	Virtual Reality (VR) tool to create immersive learning experiences	1.31	.75	Not Utilized
16	Augmented Reality (AR) tool to create simulations that allow			
	students to explore complex concepts and scenarios in a			
	realistic and interactive environment	1.33	.67	Not Utilized
17	AR tool to bring lessons to life (make teaching and learning			
	real to the students)	1.31	.78	Not Utilized
18	AI grading systems to assess and provide instant feedback on			
	assignments, quizzes and examinations	1.29	.54	Not Utilized
19	AI-powered language translation technologies to bridge			
	language gap and reach a wider audience of students	1.36	.91	Not Utilized
21	AI-based Collaborative Learning Platforms to facilitate			
	collaborative learning experiences, and allow students to work	1.54	.72	Rarely Utilized
	together on projects			
	Cluster Mean	1.39		Not Utilized

Table 2: Respondents' Mean Ratings and Standard Deviation on the Level of Utilization of AI Technologies for Teaching Delivery by Business Subjects Teachers

Table 2 shows a cluster mean score of 1.39 which indicates that business subjects teachers do not utilize AI technologies listed in the study for enhancing their teaching delivery. The item by item analysis reveals that items 13 and 21 are rarely utilized by business subjects teachers for teaching delivery with mean scores ranging between 1.52 to 1.54, while the remaining seven items are not utilized for teaching delivery, with mean scores ranged between 1.29 to 1.48. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Table 3: Summary of t-test Analysis of mean Ratings of Male and Female Business Subjects Teachers on Level of Utilization of AI Technologies for Lesson Preparation

Gender	Ν	X	SD	df	t-value	P-value	Decision
Male	51	1.43	.68				
				136	1.23	.21	Not Significant
Female	86	1.31	.72				-

Table 3 show the mean ratings and standard deviation of male business subject teachers as (X = 1.43, SD = .68) and female business subjects teachers as (X = 1.31, SD = .72), with a degree freedom of 136. The t-value is 1.23 with a p-value of .21 which is greater than the alpha value of .05 (P = .21 > .05). Since the p-value is greater than the significant value, the null hypothesis is therefore accepted. This means that there is no

significant difference in the mean ratings of male and female business subjects teachers on the level they utilize AI technologies for enhancing their lesson preparation in senior secondary schools in Anambra State, Nigeria.

 Table 4: Summary of t-test Analysis of mean Ratings of Male and Female Business Subjects

 Teachers on Level of Utilization of AI Technologies for Teaching Delivery

Gender	Ν	X	SD	df	t-value	P-value	Decision
Male	51	1.45	.79				
				136	1.37	1.11	Not Significant
Female	86	1.33	.80				-

Table 4 show the mean ratings and standard deviation of male business subject teachers as (X = 1.45, SD = .79) and female business subjects teachers as (X = 1.33, SD = .80), with a degree freedom of 136. The t-value is 1.37 with a p-value of 1.11 which is greater than the alpha value of 0.05 (P = 1.11 > .05). Since the p-value is greater than the significant value, the null hypothesis is therefore accepted. This means that male and female business subjects teachers in senior secondary schools in Anambra State, Nigeria do not significantly differ in their mean ratings on the level they utilize AI technologies for enhancing teaching delivery.

Discussion of Findings

Findings of the study revealed that business subjects teachers do not utilize AI technologies listed in the study for enhancing their lesson preparation. The finding corroborates that of Ile and Ikechukwu (2021) which revealed that the extent of utilization of modern technologies in instructional processes by business subjects teachers was very low. Mbah (2016) earlier revealed that modern technologies were not utilized by Nigerian secondary school teachers for effective instructional delivery due to their non availability. This implies that modern AI technologies can only be utilized in teaching preparing business subjects lesson if they are available. In addition, Adedoyin and Soykan (2019) blamed limited lack of AI technological infrastructures, lack of awareness of teachers on the potential benefits of AI technologies in education, and poor trainings of teachers on AI integration in educational practices. Findings of the study also found that there was no significant difference in the mean ratings of male and female business subjects teachers on the level they utilize AI technologies for enhancing their lesson preparation in senior secondary schools in Anambra State, Nigeria. This findings aligns with the findings of Thomas (2017) that there was no significant difference in the mean response of male and female teacher on their level of utilization of AI technologies for instructional processes.

Findings of the study revealed that business subjects teacher do not utilize AI technologies listed in the study for enhancing their teaching delivery. The findings of the study corroborates the findings of Adanikin and Adanikin (2020) which found that most Nigerian secondary school teachers do not utilize digital technologies such as AI for enhancing their professional practices. In agreement, Thomas et al. (2023) reported that educators in Nigeria rarely utilized AI in their teaching delivery. Okoli and Ohwovoriole (2019) found that the level of utilization of digital technologies in Nigerian education system was very low., Oye and Banjo (2019) agreed that teachers in Nigerian secondary schools hardly utilized modern technologies teaching practices. findings of the study also revealed that male and female business subjects teachers in senior secondary schools in Anambra State, Nigeria did not significantly differ in their mean ratings on the level they utilize AI technologies. It could be that both male and female business subjects

teachers have similar access to training, resources, and support in implementing AI technologies in their teaching practices, as a result, they may be demonstrating similar levels of utilization and proficiency. In such a scenario, any differences based on gender would be minimized, leading to comparable mean ratings between male and female business subjects teacher.

Conclusion

The benefits of utilization of AI technologies in the field of education and especially in equipping business subjects students with employability skills for gainful employment or self-employment have been emphasized by educational experts. However, despite these benefits, the findings of this study revealed that business subjects teachers do not utilize AI technologies in enhancing the teaching of business subjects. The findings also showed that gender was not a determinant factor on the utilization of these AI technologies. Based on these findings, the researchers conclude that business subjects teachers are not leveraging AI technologies in enhancing their instructional delivery to prepare students for the higher education and the labour markets.

Recommendations

Based on the findings of the study, the researcher makes the following recommendations;

- 1. Ministry of Education in Anambra State should provide comprehensive training and professional development programmes for business subjects teachers to familiarize them with AI technologies and how they can be integrated into teaching practices effectively. These programmes should cover both the theoretical understanding of AI and practical skills in using AI tools and platforms.
- 2. Anambra State government should ensure that public secondary schools in the state have access to adequate resources and infrastructure, including computers, internet connectivity, and AI software tools. The state and federal governments, and stakeholders should invest in improving technology infrastructure in secondary schools to facilitate the utilization of AI technologies.
- 3. Ministry of Education in Anambra State should encourage collaboration and knowledge sharing among teachers, secondary schools, and educational institutions to exchange best practices and experiences in using AI technologies for teaching delivery. The Ministry should establish platforms for business subjects teachers to share lesson plans, resources, and success stories related to AI integration in teaching.
- 4. The curriculum planners should revise business subjects curriculum and pedagogical approaches to incorporate AI education as a core component. They should develop learning materials and lesson plans that integrate AI concepts and applications across business subjects. They should also emphasize hands-on, project-based learning activities that allow students to interact with AI technologies and develop critical thinking and problem-solving skills.

References

- Adnan, M., Anwar, S. M., Majid, M., & Qayyum, A. (2020). Artificial intelligence in education sector: A systematic review and future directions of research. *IEEE Access*, *8*, 177291-177312.
- An, Y. J., & Reigeluth, C. M. (2020). Creating Technology-Enhanced, Learner-Centered Classrooms: K-12 Teachers' Beliefs, Perceptions, Barriers, and Support Needs. *Journal of Digital Learning in Teacher Education*, 28(2), 54-62.
- Alabi, E. B. (2022). Adoption of artificial intelligence in business education and school administration. *Journal of Business Education, Management Science and Information Technology*, 8(2), 106-115.

Benhamou, S. & Janin, L. (2018). *Intélligence artificielleet travailParis*. France Stratégie. Federal Republic of Nigeria (2013). National policy on education, 6th edition. Abuja: NERDC.

- Hew, K. F. & Cheung, W. S. (2019). Use of Web 2.0 Technologies in K-12 and Higher Education: The Search for Evidence-Based Practice. *Educational Research Review*, 9, 47-64.
- Ile, C. M. & Ikechukwu, S. N. (2021). Utilization of modern instructional materials for teaching business subjects in secondary schools in Anambra State, Nigeria. NAU Journal of Technology & Vocational Education, 6(1), 449-59.
- Killen, R. (2019). Effective teaching strategies: lessons from research and practice (6th ed.). Cengage Learning
- Manyika, J., Chui, M., Bisson, P., & Woetzel, J. (2018). *The internet of things: mapping the value beyond the hype*. McKinsey Global Institute.
- Mbah, B. A. (2016). An Assessment on the availability and utilization of information and communication technology (ICT) for the teaching and learning of English language. *Journal of Sciences education*, 6(11), 25-65.
- Ngeru, E. W. (2015). Influence of teacher characteristics on utilization of instructional resources in teaching number work in preschools in Westlands Sub – County, Nairobi County. *Published master's degree thesis*, Department of Educational Communication and Technology University of Nairobi. Retrieved from http:// erepository.uonbi.ac.ke/bitstream/handle/1129597341
- Muhammed, M. N. (2017). Assessment of availability and utilization of instructional materials for teaching Islamic studies in junior secondary schools in Kaduna state, Nigeria.
- Nannim, A. F., Yushau, B. & Gital, A. Y. (2018). Lecturers' level of awareness of ICT facilities for teaching purposes in Abubakar Tafawa Balewa University (ATBU), Bauchi. *African Journal of Science Technology and Mathematics Education*, 4(1), 16-24.
- Onah, J. C., Onyebuchi, G. U., Eke, C. C., Adayi, I. O. (2020). Empirical evidence of availability and utilisation of Information and Communication Technology (ICT) in teaching and learning Cultural and Creative arts in Nsukka Local Government Area. *Journal of the Social Sciences*, *48*(3), 446-464.
- Sallam, M., Snygg, J. & Sallam, M. (2024). Assessment of artificial intelligence credibility in evidencebased healthcare Management with "AERUS" innovative tool. *Journal of Artificial Intelligence Machine Learning and Data Science*. 1, 9-18. 10.51219/JAIMLD/mohammed-sallam/20.
- Thomas, G., Gambari, A. I., Sobowale, F. M. & Shehu, B.A. (2023). Assessment of lecturers' utilization of artificial intelligence for education in a Nigerian university.
- Ubulom, W. J. &Ogwunte, P. C. (2017). Evaluation of instructional resources for teaching business subjects in public secondary schools in Rivers State, Nigeria. *International Journal of Innovative Education Research*, 5(4), 67-74.
- Ugwu, C.L. (2016). Assessment of utilization of instructional materials inteaching and learning of business education subjects in secondary schools in Enugu education zone of Enugu state. *Unpublished master's thesis*, Department of Vocational Technical Education, University of Nigeria, Nsukka.
- United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2019). Education for All global monitoring report: policy paper 24 Education Inequalities at the Crossroads: The Costs of I n e q u a l i t y i n E d u c a t i o n. R e t r i e v e d f r o m http://unesdoc.unesco.org/images/0024/002475/247516E.pdf
- World Economic Forum. (2018). The future of jobs report 2018. World Economic Forum. [Online report].
- Yushau, B., & Nannim, F. A. (2020). Investigation into the utilization of ict facilities for teaching purposes among university lecturers: influence of gender, age, qualification and years of teaching experience. *Pedagogical Research*, 5(2), 1-9.

Changing Gender Roles and Expectations in Nigerian Society: The Home Economists Perspective

¹Adilo Obioma Angela and ²Ezenwanne Dorothy N., Ph.D

¹Department of Home Economics and ²Department of Home Economics and Hospitality Management Education, ^{1.2}Nwafor Orizu College of Education Nsugbe ¹angellybridais@gmail.com, ¹08036720367

Abstract

This study explores the shifting landscape of gender roles and expectations within Nigerian society through the lens of Home Economics. It examines traditional gender roles, the context of Home Economics in Nigeria, and the field's connection to changing gender dynamics. The study delves into factors influencing these changes, such as education, socioeconomic shifts, and media influences. Furthermore, it discusses the challenges and opportunities presented by evolving gender roles, including persistent stereotypes and the potential for economic empowerment through Home Economics programs. The study showed that encouraging men in Home Economics requires campaigns, mentorship, challenging stereotypes, financial support, collaborations, and policy advocacy to foster gender diversity and inclusivity in the field. Recommendations for further progress are proposed, focusing on policy changes, educational initiatives, and community engagement. These recommendations aim to promote gender equality and inclusivity within the field and society at large. In conclusion, the study emphasizes the importance of collaboration, advocacy, and diverse perspectives in creating a future where all individuals have equal opportunities to thrive within their households, communities, and the nation.

Keywords: Gender Roles, Expectations, Nigerian Society, Home Economists, Home Economics

Introduction

The importance of Home Economics in developing countries like Nigeria cannot be overemphasized. Home Economics stands as a vital discipline at the intersection of practicality, household management, nutrition and health, clothing and textiles, hospitality, consumer sciences, design and technology, family dynamics among others. The field is rooted in the meticulous management of household resources and the promotion of healthy living (Philippy et al., 2024). Home Economics as practical skill course aims to equip individuals with needed skills for everyday life, such as budgeting, cookery, laundry, and parenting. Home Economics is not only about domestic tasks but also addresses broader issues like gender roles, resource management, nurturing and fostering physical development as well as sustainable living. It plays a vital role in promoting healthy, well-rounded lifestyles and empowering individuals within their homes and communities (Nwadi et al., 2024). The Home Economist therefore embodies a unique blend of empathy, practicality, and advocacy, making their personality invaluable in Nigerian society.

Home Economists serve as agents of change, bridging the gap between tradition and progress. They empower individuals, especially women, through education and skills development, fostering economic independence and decision-making within households (Blayac, 2023). In a society where gender roles have historically been rigid, Home Economists advocate for equality, challenging stereotypes and promoting shared responsibilities. Their work extends beyond individual households to communities, where they lead initiatives, workshops, and advocacy campaigns (Kehinde et al., 2023).

In the ever-evolving landscape of Nigerian society, the role of Home Economics in understanding

and addressing changing gender roles and expectations is paramount. Home Economics, as a multidisciplinary field encompassing aspects of family studies, nutrition, resource management, consumer sciences among others, offers a unique lens through which to examine these shifts (Estevez, 2017). Historically, Nigerian society has been deeply rooted in traditional gender roles, where women were primarily responsible for caregiving, household management, and child-rearing. Men, on the other hand, were often the breadwinners and decision-makers within the family unit (Oluwagbemileke & Uko-Aviomoh, 2023). These roles were not only socially constructed but also influenced by cultural norms and expectations.

Home Economists, through their study of family dynamics and resource management, recognize the impact of these traditional roles on household economics and well-being. As Jabeen et al., (2020) notes, "Traditional gender roles have implications for the distribution of resources within households, affecting access to education, healthcare, and economic opportunities". One of the key avenues through which Home Economists address changing gender roles is education (Alemu et al., 2023). Education is seen as a powerful tool for empowerment, especially for women who have historically been marginalized in Nigerian society. Home Economics programs often focus on providing practical skills and knowledge that empower individuals to challenge traditional gender norms (Azonuche, 2020).

A study by Umoru (2021) found that Home Economics education played a significant role in improving the economic status of women in Nigeria. By equipping women with skills in budgeting, entrepreneurship, and nutrition, Home Economics programs contribute to their economic independence and decision-making within the household (Obunadike et al., 2022). Beyond the individual level, Home Economists also work within communities to promote gender equality and challenge stereotypes. Community engagement is a core aspect of Home Economics, with professionals often leading workshops, outreach programs, and advocacy campaigns.

In advocating for gender equality, Home Economists also play a role in policy discussions and recommendations. By analyzing data on household economics, nutrition, and family dynamics, they provide valuable understanding for policymakers. A report by Madichie (2013) highlighted the need for policies that support shared household responsibilities, such as parental leave policies that encourage both men and women to actively participate in caregiving. Such policies not only promote gender equality but also contribute to healthier family dynamics.

Perspectives on Gender Roles in Nigeria

The misconception of the critical issues that pertain to gender has made its analysis of crucial importance in research. Most existing gender systems are deeply hierarchical, privileging that which is male or masculine over that which is female or feminine (although this need not be the case). United Nations International Children's Emergency Fund (2017) stated that gender is a socioeconomic variable analyzing roles, responsibilities, constraints and opportunities of people – both men and women. Amuwah et al (2023) go further to explain that gender norms are social norms defining acceptable appropriate actions for women and men in a given group or society. They are embedded in formal and informal institutions, nested in the mind, and produced and reproduced through social interaction. They play a role in shaping women's and men's (often unequal) access to resources and freedoms thus affecting their voice, power and sense of self.

Gender roles in Nigerian society have undergone profound transformations over time, shaped by historical, cultural, and socio-political factors. Historically, Nigerian society has been characterized by traditional gender roles, with women primarily assigned to caregiving and household management roles (Ejukonemu, 2018). These roles were deeply ingrained in cultural norms and practices, where women were expected to be the primary caregivers for children and elderly family members, as well as responsible for domestic chores. A study by Fan (2017) emphasizes the prevalence of these traditional roles and their significance in shaping family structures.

The shaping of gender roles in Nigeria has also been influenced by policies and practices, particularly during the colonial era and post-independence period. Colonial policies often reinforced gender stereotypes, with men seen as the breadwinners and women confined to domestic roles. This legacy has had enduring effects on gender norms and family structures in Nigeria (Ifegbesan & Azeez, 2024). Home Economics provides a lens through which to analyze how these policies and practices have shaped gender roles. For instance, the introduction of Western education and employment opportunities for women has gradually challenged traditional roles and provided avenues for economic empowerment. The Nigerian National Gender Policy, established to promote gender equality and women's empowerment, reflects efforts to address historical imbalances (De-Veauuse-Brown et al., 2022).

In recent decades, Nigeria has experienced significant shifts in gender dynamics, driven by factors such as urbanization, globalization, and educational attainment. Home Economics tracks these changes, examining their impact on family economics, nutrition, and child-rearing practices. The increasing participation of women in the workforce has led to changes in family economics, with dual-income households becoming more common. This shift has implications for household decision-making, resource allocation, and the division of labor within the home (Carlson & Hans, 2020). Moreover, changes in gender roles have influenced nutrition and child-rearing practices. Women's increased participation in the workforce may lead to shifts in meal preparation and dietary choices, impacting family nutrition (Smith et al., 2013). A study by Dinisman et al., (2017) highlights how these changes affect the well-being of children and the overall health of the family unit.

Changing Gender Roles in Modern Nigeria

In recent decades, Nigeria has experienced significant shifts in gender dynamics, particularly concerning the roles of women and men within the family unit. The increasing participation of women in the Nigerian workforce has had profound implications for family economics and roles. As more women pursue careers outside the home, there is a shift in the traditional division of labor within households. Women are no longer solely responsible for domestic duties but are also contributing to the family income.

This shift has both positive and challenging aspects. On one hand, it brings economic empowerment to women, enabling them to contribute financially to their households. A study by Jabeen et al., (2020) highlights how women's economic contributions have improved household living standards and increased access to education and healthcare for children. However, this change also presents challenges, particularly concerning the balancing act of work and family responsibilities. Women often face the dual burden of managing their careers while still fulfilling traditional caregiving roles. The pressure to excel in both spheres can lead to stress and fatigue, impacting family dynamics.

Concurrently, the expectations and roles of men in Nigerian society are also evolving. With the increasing participation of women in the workforce, men are being encouraged to take on more active roles in household management and caregiving. This shift challenges traditional notions of masculinity and emphasizes the importance of shared responsibilities within families. Men's evolving roles have implications for family dynamics and household management. A study by Del-Boca et al., (2020) discusses how men's involvement in household chores and childcare tasks has increased, leading to more equitable distribution of responsibilities. This shift not only benefits women by reducing their burden but also fosters stronger family bonds and shared decision-making.

The evolving roles within Nigerian families have significant implications for decision-making and resource allocation. Traditionally, decision-making in Nigerian households was often centralized, with men as the primary decision-makers (Oinas, 2018). However, as gender roles shift, decision-making becomes more collaborative and inclusive. Home Economics research, such as the study by Farooq & Kayani (2014), highlights how changing gender roles influence family dynamics. With women and men sharing responsibilities, there is a greater emphasis on communication and negotiation within families. This shift

towards more egalitarian relationships fosters mutual respect and understanding, ultimately benefiting the entire family unit. Furthermore, the impact on resource allocation is profound. As both women and men contribute to the family income, there is a reevaluation of priorities and financial management (Setiadi & Frederika, 2022). Home Economics education plays a crucial role in empowering individuals to make informed decisions about budgeting, savings, and investment.

Factors Influencing Changing Gender Roles

The evolution of gender roles in Nigerian society is influenced by a myriad of factors, reflecting the interplay of education, socioeconomic changes, media, and cultural norms as captured in Figure 1. Home Economics, as a field deeply concerned with family dynamics, household management, and consumer sciences, provides valuable understanding into these factors. Education is a powerful catalyst for challenging traditional gender roles and empowering individuals to pursue diverse paths (Dhiman, 2023). Home Economics, with its emphasis on education and skills development, plays a crucial role in this process. By providing practical knowledge on nutrition, budgeting, and household management, Home Economics equips individuals with the tools to challenge stereotypes and make informed decisions.

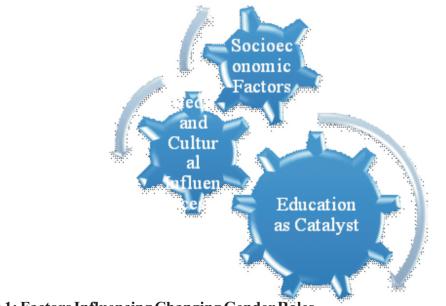


Figure 1: Factors Influencing Changing Gender Roles

A study by Gamawa (2015) highlights the role of Home Economics education in empowering women for sustainable development. The study emphasizes that education not only enhances individuals' economic prospects but also fosters a sense of independence and self-efficacy, enabling them to challenge traditional gender norms. Socioeconomic factors have a profound impact on gender roles within Nigerian households. As economic landscapes shift, so do the roles and expectations placed on men and women. Home Economics, with its focus on the economic aspects of households, provides valuable understanding into these changes (Schulz, 2013). For example, the increasing cost of living and the need for dual-income households have led to a reevaluation of traditional gender roles. Women are now more likely to contribute to the family income, leading to shifts in decision-making and resource allocation. A report by Farooq and Kayani (2014) discusses how social dynamics in rural Punjab and economic changes influence gender roles and family dynamics.

Media representations and cultural norms play a significant role in shaping household behaviors and expectations regarding gender roles. Home Economics can explore these influences and their impact on

family dynamics. Media often perpetuates stereotypes about gender, portraying women as caregivers and men as breadwinners. Cultural norms also contribute to the reinforcement of traditional gender roles. Home Economics research, such as the work of Oreffice (2014), delves into how cultural beliefs impact household decision-making and resource allocation. Understanding these influences is crucial for challenging stereotypes and promoting more equitable roles within families. Additionally, Home Economics can advocate for media literacy and critical thinking skills to help individuals navigate and question these representations. By promoting discussions on media influence and cultural norms, Home Economics contributes to a more nuanced understanding of gender roles in Nigerian society.

The Role of Home Economics in Shaping Gender Equality

Home Economics plays a vital role in shaping gender equality by serving as a platform for education, skills development, and fostering changes within families and communities as summarized in Figure 2. One of the fundamental ways Home Economics shapes gender equalities is through education. Home Economics programs provide a platform for promoting gender equality by educating individuals on gender issues, rights, and responsibilities. A study by Gamawa (2015) emphasizes the role of Home Economics education in empowering women for sustainable development. By integrating discussions on gender equality into the curriculum, Home Economics fosters awareness and critical thinking about societal norms and expectations. For example, Home Economics classes may include topics on gender stereotypes, gender-based violence, and women's rights. These discussions empower individuals, especially women and girls, to challenge societal norms and advocate for their rights.

Moreover, Home Economics educators often serve as advocates for gender equality, promoting inclusive teaching practices and creating a safe space for open dialogue. Through workshops, seminars, and community outreach programs, Home Economics professionals contribute to a more informed and empowered society. Home Economics is an act as it involves skills that are based on certain traditions and qualities that are intangible and indefinable, such as beauty, taste and values for navigating everyday life.

By providing individuals with these skills, Home Economics breaks down traditional barriers and promotes shared responsibilities within households. For instance, men learning home making skills challenge stereotypes about domestic duties being solely a woman's responsibility. A study by Ahamad et al., (2016) discusses how Home Economics programs promote skills development for men and women, leading to more equitable divisions of labor within households. Furthermore, these practical skills have broader implications for economic empowerment. Women who are skilled in budgeting and entrepreneurship, for example, are better equipped to start businesses and contribute to their household income. This economic empowerment not only benefits individuals but also strengthens families and communities.

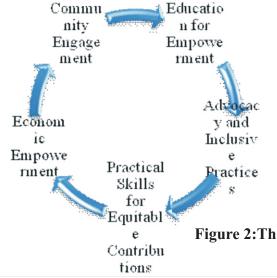


Figure 2: The Role of Home Economics in Shaping Gender Equality

Changes within families, influenced by Home Economics, can ripple out to impact broader community attitudes towards gender roles. As individuals within families adopt more equitable practices and challenge traditional norms, these changes can influence community perceptions and behaviors (Kinzig et al., 2013). For example, a family where both parents share caregiving responsibilities and decision-making may serve as a model for others in the community. This can lead to a shift in community attitudes towards gender roles, promoting inclusivity and equality. A report by Bloom (2021) discusses how changes within families can have a ripple effect on community norms. Moreover, Home Economics programs often extend their impact beyond the classroom through community engagement initiatives. By partnering with local organizations, hosting workshops, and leading advocacy campaigns, Home Economics professionals contribute to broader conversations about gender equality.

Bringing Men into the Home Economics Profession

The Home Economics profession, historically seen as a predominantly female domain, faces the challenge of attracting more men into its ranks. This challenge is rooted in societal perceptions and stereotypes that have long associated Home Economics with traditional gender roles. Understanding this challenge requires a deep dive into how these perceptions impact career choices and the broader implications for the field. Societal perceptions and stereotypes often paint Home Economics as a "women's profession," focusing on caregiving and domestic roles (Bailey, 2023). This narrow view limits the field's appeal to men, who may feel discouraged from pursuing a career in Home Economics due to these ingrained biases. Gender norms and expectations further compound this challenge, as men might feel pressured to pursue careers deemed more traditionally masculine.

These perceptions have tangible effects on career choices. Men may opt for fields perceived as more aligned with masculinity, such as engineering or finance, rather than exploring opportunities in Home Economics. This perpetuates a cycle where the field remains predominantly female, reinforcing stereotypes and limiting diversity. Research by Kossek et al., (2017)highlights the impact of these stereotypes on career choices, emphasizing the need to challenge these perceptions to create a more inclusive profession.

Encouraging more men to enter the Home Economics profession offers numerous benefits that extend beyond individual career paths. Male involvement brings diverse perspectives to the field, enriching curriculum development and teaching methods. By incorporating male viewpoints into Home Economics education, students gain a more holistic understanding of household management, budgeting, human development/health care, design among others nutrition. Furthermore, having male Home Economics professionals serves as powerful role models for aspiring men in the field. These individuals showcase the diverse and impactful roles available within Home Economics, inspiring future generations to consider the profession.

Strategies for Encouraging Men in Home Economics

Encouraging more men to pursue careers in Home Economics involves a multifaceted approach that addresses societal perceptions, provides support systems, challenges stereotypes, and advocates for policy changes. These strategies as captured in Figure 3 are crucial for promoting gender diversity and inclusivity within the field. Promoting inclusivity is key to attracting more men to Home Economics. Targeted campaigns can highlight the diverse and valuable roles within the field, emphasizing that it is not limited to traditional caregiving roles (Baxter et al., 2016). By showcasing the varied career opportunities available, both in education and industry, men can see Home Economics as a field with potential for growth and impact. Educational programs aimed at schools and communities can play a pivotal role. These programs should focus on showcasing the importance of male representation in Home Economics. Workshops, seminars, and career fairs can educate students, parents, and educators about the diverse skill sets and opportunities that Home Economics offers to men.

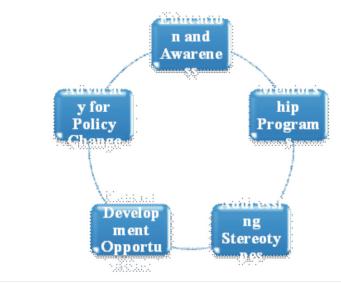


Figure 3: Strategies for Encouraging Male Participation and Diversifying the Home Economics Profession

Establishing mentorship programs is essential for providing support and guidance to aspiring men in Home Economics. Male professionals in the field can serve as valuable mentors, offering understanding into career paths, sharing experiences, and providing encouragement (Jones, 2017). These mentorship programs can be formalized through partnerships with schools, universities, and professional organizations. Connecting students with successful male practitioners is another impactful strategy. By hearing success stories firsthand, individuals can be inspired and motivated to consider Home Economics as a viable and rewarding career option. Career panels, guest lectures, and networking events can facilitate these connections.

Challenging stereotypes associated with Home Economics is crucial for breaking down barriers to male participation. Media campaigns, workshops, and seminars can be effective tools for challenging misconceptions (Nnubia, 2013). These initiatives should highlight the diverse skill sets and career paths available within the field, beyond traditional gender roles. Sharing success stories of men who have excelled in Home Economics careers can also help dispel stereotypes (Merma-Molina et al., 2022). These stories serve as powerful examples of the impact men can have in the profession, showcasing the breadth and depth of opportunities available.

Tailoring scholarships, grants, and financial assistance specifically for men entering Home Economics programs can be instrumental in reducing barriers to entry. Financial support can encourage more men to pursue education in the field, particularly those from underrepresented backgrounds (Mahapatra et al., 2024). Internships and job placement programs tailored to men can provide practical experience and exposure to different career paths within Home Economics. These programs can help individuals gain valuable skills and understanding, making the transition from education to employment smoother.

Fostering collaborations with related fields such as education, nutrition, and social sciences can showcase the interdisciplinary nature of Home Economics. Joint conferences, workshops, and research projects can demonstrate the importance of male representation in these fields and the value of diverse perspectives (Johnson et al., 2019). Advocacy for policy changes is essential for creating a supportive environment for male professionals in Home Economics. Engaging with government and educational institutions to promote policies that promote gender diversity in Home Economics education and employment is crucial. This includes advocating for inclusive hiring practices, equitable opportunities for

career advancement, and support for initiatives aimed at attracting and retaining male professionals.

Recommendations for Further Progress

Promoting gender equality within the field of Home Economics requires a comprehensive approach that addresses policy changes, educational initiatives, and community engagement as shown in Figure 4. These recommendations aim to empower individuals, challenge traditional gender norms, and create a more inclusive environment within the profession.

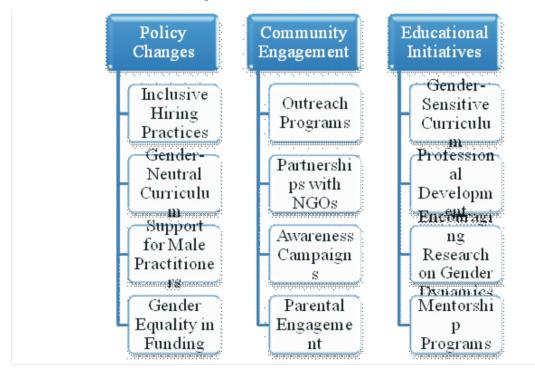


Figure 4: Promoting gender equality within the field of Home Economics

Policy Changes

Home Economics professionals often contribute significantly to policy discussions related to family welfare, making this area crucial for proposing policy changes that promote gender equality. Advocacy for policies within educational institutions and organizations that promote gender diversity in hiring practices is essential. This includes implementing recruitment strategies that actively seek to hire more men in Home Economics roles, breaking down barriers to entry for male professionals.

Proposals for curriculum revisions should be made to ensure inclusivity and representation of diverse perspectives. This involves incorporating case studies, examples, and research from male Home Economics professionals to showcase the breadth of contributions within the field. By offering a curriculum that is gender-neutral and diverse, students are exposed to a wide range of role models and career paths. It's crucial to advocate for policies that provide support and resources specifically tailored to male practitioners in Home Economics. This may include professional development opportunities, mentorship programs, and recognition of their contributions to the field. By acknowledging and supporting male professionals, the field becomes more welcoming and encourages greater participation.

Lobbying for funding allocations that support initiatives aimed at promoting gender equality in Home Economics education and research is vital. This includes funding for scholarships, research projects, and community outreach programs that focus on gender inclusivity. Adequate funding ensures that

initiatives to promote gender equality can be effectively implemented and sustained.

Educational Initiatives

Education plays a pivotal role in empowering individuals to challenge traditional gender norms. Specific strategies within educational initiatives can further this progress. Developing and implementing a gender-sensitive curriculum is essential. This involves incorporating lessons on gender equality, diversity, and inclusion into Home Economics courses at all levels. By addressing stereotypes and biases, students are equipped with the knowledge and understanding to promote equality in their future careers.

Offering professional development opportunities for Home Economics educators focused on gender equality and inclusive teaching practices is crucial. Workshops, seminars, and training sessions can equip educators with the tools to create inclusive learning environments where all students feel valued and respected. Encouraging and supporting research within the field of Home Economics that explores gender dynamics, roles, and challenges is essential. Funding research projects that focus on gender equality issues can provide valuable understanding for policy and practice. This research can inform the development of effective strategies to promote gender equality within the field and beyond.

Establishing mentorship programs, not only for students but also for educators, can be highly beneficial. Pairing experienced educators with newer faculty members can facilitate knowledge sharing and the implementation of best practices for promoting gender equality. Mentorship programs provide valuable support and guidance, particularly for those entering the field.

Community Engagement

Community engagement is a core component of Home Economics, making it a fitting field to discuss ways to engage communities in promoting gender equality. Developing and implementing community outreach programs focused on gender equality and inclusivity is essential. These programs could include workshops, seminars, and community events that educate the public on the importance of gender equality in household management, nutrition, and family well-being. By engaging with the community, Home Economics professionals can spread awareness and promote positive change.

Establishing partnerships with non-governmental organizations (NGOs) and community organizations focused on gender equality is crucial. Collaborative projects can amplify efforts to promote gender equality in homes, schools, and communities. By working together, Home Economics professionals and community organizations can create a more significant impact and reach a broader audience. Launching awareness campaigns that challenge gender stereotypes and promote positive role models is effective. Utilizing social media, public events, and traditional media channels can reach a wide audience and spark conversations about gender equality in Home Economics. By highlighting success stories of male professionals and showcasing their contributions, these campaigns can inspire others to pursue careers in the field.

Engaging parents and caregivers in discussions about the importance of gender equality in home management and caregiving is crucial. Workshops and seminars can provide parents with practical skills and strategies for promoting equal sharing of responsibilities within the family. By involving parents, Home Economics professionals can create a ripple effect that promotes gender equality from the household level upward.

Conclusion

In conclusion, the study sheds light on the dynamic landscape of gender dynamics within households and communities. Through an exploration of traditional gender roles, shifts in gender dynamics over time, factors influencing these changes, and the role of Home Economics, valuable understanding into the complexities of gender expectations in Nigeria have been gained. Home Economics emerges as a pivotal

field that not only observes but also actively engages with the evolution of gender roles. It delves into the traditional roles within households, such as women's caregiving and household management responsibilities, while also analyzing how policies and practices have shaped these roles and family structures. Moreover, Home Economics tracks changes in gender roles and their effects on family economics, health nutrition, relationship child-rearing practices among others.

The study highlights the importance of recognizing the challenges and opportunities that arise with changing gender roles. Persistent gender stereotypes continue to impact household decisions, from career choices to the division of labor and parenting roles. However, there is optimism in the potential for economic empowerment through Home Economics programs. These programs offer skills training and financial literacy, empowering individuals, especially women, to navigate and challenge societal norms. Looking to the future, the study proposes recommendations for further progress, such as policy changes to promote gender equality, educational initiatives to challenge stereotypes, and community engagement to spread awareness and foster inclusivity. These recommendations aim to create a more equitable environment within the field of Home Economics and beyond, emphasizing collaboration, advocacy, and the importance of diverse perspectives.

In essence, this study serves as a call to action for stakeholders in Nigerian society, from policymakers to educators to community leaders. By working together to promote gender equality and challenge traditional norms, a society where individuals of all genders have equal opportunities to thrive can be created. Home Economics stands at the intersection of these efforts, offering a platform for empowerment, education, and advocacy. As the evolving landscape of gender roles is navigated, a future where diversity is celebrated and everyone has the chance to contribute meaningfully to their households, communities, and the nation as a whole can be envisioned.

References

- Ahamad, T., Sinha, A., & Shastri, R. K. (2016). Women empowerment through skills development and vocational education. *SMS Journal of Entrepreneurship and Innovation*, *2*(2), 76-81.
- Alemu, N. E., Temesgen, E., & Dessiye, M. (2023). Do gender roles affect urban poverty in Ethiopia? A focus on women in micro and small enterprises. *Cogent Social Sciences*, 9(1), 2216509.
- Amuwah, V. O., Adojei, J. O., Ighoro, A. & Oyita, G. E. (2023). Determinants of gender roles and decision making in small-holder palm oil production in post Covid-19 pandemic in Delta State. *Nigeria Journal of Home Economics* (Nig-JHEC) 11(8), 240-247.
- Azonuche, J. E. (2020). Revitalizing Home Economics Education in tertiary institutions in Nigeria through ICT use for skill acquisition for global relevance. *Journal of Educational and Social Research*, *10*(6), 332-340.
- Bailey, S. (2023). Professionalisation of Home Economists in Britain from the 1950s to the 1980s: Mediating small domestic electrical appliances. *Women's History Review*, 1-18.
- Baxter, S. M., Kulczynski, A., & Ilicic, J. (2016). Ads aimed at dads: Exploring consumers' reactions towards advertising that conforms and challenges traditional gender role ideologies. *International Journal of Advertising*, 35(6), 970-982.
- Blayac, J. (2023). Jessica Peixotto, a home economist not thrilled by the thrift culture. *The European Journal* of the History of Economic Thought, 1-20.
- Bloom, J. D. (2021). "Spiraling up": Using ripple effect mapping to evaluate how an extension volunteer program increases community development capacity. *Community Development*, 52(1), 22-41.
- Carlson, M. W., & Hans, J. D. (2020). Maximizing benefits and minimizing impacts: Dual-earner couples' perceived division of household labor decision-making process. *Journal of Family Studies*, 26(2), 208-225
- Del-Boca, D., Oggero, N., Profeta, P., & Rossi, M. (2020). Women's and men's work, housework and

childcare, before and during COVID-19. *Review of Economics of the Household*, 18(4), 1001-1017.

- De-Veauuse-Brown, N. F., Annor, F. B., Swahn, M. H., & Self-Brown, S. R. (2022). Sexual violence experience among Nigerian girls and young women: What are the roles of early sexual debut, multiple sex partnerships, and traditional gender role beliefs?. *Journal of Interpersonal Violence*, 37(5-6), NP2747-NP2767.
- Dhiman, D. B. (2023). Education's Role in Empowering Women and Promoting Gender Inequality: A Critical Review. Available at SSRN 4556375.
- Dinisman, T., Andresen, S., Montserrat, C., Strózik, D., & Strózik, T. (2017). Family structure and family relationship from the child well-being perspective: Findings from comparative analysis. *Children* and Youth Services Review, 80, 105-115.
- Ejukonemu, J. A. (2018). Gender role in contemporary Nigerian society. *International Journal of Social Science and Economic Research*, 3(3), 1087-1098.
- Estevez, T. (2017). Home economist plans for her country's future. *The Iowa Homemaker*, 23(13), 12.
- Fan, Y. (2017). Household structure and gender differences in travel time: Spouse/partner presence, parenthood, and breadwinner status. *Transportation*, *44*, 271-291.
- Farooq, A., & K. Kayani, A. (2014). Social dynamics in rural Punjab: Changes in gender roles, spatial mobility and decision making. *International Journal of Sociology and Social Policy*, 34(5/6), 317-333.
- Gamawa, A. I. (2015). The role of home economics education in alleviating poverty for sustainable development and human capacity building in Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 6(7), 325-330.
- Ifegbesan, A. P., & Azeez, R. O. (2024). Gender and perception of gender role in Nigeria: Evidence from wave 6 of the World Value Survey. *Journal of Education*, 204(2), 259-266.
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability*, 12(7), 2731.
- Johnson, C., Tilt, J. H., Ries, P. D., & Shindler, B. (2019). Continuing professional education for green infrastructure: Fostering collaboration through interdisciplinary trainings. Urban Forestry and Urban Greening, 41, 283-291.
- Jones, J. (2017). How can mentoring support women in a male-dominated workplace? A case study of the UK police force. *Palgrave Communications*, *3*(1), 1-11.
- Kehinde, O. R., Osarenkhoe, I. S., & Okoruwa, J. O. (2023). Gender issues and challenges in post covid-19 pandemic: A home economist perspective. *Research Studies*, *3*(7), 1285-1291.
- Kinzig, A. P., Ehrlich, P. R., Alston, L. J., Arrow, K., Barrett, S., Buchman, T. G., Daily, G. C., Levin, B., Levin, S., Oppenheimer, M. & Ostrom, E. (2013). Social norms and global environmental challenges: the complex interaction of behaviors, values, and policy. *BioScience*, 63(3), 164-175.
- Kossek, E. E., Su, R., & Wu, L. (2017). "Opting out" or "pushed out"? Integrating perspectives on women's career equality for gender inclusion and interventions. *Journal of Management*, 43(1), 228-254.
- Madichie, N. O. (2013). Sex in the kitchen: Changing gender roles in a female-dominated occupation. International Journal of Entrepreneurship and Small Business, 18(1), 90-102.
- Mahapatra, M. S., Xiao, J. J., Mishra, R. K., & Meng, K. (2024). Parental financial socialization and life satisfaction of college students: Mediation and moderation analyses. *Young Consumers*, 25(1), 65-83.
- Merma-Molina, G., Ávalos-Ramos, M. A., & Martínez Ruiz, M. Á. (2022). Gender stereotypes: Persistence and challenges. *Equality, Diversity and Inclusion: An International Journal*, 41(7), 1112-1135.
- Nnubia, U. E. (2013). Gender stereotype in Home Economics programmes in Nigeria: Strategies for correction. *Academic Journal of Interdisciplinary Studies*, 2(5), 9-10.
- Nwadi, C. L., Ede, M. O., Nwakpadolu, G. M., Okoro, J. O., Onu, E. A., Emeghebo, U. M., Ezeanwu, A. B.,

Ogbonna, K. A., Agu, P. U., Nkemjika, O. & Nwosu, N. (2024). Impact of stress coping strategy in modifying perceptions of school stress among adult learners enrolled in Home Economics and Indigenous Textiles Education in Nigerian Universities. *Medicine*, *103*(12), p.e37392.

- Obunadike, J. C., Esiowu, A. P., & Ndubuka, C. J. (2022). Strategies for enhancing the integration of entrepreneurship education into Home Economics for sustainable retirement of women in Umunneochi, Abia State. *Nigeria Journal of Home Economics*, 10(7), 116-121.
- Oinas, T. (2018). The division of labour within households: Men's increased participation?. *Family, Work* and Well-Being: Emergence of New Issues, 21-33.
- Oluwagbemileke, F. B., & Uko-Aviomoh, E. E. (2023). Systematic review of philosophical engagement among Home Economics professionals in Nigeria. *International Journal of Home Economics*, 16(2), 66-82.
- Oreffice, S. (2014). Culture and household decision making: Balance of power and labor supply choices of us-born and foreign- born couples. *Journal of Labor Research*, 35(2), 162-184.
- Philippy, D., Betancourt, R. G., & Dimand, R. W. (2024, February). Hazel Kyrk's intellectual roots: When first-generation Home Economists met the institutionalist framework. In *Research in the History of Economic Thought and Methodology: Including a Symposium on Hazel Kyrk's: A Theory of Consumption 100 Years after Publication* (7-26).
- Schulz, N. (2013). *Home Economics: The Consequences of Changing Family Structure*. AEI Press.
- Setiadi, R., & Frederika, R. (2022). Family financial planning for disaster preparedness: A case study of North Semarang, Indonesia. *International Journal of Disaster Risk Reduction*, *82*, 103332.
- Smith, L. P., Ng, S. W., & Popkin, B. M. (2013). Trends in US home food preparation and consumption: Analysis of national nutrition surveys and time use studies from 1965–1966 to 2007–2008. *Nutrition Journal*, 12, 1-10.
- Umoru, M. L. (2021). Home Economics Education training as a panacea to COVID-19 impact on food access and nutrition among rural families in Northern Nigeria. *International Journal of Home Economics*, 14(1), 143-152.
- United Nations International Children's Emergency Fund (2017). Gender Equality: Glossary of Terms and Concepts. <u>www.unicef.org/gender/training/content/resources/glossary.pdf</u>.

Information And Communication Technology (ICT) Skills Required By Business Education Students In Colleges of Education In Anambra State

¹Uzoka Obioma Agatha and ² Anozie Patience Ukamaka Ph.D Department of Business Education Nwafor Orizu College of Education, Nsugbe Anambra State ¹obiomsy@gmail.com; ²amakapatienceanozie@gmail.com

Abstract

The study focused on the ICT skills required by Business Education students in colleges of education in Anambra State. Four research questions guided the study. A survey research design was adopted for the study. The population of the study was 435 while the sample size was 200. Structured questionnaire was used as an instrument for data collection. Data collected were analysed using mean and standard deviation. The result of the study showed that students require word processing skills, power point skills, micro soft excel skills and internet skills for effective learning of Business Education in Colleges of Education in Anambra State. It is based on this that the study recommended that appropriate and relevant ICT equipment should be made available in the Business Education laboratories, and all ICT facilities should be in check, therefore upgrade of old equipment and that he department of Business Education should teaching the students all the ICT skills they require is very necessary and also make provision for competent users to improve the Business Education student flow of work in communication, ICT and other skills both externally and internally, so as to remain at the competitive edge in the area of study and outside their area.

Keywords: Information and Communication Technology, Skill, Business Education

Introduction

Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. According to Rouse (2014) and Odian (2014), ICT is defined as a system designed to acquire, analyse, synthesize, store and distribute appropriate information required by managers to perform their duties (Odiari, 2014). Computer, communication equipment's, gadgets such as (iphone, i-pad, windows mobile, etc) software used to prepare, arrange, design, install, save, transmit, interpret and finally manipulate information in its divers format are all embedded in information and communication technology (ICT). Some types of ICT tools are the computer, laptops, tablets, mobile phones, microchips, television and so on.

ICT equipment include computer, phones printers compact discs among others. According to Egwuelu (2006), information and communication tools include; telecommunication, satellite technologies, electrical and electronic hardware and electronic computing software, the internet and global systems of mobile communication (GSM), DVD and player, Computer, phones, printers, Compact Disc and many others.

The world has developed into a global village with the introduction of ICT and the development of ICT has not only brought the world closer but had equally allowed tile world's economy to be a single independent system. This suggests that sharing of information through ICT eliminate geographical barriers. The role of information communication technology in the 21st century cannot be over emphasized. It has been described by several researchers as vital tools in keeping ahead with rapidly changing technologies.

According to Kwacha (2007), the educational field worldwide has been greatly influenced by ICT. This is because ICTs make great impacts on the quality and quantity of teaching, learning and research in institutions using it. The introduction of ICT usage has ushered in a new world of educational method, logics, having the potentials to accelerate, enrich and deepen skills which motivate and engage students. In learning, it helps students to relate school experience to their daily lives, help in strengthening teaching techniques and providing opportunities for connection between the school and the world (Davis and Yusuf, 2015).

Despite the huge importance of ICT in the education system, the investment in ICT in Nigerian educational system have not yielded much, when compared to similar investments made in other areas. According to Ndoh (2016), most universities have little or nothing to show for the existence of ICT in their area. He further noted that most of the students in these institutions do not have the skills in using the ICTs equipment in their area.

In Colleges of Education in Anambra State, the case is not different as most of the students especially Business Education students do not have adequate skill in the use of ICT in after graduation. Skill acquisition in the use of these ICT soft wares and hard wares are very important to educational development and the world of work of these Business Education students. It is based on this that the researcher sought find out ICT required by Business Education students.

Statement of the Problem

The influence of ICT is very wide and vast, in our society presently. The reason in advancement is to change from the unorganized and non-systematic ways of running different activities whether the business or academics would or collections of information. Going down memory lane, we realize that when new technologies are acquired by an institution; a challenge is been posed with usage and application of innovation. Hence, using ICT to achieve educational goals, how are the users of IC'T (students, staff, and administration) motivated, since competency is linked to individual's performance outcome.

Revolutions do not only require leadership with a clear vision and what the vision is about but also entails know-how and manipulative ability. This is where we find that completely equipped institution with purpose to achieve the laid down objectives of Business Education in respect to limited know-how (knowledge) resulting from computers and media illiteracy, poor research achievement, this have led to ICT paralysis. Furthermore, there may be technically advanced students but they are handicapped when it comes to other competencies like: communication ability and information enhancement.

Teaching and learning process in Business Education in Nigeria n tertiary institutions is still at it crudest form. In fact students are still relying on textbook information and lecturer's class verbalization due to the general poor attitude towards innovation. So students believe that government has neglected education. But the reality is that many students are yet to fully utilize ICT for learning. Due to this deficiency, the actual duties of Business Education students such as secretarial duties; effective marketing distributive duties, and accounting duties have been difficult and tedious. Also, some subjects such as Business studies are not well learned by students due to failure of institutions to supplement the traditional method of teaching with the ICT related education, thus calling for research in this direction.

Purpose of the Study

The main purpose of the study was to ascertain the ICT skills required by Business Education students. Specifically the study sought to;

- 1. Ascertain the word processing skills required by Business Education students.
- 2. Determine the power point skills required by Business Education students.
- 3. Find out micro soft excel skills required by Business Education students.

4. Ascertain the internet skills required by Business Education students.

Research Questions

In other to solve the research problems, the following research questions have been formulated for the study.

- 1. What are the words processing skills required by Business Education students?
- 2. What are the power point skills required by Business Education students?
- 3. What are the Microsoft excel skills required by Business Education students?
- 4. What are the internet skills required by Business Education students?

Methodology

The study adopted a descriptive survey research which involved gathering data through the use of questionnaire. The population of the study consisted of 838 Business Education students from Colleges of Education in Anambra State, Nigeria. The sample size of the study was 250 students selected using proportionate sampling technique. The study utilized a validated four-point scale questionnaire with a reliability coefficient of 0.78 utilized through Cronbach Alpha reliability method. The researchers with the help of two research assistants administered and collected the instrument from the respondents. The data collected for the study were analysed using the arithmetic mean and standard deviation. Thus, any item with a mean rating of 2.50 or above was regarded as accepted while mean rating less than 2.50 was regarded as not accepted.

Research question 1: What are the word processing skills required by Business Education students? **Table 1: Mean X and standard deviation (SD) score on the word processing skills required by Business Education students?**

S/N	MS-Word Skilk	Ef??	STD	Remark
1	Speed and Accuracy	3.40	1.65	Accepted
2	Creating, saving and retrieving documents	3.10	1.46	Accepted
3	Editing and printing skill	2.80	1.33	Accepted
4	Using shortcut on the keyboard	3.51	1.75	Accepted
5	Setting tabs and margin	3.22	1.52	Accepted
6	Creating and formatting tables	2.95	1.41	Accepted
7	Page breaks and numbering	2.95	1.41	Accepted
8	Text alignment and fonts	3.10	1.46	Accepted
9	Copy and paste	2.80	1.33	Accepted
	Grand Mean	3.10		1

Table 1 showed the means and standard deviation of the word processing skills required by Business Education Students. The table showed that items 1-9 were all accepted by the respondents as the word processing skills required by Business Education Students. This is evidently shown in the mean scores of the items which were 3.40, 3.10, 2.80, 3.51, 3.22, 2.95, 2.95, 3.10 and 2.80 respectively, which were all above 2.5. Finally, the table had the grand mean of 3.10. This implied that information and communication technology (ICT) skills are relevant to Business Education students and should of necessity be acquired.

Research question 2: What are the power point skills required by Business Education students? **Table 2: mean** *x* **and standard deviation (SD) score on the power point skills are required by Business Education students?**

S/N	Power Point Skills	Ef??	STD	Remark
10	Creating and running a slide adding, resizing, and moving text or object.	3.68	1.89	Accepted
11	Adding background design (templates)	2.98	1.41	Accepted
12	Using outlines adding slide transitions	3.11	1.46	Accepted
13	Saving a presentation	3.21	1.52	Accepted
14	Adding new slides	3.40	1.65	Accepted
15	Opening an existing file	3.45	1.75	Accepted
16	Inserting clipart	3.10	1.46	Accepted
17	Using graphic images from the internet	2.77	1.33	Accepted
18	Adding transition	3.41	1.65	Accepted
19	Printing a presentation	3.45	1.29	Accepted
	Grand Mean	3.27		

Table 2 showed the mean scores of power point skills required by Business Education students. The table showed that items 10-19 were accepted by the respondents as power point skills required of Business Education Students. There is evidently shown in the mean scores of the items which were 3.68, 3.98, 3.10, 3.21, 3.40, 3.45, 3.10, 2.77, 3.41 and 3.45 respectively which were above 2.5. Finally the table had the grand mean score of 3.27.

Research Question 3: What are the Microsoft excel skills required by Business Education students? **Table 3: Mean ((x)and standard deviation (SD) score on the Microsoft excel skills required by Business Education students**

S/N	Microsoft Excel Skills	Ef ? ?	STD	Remark
20	Adding Rows and Columns	3.31	1.58	Accepted
21	Creating and Deleting cells	3.12	1.52	Accepted
22	Creating and Moving within a spreadsheet	2.68	1.31	Accepted
23	Making calculations of figure	3.20	1.52	Accepted
24	Saving created cell	3.12	1.52	Accepted
25	Editing cell address	2.50	1.29	Accepted
26	Formatting of cells	2.95	1.41	Accepted
27	Making graphics and charts	2.95	1.41	Accepted
	Grand mean	2.98		

Table 3 showed the mean score of Microsoft excel skills required by Business Education students. The table showed that the respondents agreed with items 20-27. This is evidently shown in the mean scores of the items which were 3.31, 3.12, 2.68, 3.20, 3.12, 2.50 and 2.95 and 2.95 which were above 2.5. Finally the table had

the grand mean of 3.0 which showed that all the items are the Microsoft excel skills required by Business Education Students.

Research Question 4: What are the internet skills required by Business Education students?
Table 4: Mean (x) and standard deviation (SD) score on the internet skills required by Business
Education students?

S/N	Internet skills	Ef??	STD	Remark
29	Software development	3.10	1.46	Accepted
30	Web design	3.20	1.52	Accepted
31	Programming	2.45	1.29	Accepted
32	Networking	3.21	1.52	Accepted
33	Performing search using search engines	2.98	1.41	Accepted
34	Send and receive Electronic mails	3.20	1.52	Accepted
35	Downloading files to personal computers	3.10	1.46	Accepted
36	Web Blog management	3.66	1.98	Accepted
37	White-hat hackers	2.95	1.41	Accepted
	Grand mean	3.10		

Table 4, showed the mean scores of internet skills required by Business Education Students with mean scores 3.1, 3.2, 2.5, 3.2, 3.0, 3.2, 3.1, 3.7 and 3.0 respectively which were above 2.5 the cut-off point for acceptance. This showed that the respondents agreed with the items as internet skills required by Business Education Students. Finally, the table had the grand mean of 3.1 indicates that the listed internet skills are required by Business Education Students in Colleges of Education in Anambra State.

Discussion of Findings

Table 1 showed that items 1-9 with the mean scores of 2.5 and above cut-off point for acceptance were accepted as Word processing skills required by Business Education students. This indicates that the theoretical teaching has been done, and there are computer laboratories, ICT library, personal computer, printers, etc. available for the students in Colleges of Education in Anambra State. In line with the findings, Charles (2011) argued that teaching facilities rank second after inadequate capabilities of the teachers and learners in ensuring success in educational abilities of students. He asserted that what motivates learners towards competency and self-reliance is the availability of facilities (infrastructure), these infrastructures include the computer, internet, tables and chairs, fax, telecommunication and so on. Robert (2021) also pointed out that availability of required facilities enhance Business Education, thus providing enough practical experience in one or all business occupations. Based on the findings, the researcher asserts that skilled personnel should be employed in the ICT laboratories and library to assist students while practicing and during practical to enhance performance of Business Education students and the course programme.

Table 2 showed the Power point Skills required by Business Education Students. Thus, the result of the data analysed in table 2 (research question II) above revealed that all the PPT skills listed from 10- 19 with mean above than 2.5 cut-off point for acceptance were accepted by the respondents, as PPT skills required by Business Education students. This finding is in line following the widely discussed benefits of ICT skills to Business Education students (Nwosu, 2006), one would have expected the graduating students

of business education, to a great extent manipulate all ICT equipment and tools. The implication of the finding is that this skills acquired will enable the students perform academic work well, manipulate the PPT gadgets during their presentations. Based on the funding, the researcher maintains that PPT skills are required by Business Education students in their programme to improve their manipulative skills.

Table 3 showed the Microsoft excel skills required by Business Education Students. The implication of this finding is that for the students to be fully relevant in the labour market, learning these skills would build them up for the future. The researcher based on this finding asserts that micro soft excel skills are required by Business Education students in their program and will help them in calculative Business Education courses.

Table 4 showed the Internet Skills Required by Business Education Students. This is in line with the view of Okeke and Ezenwafor (2011) that Business Education students in the South-East universities possess internet skills to a great extent. Agomuo (2007) even warned that Business Education programme at every tertiary level must blend with the technological skill, and this concerns both the students. In line with the above findings, students could learn from wherever they are with the use of group chart, social network virtual classroom. And through the internet skills Business Education student would learn new skills that come along side newly developed ICT equipment.

Conclusion

From the findings of this study, one can see that lots of ICT skills which will help improve the performance of Business Education student academically .and work wise, bridge the gaps that exist between theories and practice in business education, widen the knowledge in Business Education students that are not been taught or practiced and ICT packages not yet fully utilized. Innumerable benefits are offered by ICT in enriching the quality and quantity of learning in business education. Although they have not been fully integrated into teaching practically due to problems or challenges facing it, but their integration will develop the student innate scientific inquiry mind and their critical thinking abilities, and revolutionize teaching and learning process (theory and practical aspect).

Recommendation

- 1. Appropriate and relevant ICT equipment should be made available in the Business Education laboratories, and all ICT facilities should be in check, therefore there is need to upgrade old equipment in the department of Business Education.
- 2. Colleges of education in Anambra State under department of Business Education should incorporate ICT skills into the business education curriculum to prepare students for the digital age, and also educate students on effective use of the internet and online resources for research, information gathering, and professional development.
- 3. There is need for the government to subsidize the cost of ICT faculties and equipment to enable Business Education Students and colleges of education afford and acquire them. And the national policy on ICT in education should be made standardized and mandated to be adhered to by colleges of education.
- 4. The body governing the universities, Nigeria University Commission (NUC) should include ICTbased for accreditation alongside other courses in the universities throughout the country, because this will compel the institutions to take ICT serious and as such delivering a more education in a more efficient way.

References

Agomuo, S (2007) Performance Management Employee Well-being among Student. March 20. A.13.

- Charles, F (2011) Information and communication technology revolution: opportunities or threat for SMES world association of small and medium enterprises 15th international conference on small and medium enterprises.
- Davis, D and Yusuf, E (2015) *Information and communication technology in education delivery in Nigeria*. *An evaluation of recent experiences*. Ile-Ife: Cognet Publishing Company.
- Kwacha, C R (2007), Financial Accounting: Principles and Practices. Enugu. New Concept Pub.
- Ndoh, F. D (2016), Education in the "E" Era: Implications for national education reforms. A lead paper presented at the 9th annual conference of ABEN at Colleges of Education in Anambra State 16th 20th October, 2007.
- Ndukwe, C (2016). Business education, technology and national development. *Business Education Journal* 3 (5) 1-8
- Odiari, V (2014). Ontology of modern technology: An integral approach. Ibadan: African Educational Press.
- Okeke, O. P & Ezenwafor, B V (2021) Analysis of problems hindering information and communication technology in Business Education in Imo State Polytechnics. *Unpublished Ph. D Thesis. Imo State University*
- Robert, G (2021). The impact of the new communication technology in the broadcast industry *International Journal of Communication* 3 (1), 72-81
- Rouse, H T (2014). The need for problem solving skills in the Secretarial education curriculum. *Business Education Journal*, 6(1), 197-206.

La Place Des Langues Africaines Dans La Litterature Africaine

Uzor, Ogechukwu Chinulu Department of French ogendubisi2003@gmail.com; 08062202891

Résumé

Autrefois, en Afrique, les artistes échangeaient littéralement de nombreuses diatribes au sein de leur caucus et à l'extérieur avec différents chercheurs intéressés par la littérature africaine. Vous ne pouvez pas entasser la littérature africaine dans une définition petite et soignée. On ne voit pas la littérature africaine comme une unité mais comme des unités associées – en fait, la somme totale de toutes les littératures nationales et ethniques d'Afrique. Le désaccord n'est plus flagrant. Cependant, la question qui appelle une réponse est la suivante : Les langues africaines sont-elles devenues productives dans la littérature africaine ? Ce travail signifie que ce n'est peut-être pas encore le cas. Il évalue cette situation, en fournissant les facteurs responsables. L'un de ces facteurs est le non-développement et le sous-développement des langues africaines. En outre, le document recommande et fait des suggestions qui peuvent améliorer la situation ; dont l'un consiste à promouvoir et à encourager les œuvres littéraires réalisées dans les langues africaines par des récompenses.

Introduction

La langue est un moyen de communication d'idées ou de sentiments via des signes, des sons ou des marques conventionnels avec des dénotations et des connotations distinctes. Les vues de Sapir, Hall et Trager citées dans Crystal corroborent ceci : Sapir commente que le langage est une méthode purement humaine et non instinctive de communication d'idées, d'émotions et de désirs au moyen de symboles produits volontairement ; Trager le considère comme un système de symboles vocaux arbitraires au moyen desquels les membres d'une société interagissent en termes de leur culture globale ; et Hall soutient que c'est l'institution par laquelle les humains communiquent et interagissent les uns avec les autres au moyen de symboles oraux-auditifs habituellement utilisés. Les rôles du langage dans la communication comme suggéré ci-dessus fait Essien pour y voir la « quintessence de l'humanité ».

L'utilisation du langage dans la communication illustre son relation avec l'esprit. La grammaire universelle de Chomsky La théorie de la grammaire universelle met en évidence cette relation. Selon Cook, l'importance de la grammaire universelle est sa tentative d'intégrer la grammaire, l'esprit et l'acquisition à chaque instant. L'esprit ici suggère la créativité. Par conséquent, Emenanjo soutient que le langage traverse les artefacts, les faits sociaux et les faits mentis. Artefacts se former à partir de la flore et de la faune d'une aire culturelle ; faits socio-économiques proviennent de structures politiques, sociales, juridiques et économiques, tandis que les mentions-faits cèdent au langage dans ses multiples facettes et des réalisations multidimensionnelles qui sont représentées dans des idées, croyances et créativité orale et littéraire. La littérature est clairement l'un des menti-faits résultants de son emploi du décodage et codage et construction et déconstruction capacités du langage en cours d'établissement de la réalité, qui est son objet. En d'autres termes, la littérature dépend langue.

Le langage est instancié sous diverses formes. C'est ici langage externalisé (e-langage). La connaissance d'un orateur. Ce qu'un orateur sait Le langage est un langage intériorisé (i-langage). C'est représenté dans l'esprit/cerveau, Chomsky. Plus de manière détaillée, Carnie explique : ...

quand les linguistes parlent de Langue (ou i- langue), ils parlent généralement de la capacité des humains à parler n'importe quel (particulier) Eme & Mbagwu : Langues africaines et littérature africaine langue. Certaines personnes (notamment Noam Chomsky) appellent aussi cela le Langage Humain Capacité. La langue (écrite avec un L majuscule) est la partie de l'esprit ou du cerveau qui vous permet de parler, alors que la langue (avec un l minuscule) (également connu sous le nom de langage électronique) est une instanciation de cette capacité (comme le français ou l'anglais).

Le point ici est qu'il y a une différence entre la langue et une langue. Anglais, Igbo, Haoussa, Français, Russe, Le chinois, l'allemand, l'urhobo, etc. sont des instanciations de langue et quand nous affirmons que la littérature dépend de langue, nous entendons l'une des langues ou l'une des les langues du monde. C'est pourquoi il est possible de parler sur la littérature en anglais, la littérature en igbo, la littérature en Ibibio, littérature en français etc ou plus largement littérature en langues africaines, littérature en langues européennes langues etc. Cependant, la littérature dans une langue ne reflète pas pleinement ce qu'est la littérature, c'est simplement une représentation superficielle. C'est parce que la vie de un peuple est ancré dans sa littérature (Ukpai et Orji).

Pouvons-nous noter que la vie telle qu'utilisée par Ukpai et Orji fait référence aux valeurs culturelles du peuple. Ceci et bien plus est indiqué par Obi, « La littérature est devenue un moyen important de comprendre et interpréter les êtres humains et les aspects de la société comme la politique, la religion, l'économie, les conflits sociaux, lutte des classes et condition humaine ». Autrement dit, quand on parle de littérature, deux facteurs sont essentiels, une langue et une société humaine qui parle la langue, où la langue est le moyen d'expression et la société le fournisseur de croyances et de manières qui sont exprimées. Dans ce cas, il est possible de parler de littérature anglaise, de littérature français, Littérature kiswahili, littérature igbo ou Unizik Journal of Arts and Humanities Vol. 12 n $^{\circ}$ 1, 2011, littérature largement africaine, littérature européenne, asiatique littérature, littérature américaine, etc.

Cet article se concentre sur la littérature africaine. Particulièrement, il tente d'évaluer dans quelle mesure les langues africaines sont impliqués dans la littérature africaine. Indices de l'évaluation sont plutôt de la littérature africaine, de la littérature francophone. Dans les sections ci-dessous, l'évaluation est présentée. Aussi, l'importance des langues africaines dans La littérature africaine est discutée et les facteurs responsables d'utilisation insuffisante des langues africaines dans la littérature africaine sont donnés et discutés. Recommandations pour modifier la situation sont proposées. Ils sont suivis d'une conclusion.

La littérature africaine et la question linguistique

La littérature africaine était majoritairement orale jusqu'au 19e siècle où les tentatives de mettre certaines langues africaines dans les formes écrites ont commencé considérablement (Ukpai et Orji). Le les tentatives sont devenues plus productives au XXe siècle. Par exemple, les premiers romans Igbo, Omen?k? et Ala Bingo ont été publiés entre 1905 et 1909. Les tentatives cependant diminué vers le milieu du 20e siècle. La raison pour cela provenait de l'acceptation des langues étrangères par les Africains pour s'occuper de presque toutes leurs affaires. C'est évident dans Bamgbose. Il commente : « Les Nigérians ont appris à adorer, et peut-être à surestimer la valeur d'un langue étrangère ».

La surestimation de la valeur des langues étrangères est plutôt écrasante en Afrique aujourd'hui. Mbagwu et Obiorah soulignent qu'il n'existe pratiquement aucun pays africain dans lequel un la langue indigène joue pleinement un rôle officiel. Dans leurs mots : « Ce qui existe, ce sont les pays africains qui ont les langues autochtones aux côtés des langues exo glossiques comme langues officielles. Le Kenya et la Tanzanie... en sont la preuve.

Avec cette situation, les langues africaines Je n'ai pas bien travaillé en littérature. En fait, dans les années 1960, Eme & Mbagwu : African Languages and Africain Litterature, Il y a eu une discussion sur le langage approprié de Littérature africaine. Même si certains affirmaient que les langues africaines étaient

adaptés à la littérature africaine, ont soutenu beaucoup dans le contraire. La Conférence des écrivains africains de 1962 fut démonstration de cela.

Wali était la voix de ceux qui étaient pro-africains littérature en langues africaines alors que l'Achebe était compris l'usasse des langues anti-africaines dans la littérature africaine. Wali, dans son critique de la Conférence des écrivains africains de 1962, explique : Il ne doit pas discréditer les écrivains qui ont beaucoup accompli en matière de droits individuels au sein d'une situation extrêmement difficile et illogique. C'est souligner que toute l'acceptation sans réserve de l'anglais et du français comme médium incontournable car l'écriture africaine instruite est mal orientée.

La position de Wali, comme le montrent ses paroles, est que les Africains les langues ne doivent pas être sous-estimées et reléguées au second plan statut non pertinent à l'exaltation de la linguistique exo glossique normes. Par conséquent, commente-t-il, « ... jusqu'à ce que ces écrivains et leurs les sagesfemmes occidentales acceptent le fait que la véritable littérature africaine doivent être écrits en langues africaines, ils ne seraient que poursuivre une impasse, qui ne peut conduire qu'à la stérilité, manque de créativité et frustration ».

La position d'Achebe ici reste sur son point de vue :

On ne peut pas regrouper la littérature africaine dans une définition courte et soignée. On ne pas considérer pas la littérature africaine comme une seule unité mais comme des unités associées – en fait, la somme totale de toutes les littératures nationales et ethniques de l'Afrique ».

Ce qui précède révèle à quel point les langues – Africaines sont impliquées dans la littérature africaine, même si elle semble que le désaccord ait disparu. En effet, le nombre de romans, pièces de théâtre et poèmes produits par des Africains en anglais et le français sur une base annuelle est bien supérieur au nombre de telles œuvres se sont révélées dans des langues africaines. Au Nigéria pour par exemple, bien qu'il existe une production louable de littérature en igbo, yoruba et haoussa, notamment en raison de leur statut officiel régional, il y a l' absence ou la négligence de la présence de telles œuvres dans la myriade d'autres langues Nigeria.

L'importance de la littérature africaine dans ses langues

La littérature est le reflet du passé d'un peuple et d'un projection de leur aspiration vers l'avenir (Duvignand, 67). En autres termes, sa tâche est de maintenir l'imaginaire collectif d'une société vivante telle que ses membres puissent canaliser leurs énergies vers la construction sociale communautaire (Caudwell, 145).

Les pro-africains de la littérature étrangère; les langues trouveront un certain support dans ce qui précède. C'est parce que les romans, pièces de théâtre et poèmes africains en anglais ou en français en particulier comportent le reflet de la vie des Africains Ce qui précède révèle à quel point les langues

Africaines sont impliquées dans la littérature africaine, même si elle il semble que le désaccord ait disparu. En effet, le nombre de romans, pièces de théâtre et poèmes produits par des Africains en anglais et le français sur une base annuelle est bien supérieur au nombre de telles œuvres se sont révélées dans des langues africaines. Au Nigéria par exemple, bien qu'il existe une production louable de littérature ecrit en igbo, yoruba et haoussa, notamment en raison de leur statut officiel régional, il y a absence ou négligence de telles œuvres dans la myriade d'autres langues Nigeria.

La position d'Achebe ici repose sur son point de vue : «On ne peut pas regrouper la littérature africaine dans une définition courte et soignée. On ne considérer pas la littérature africaine comme une seule unité mais comme des unités associées – en fait, la somme totale de toutes les littératures nationales et ethniques de l'Afrique ».

Ce qui précède révèle à quel point dans l'Afrique, les langues sont impliquées dans la littérature africaine, même si elle semble que le désaccord ait disparu. En effet, le nombre de romans, pièces de théâtre et poèmes produits par des Africains en anglais et le français sur une base annuelle est bien supérieur au

nombre de telles œuvres se sont révélées dans des langues africaines. Au Nigéria pour par exemple, bien qu'il existe une production louable de littérature travaille en igbo, yoruba et haoussa, notamment en raison de leur statut officiel régional, il y a absence ou négligence présence de telles œuvres dans la myriade d'autres langues Nigeria.

L'importance de la littérature africaine dans ses langues

La littérature est le reflet du passé d'un peuple et d'une projection de leur aspiration vers l'avenir (Duvignand, 67). En autres termes, sa tâche est de maintenir l'imaginaire collectif d'une société vivante telle que ses membres puissent canaliser leurs énergies vers la construction sociale communautaire (Caudwell, 145).

Cependant, ils manquent le point exprimé plus tôt concernant la différence entre, la littérature anglaise et la littérature en anglais. Eme & Mbagwu Langues africaines et littérature africaine. La littérature anglaise parle du peuple anglais dans son langue alors que la littérature en anglais concerne n'importe quel peuple, disons, Yoruba ou Haoussa en langue anglaise. En d'autres termes, l'identité du peuple est incomplète.

D'après Dathome (1), Littérature dans les langues vernaculaires écrites pour L'Afrique constitue un lien imaginatif et essentiel avec la littérature indigène non écrite; ce la littérature qui indique l'adaptabilité de la tradition orale en ce sens qu'à travers la langue vernaculaire on écrit littérature, la tradition orale exprime sa polyvalence et diversité.

Dathome parle d'un véritable moyen de préservation de la tradition orale et c'est l'écriture en vernaculaires. La tradition orale africaine ne peut être préservée si les langues étrangères sont adoptées pour la littérature africaine. En fait, à mesure que les traditions orales africaines disparaissent, les langues et la culture africaines suivre.

Wali commente que la littérature est l'exploitation de langue. Obi soutient cela. Selon ses mots : « La littérature encourage l'utilisation du langage non seulement à, mais aussi pour le discours au sein de la communauté ... les écrivains créatifs ont le devoir très important de promouvoir l'utilisation des langues en créant des unités de littérature ». Le point ici est que la peur de bourrer la littérature africaine dans une petite définition soignée exprimée par Achebe a amené la plupart des Africains à exploiter les langues étrangères et promouvoir leur utilisation. L'effet de ceci est le non-développement et sous-développement des langues africaines : une situation qui les classe dans les différents niveaux de langage la menace identifiée par Wurm. Autrement dit, certains d'entre eux sont potentiellement en danger ; certains, en voie de disparition ; certains, sérieusement menacé; certains, en voie de disparition ; quelques d'autres, morts ou éteints.

Globalement, l'importance de la littérature africaine dans ses langues inclut la définition de l'identité complète de l'Afrique et à le maintenir et à le préserver. Encore une fois, cela fournira l'installation qui permettra l'expression de la polyvalence et la diversité de la tradition orale africaine. Par là, la tradition orale et les langues seront préservée. La préservation affectera la durée de vie des langues et de la culture africaines. Enfin, ce sera

servir de lieu de développement des langues africaines et la promotion de leur utilisation.

Facteurs responsables de la sous-utilisassion des ressources africaines

Les langues dans la littérature ; Un facteur important qui ressort de la section précédente est langues africaines sous-développées. Les ecrivains ne peut pas écrire dans des langues qui n'ont pas été développées pour une forme écrite, ou des langues qui n'ont pas été développés au niveau auquel ils pourraient être utilisés dans littérature.

Les politiques gouvernementales qui pourraient encourager l'utilisation des les langues africaines sont absentes dans la littérature africaine. Pour Par exemple, aucune langue africaine n'est la seule langue

officielle n'importe quel pays africain. Les langues africaines officielles sont régionales. C'est le cas des Haoussa, d'Igbo et de Yoruba en Nigeria. En réalité, le Kiswahili est une langue nationale fonctionnelle en Tanzanie. Cependant, son rôle se limite au commerce (Mbagwu et Obiorah). De plus, il n'existe aucun pays africain où un laissez-passer de crédit dans une langue africaine est un critère de promotion dans la fonction publique, l'admission à une université ou un emploi. Avec cette situation, les langues africaines ne seront pas exploitées au maximum

utilisé dans la littérature.

La situation linguistique complexe est un facteur très grave. Heine et Nurse citent Grimes comme ayant donné le numéro d'Eme & Mbagwu: African Languages and African Literature langues africaines en 2035. On prétend que ce nombre n'est pas corrigé puisque certaines langues africaines sont encore écouverts avec peu de locuteurs sont ignorés.

Cela signifie que les langues africaines dépassent les ombres limites fixées. Cette situation est peut-être responsable du manque de politiques gouvernementales qui pourraient encourager l'utilisation des langues africaines

dans la littérature. Mbagwu et Obiorah capturent la situation ainsi : « Peut-être parce que chaque pays africain est multilingue1, il existe un recours pratique à l'exo glossique des langues pour éteindre la flamme des désaccords manifestés ou cachés du choix d'une langue autochtone plutôt qu'une autre ».

Par ailleurs, ce facteur a une implication pour le non- développement ou sous-développement des langues africaines.

Développer une langue demande beaucoup de capital. C'est donc difficile de développer toutes les langues d'Afrique. Au Nigéria, on compte à lui seul 505 langues autochtones (Udoh, 18). De ce nombre, seules les langues principales, le haoussa, Igbo et Yoruba ; et les langues principales, Edo, Urhobo, Izon, Fulfude, Igala, Ogoni, Ibibio, Efik etc ont reçu attention positive à des degrés divers pour le développement. Plus que quatre cent cinquante autres sont sous-développés ou sous-développé. La littérature en eux est donc impossible.

Valeur commerciale des romans, pièces de théâtre et livres de poésie écrit dans les langues africaines est infinitésimal comparé à ces ouvrages rédigés en anglais.

Notons que la très faible valeur commerciale de œuvres littéraires africaines en langues africaines aurait pu quelque chose à voir avec le fait que les langues africaines ne sont pas pleine Mbagwu : Langues africaines et littérature africaine langues africaines en 2035. On prétend que ce nombre est pas corrigé puisque certaines langues africaines sont encore découverts et d'autres avec peu de locuteurs sont ignorés. Cela signifie que les langues africaines dépassent les limites fixées. Cette situation peut-être responsable du manque de politiques gouvernementales qui pourraient encourager l'utilisation des langues africaines dans la littérature. Mbagwu et Obiorah capturent la situation ainsi : « Peut-être parce que chaque pays africain est multilingue1 , il existe un recours pratique à l'exo glossique des langues pour éteindre la flamme des désaccords manifestes ou cachés du choix d'une langue autochtone plutôt qu'une autre ».

Par ailleurs, ce facteur a une implication pour le non- développement ou sous-développement des langues africaines.

Notons que la très faible valeur commerciale de œuvres littéraires africaines en langues africaines aurait pu quelque chose à voir avec le fait que les langues africaines ne sont pas pleinement officielles ou national dans les pays africains : décidément, les travaux ont de petites zones de distribution.

L'analphabétisme dans les langues africaines est un facteur majeur qui affecte la valeur commerciale des œuvres littéraires écrites dans les langues africaine. Les archives indiquent que la plupart des Africains sont analphabètes dans leur propre langue. Mbagwu confirme ceci en utilisant Igbo. Dans cette situation, les œuvres littéraires écrites en les langues auront une valeur commerciale négligeable : les gens ne leur achèteront guère de lecture car ils ne sauront pas lire.

Recommandations pour l'utilisation optimale des langues africaines la dans la littérature

La section ci-dessus suggère certaines recommandations. Toutefois, des recommandations qui ne sont pas directement déductibles ont été faites.

Les langues africaines sous-développées devraient être développés les pays développés et sousdéveloppés devraient être pleinement développé pour encourager les écrivains à employer les langues africaines dans l'écriture créative.

L'alphabétisation dans les langues développées devrait être poursuivie avec vigueur. Cela améliorera la valeur commerciale des œuvres littéraires écrites en eux : une situation qui incitera davantage d'écrivains à plonger dans la région.

Des politiques qui pourraient encourager l'écriture africaine ; la littérature en langues africaines devrait être formulé et mis en œuvre par le gouvernement des pays africaines.

Pays africains. En fait, il n'y a aucun mal à faisant de toute langue africaine développée une langue officielle dans son domaine de domination en n'importe quel pays africain, en veillant à ce que les personnes qui je parle la langue, on na pas l'emploi du gouvernement ou l' admission dans les établissements d'enseignement supérieur Eme & Mbagwu: African langues and African litterature apprendre, s'ils ne sont pas alphabétisés la langue de leur domaine.

Des prix d'un million de dollars devraient être institués pour les œuvres littéraires en langues africaines. C'est dommage qu'il y ait le prix Nobel et d'autres prix décernés par des institutions étrangères pour, la littérature en langues étrangères et Les Africains ont remporté certains prix et sont encouragés à écrire davantage dans les langues.

En effet, si des récompenses similaires étaient instituées pour les œuvres littéraires africainas en langues africaines, les gens serut encouragé à écrire dans les langues.

Les artistes littéraires africains devraient être sensibilisés à voir les langues étrangères comme les langues secondaires.

Leurs œuvres devraient paraître d'abord en langue afrique et ensuite à une langue étrangère ; Pas l'inverse. Certains Africains les écrivains africains ont tenté cela. Malheureusement, ils pourraient pas continuer. S'ils continuaient, la littérature africaine, nous pensons que cela aurait eu une meilleure définition.

Publication d'œuvres littéraires en langues africaines devrait être subventionnée par les secteurs public et privé . Cela augmentera le nombre des œuvres dans les langues produites chaque année. Ce sera améliorent également leurs normes. En particulier, les écrivains cesseraient de produire des romans comme des romans avec la raison pour laquelle le coût du financement de l'édition est élevé et repose uniquement sur eux.

Conclusion

Les langues africaines sont sous-utilisées dans la littérature africaine. Ce qui existe le plus, c'est la littérature africaine en langue étrangère. Langues. Le débat dans les années 1960 sur la pertinence langue pour la littérature africaine n'a réalisé que peu ou rien.

Plus encore, l'importance criante de la littérature dans le la langue de ses propriétaires, comme nous l'avons souligné ici, n'a pas engendré aucun changement radical. Cet article a mis en évidence quelques-uns des facteurs responsables de cette situation inquiétante.

Ils comprennent des pays africains sous-développés et les langues sous-développés. L'Absence de politiques gouvernementales qui pourraient encourager l'écriture de littérature africaine dans les langues africaines ; situation linguistique complexe; valeur commerciale de la littérature en langues africaines; et l'analphabétisme dans les langues.

Des recommandations pour gérer les facteurs ont été faites. un bon nombre d'entre eux sont clairement suggérés par les facteurs. Ceux qui ne sont pas clairement suggérés par eux sont : million de

dollars des prix devraient être créés pour les œuvres littéraires en langue africaines; Les artistes littéraires africains devraient être sensibilisés à écrire dans leur propre langue avant que leurs œuvres ne soient traduites vers des langues étrangères: et l'édition d'œuvres littéraires en langues africaines devraient être subventionnées par les pouvoirs publics et privés organisations.

En effet, la littérature africaine en langues étrangères ne définit pas adéquatement la littérature africaine. Des efforts devraient être faits pour changer la situation. Nos recommandations pourraient grandement contribuer à garantir cela.

References

Achebe, Chinua (1965), The African writer and the English Language, Transition, 4, 18, 27-30.

- Bamgbose, A., (1970) ,'The English Language in Nigeria', In Spencer, J. (ed.), English language in West Africa.
- Caudwell, C., (1977), *Illusion and reality: A study of the sources of poetry*, London: Lawrence and Wish art Ltd.
- Carnie, Andrew, (2002), Syntax: A generative introduction, Oxford: Blackwell Publishing.
- Chomsky, N., (1981), Lectures on government and binding, Dordrecht: FSoris.
- Chomsky, N., (1988), *Language and problems of knowledge*: The Nicaraguan lectures, Cambridge: MIT Press.
- Cook, V. J., (1988), Chomsky's universal grammar: An introduction, Oxford: Blackwell.
- Crystal, D., (1987), The Cambridge encyclopedia of language, Cambridge: Cambridge University Pres.
- Dathome, O. R., (1974), African literature in the Twentieth Century, U. S. A.: Heinemann.
- Emenanj?, E. N., (2000), Culture, Nigerian languages and national development, JONLAC, 2, 1-10.
- Essien, O., (1990), *The future of minority languages*, in Emenanjo, E. N. (ed.), *Multilingualism, minority languages and language policy in Nigeria*, Agbor: Central Books Ltd., 155-164.
- Ezenwa-? haeto, (1997), Achebe Chinua: The author of Things fall apart, U.S.A.: Heinemann.
- Heine, Bernd and Nurse, Derek, (2011), African linguistics: An introduction, Cambridge: Cambridge University Press, 2000.UJAH: Unizik Journal of Arts and Humanities Vol. 12 No. 1, 127
- Mbagwu, D. U., Illiteracy in Igbo: An assessment of the situation, JONLAC, 8, 2007, 45-50.
- Mbagw?, D. U. and Obiorah, T., (2007), African linguistic situation and Africa's development, *Journal of Religion and Human Relations*, 2007, 145-153.
- Nwadike, I. U., (2008), Igbo Language and culture: Whither bound? (As?s? Igbo: Ije an?), *Chief (Dr) F. C. Ogbalu Memorial Lectures*, (1 & 3), Onitsha: Varsity Press and Unizik, 2008.
- Obi, N. M., (2003), Language: A tool for literature, in Ndimele, O-M., (ed.), Four decades in the study of languages & linguistics in Nigeria: A festschrift for Kay Williamson, Aba: NINLAN, 2003, 487-492.

Udoh, Imelda Icheji L., (2003), *The languages of the South-South Zone of Nigeria: A geopolitical profile, Lagos:* Concept publications, 2003, 18.

Ukpai, M. O. and Orji, E. U., *Literature in Nigerian languages: A potent tool in democratic Nigeria*, JONLAC, 4, 2002, 13-16.

Wali, Obi, 'The dead-end of African literature', Transition, (10 September 1963), 13-15.

Strategies Towards Improving Event Management Competencies: The Home Economics Perspective

¹Emeka Ebele Cynthia and ²Adilo Angela Obioma

^{1,2}Department Of Home Economics And Hospitality Management Education, ^{1,2}Nwafor Orizu College of Education, Nsugbe ¹ajanicynthia@yahoo.com; 08063678954 and ²08036720367

Abstract

The study was aimed at determining the strategies towards improving event management; the Home *Economics Perspective. Four (4) research questions were formulated. The study adopted a descriptive survey* design. The population for the study consisted 216 event managers in Asaba, Delta State. The whole population was used as the sample of the study. Ouestionnaires were used to collect data for the study. The reliability of the instrument was established using split-half method. The responses were correlated using Pearson Product Moment Correlation Co-efficient and the result yielded 0.78. The data collected were analyzed using mean. Based on the analysis, the study revealed that the Home Economics skills and competencies used in planning and executing events are the following; budgeting and resource management, knowledge of food preparation and presentation, organizational and project management which helps in planning event time lines, delegating tasks, and ensuring smooth operation, hospitality and guest relations, creativity and problem-solving, knowledge of textiles and décor skills, resource management skills. Managing diverse personalities and team dynamics, Communication and interpersonal skills and time management skills which helps to plan, organize and schedule tasks. While Home Economics inclined strategies towards surmounting event management challenges include using readily available and easily accessible materials for decorations, making use of negot nation skills. The study concluded that some Home Economics skills, competencies and strategies are very relevant in event management. It was recommended among others that fostering research partnerships between Home Economics scholars and event managers can lead to more in-depth explorations of specific skill applications, quantifying their impact on event outcomes.

Keywords: Strategies, Competencies, Event Management, Home Economics, Skills.

Introduction

Home Economics is a multidisciplinary field that encompasses arrange of knowledge and skills related to the management of households and the well-being of individuals and families. Rooted in a holistic approach, it combines elements of economics, nutrition, textiles, consumer sciences, and interpersonal skills to empower individuals with the tools needed for sustainable and fulfilling lifestyles. In recent years, the field of Home Economics has evolved significantly, encompassing a broad spectrum of life skills that extend far beyond traditional domestic tasks with a focus on event management, which has gained immense popularity as an entrepreneurial opportunity. This transition has opened up new vistas of employment and business opportunities, as individual are increasingly drawn to this dynamic and growing industry. The Home Economics discipline equips individuals with a unique skill set, including expertise in nutrition, clothing and textiles, family and consumer sciences, and interior design, which are directly applicable to the field of event management.

Ogbene (2016), noted that the essential elements of Home Economics education is the provision of knowledge, skills acquisition and to inculcate attitudes that are necessary for gainful employment in specific

occupations. With the challenges of dynamic industrial revolution, Home Economics should be able to equip the youths with skills and attitudes that would develop, reflect and articulate the new development in the 21st century (Uko- Aviomo, 2020). Further, Thompson (2020), views Home Economics education as the center of an integrated model of economic development through which the development of new strategies, organizational forms, discovery of market for products, and search for new materials that would reflect the global changes, are revealed or made known to youths. Home Economics education unlocks the key to economic potentials of youths; empowers and equips the youth in the society to participate and benefit from the national economy, facilitate economic development and provides the basis for transformation in self and occupations. Skills and competencies derived from Home Economics can be applied to a variety of employment areas including event management.

An event is any occasion involving the gathering of people. It is a unique moment in time that is commemorated/observed to satisfy specific needs. Events are synonymous with occurrences, happenings, incidents, occasions and experience. An event can be described as a public assembly for the purpose of celebration, education, marketing or reunion. Events can be classified on the basis of their size, type and context as maga, Hallmark, major and local events. According to Kotler (2015), "events are defined as occurrences to communicate particular messages to target audience." The nature of the event determines the kind of crowd in attendance and as well, defines the kind of attention or treatment to be given. However, the process of hosting a proposed event is not only broad but complex. In other words, event hosting is bigger than the idea; it calls for meticulousplanning, hence the word "event management". Professionally, event management has become an occupation where the practitioners are masters in the trade (Ene-Obong, 2016). Events create opportunities for people to connect with an area, spend time together, celebrate and experience the diversity of cultures and foster creativity and innovation. Eventmakes a community to come alive and provide an opportunity for a destination to showcase its tourism experience and increase economic activity. Events contribute significantly to community building, lifestyle and leisure enhancement, cultural development, tourism promotion, increased visitation, volunteer participation, fund raising and economic development. Most importantly, events create a sense of fun and vibrancy, resulting in a strong sense of community connectivity, pride and a sense of place. (United Nations, World Tourism Organization, (2017), Goldblatt, (2012), Silberman (2009)

According to Mande, Adegola, Olusegun, Lawal, &Ishola (2023), event management is an application of project management to the creation development and execution of events. It is the planning and management of an event or activity. It involves studying the intricacies of the brand, identifying the target audience, devising the event concept, planning the logistics and co-ordinating the technical aspects before actually executing the modalities of the proposed event. Event management requires strong organizational communication, negotiation, budgeting and creative skills. Event management is motivated by the need to satisfy individual tastes through corporate planning, organized packaging and care execution. The aim is to free the celebrant from, the hassles associated with event processes while engaging experts for a better hosting experience. This way, invited guests receive the value that comes with professional planning. Event managementis the act of planning and executing events successfully through organized processes. The process is important because the organizer has placed absolute trust on the event manager (Julius-Adeoye, 2010). Krishnakumar and Arul (2014), explained that management of an event encompasses all activities involved in planning, organizing, staffing, leading and evaluation of an event. Infact, all operational tasks for an event such as the ground work viz; venue selection and stage design, arranging the infrastructural facilities required, liaison with artists/performers and networking with other activities such as advertising, public relations, ticket sales, etc fall under the preview of event management. It means that so much is at stake in terms of mutual images of both parties, but especially that of the organizer who stands to lose more in terms of fund and clientele. Mande et al (2023) further stipulated five components of event management as conceptualizing, costing, canvassing, costomizing and carrying out.

To ensure effective event managementhroughHome Economics, Mande et al (2023) and Bowdin

(2016) suggested several strategies. Firstly, individuals should be equipped with comprehensive knowledge and skills in event planning, coordination, and execution through their academic curriculum. This can be achieved by incorporating practical training, workshops, and internships focused on event management within the Home Economics programmes offered in institutions. Additionally, many event management positions require strong communication and organizational skills, which are also skills that can be developed through a Home Economics education. Home Economics emphasizes organizational skills and project management techniques, crucial for planning event timelines, delegating tasks, and managing personnel. Event managers can leverage these skills to ensure smooth operation, avoid last-minute scrambling, and maintain focus on the bigger picture.(Johnson & Miller,2021). Akindele&Adeyemo (2011), explore the relevance of Home Economics education in contemporary Nigeria, particularly its potential to equip individuals with transferable skills valuable in the 21st century. While not directly focused on event management, it highlights essential transferable skills likere source management, proficiency in budgeting, financial planning, and resource optimization, creativity and problem-solving competencies which equip graduates with the ability to think outside the box and find innovative solutions crucial for successful event planning. Home Economics education fosters independent thinking, informed decision making, effective communication, collaboration and interpersonal skills which translate well to building relationships and working effectively with diverse stakeholders in event management industry. By applying these knowledge skills and competencies, individuals can thrive in this dynamic and growing economic sector.

Statement of the Problem

Event management is the planning, coordination, and execution of various events including conferences, seminars, weddings, corporate meetings, exhibitions, and social gatherings. It utilizes knowledge, skills and attitudes from different disciplines to develop competencies needed accomplish inherent tasks. Event managers however have not been able to effectively identify and harness the importance of using Home Economics skills and competencies in planning and executing events as they are yet to link Home Economics knowledge, skills and competencies to the demands of a successful event.

In event management, different challenges are encountered which may cause event managers not to meet up with schedule, budget and timing. However, with the application of Home Economics inclined strategies and solutions, these challenges can be surmounted. This study therefore, seeks to identify the challenges encountered in event management, the Home Economics skills and competencies necessary for event management as well as strategies towards improving event management through Home Economics.

Purpose of the Study

The purpose of the study is to identify and examine Home Economics skills, competencies and strategies needed to surmount the challenges impeding event management. Specifically, the study aimed to:

- 1. Identify some Home Economics competences needed in planning and executing events.
- 2. Identify the diverse range of Home Economics competencies readily applicable to various stages of event management.
- 3. Identify the challenges encountered by event managers in Asaba.
- 4. Highlight Home Economics inclined strategies that can be applied in surmounting these challenges.

Research Questions:

- 1. What are the Home Economics skills needed in planning and executing events?
- 2. What Home Economics competencies are readily in use in planning and managing events?
- 1. What challenges does event managers encounter while planning and executing events in Asaba?
- 2. What are the Home Economics inclined strategies that can be applied to surmount these challenges?

Significance of the Study

Event management is a significant contributor to the economy, creating job opportunities and stimulating business growth. By identifying the needed skills, competencies and strategies for tackling challenges through Home Economics, the study hopes to improve event management outcomes. If assessed, the findings of this study will be useful to event management outlets in Nigeria as it will analyze the Home Economics knowledge, skills and competencies applicable to event management.

Methodology

This study adapted a descriptive survey research design. It was conducted in Asaba, the Delta State capital that shares boundaries with the commercial city of Onitsha. The population for the study consisted of all the two hundred and sixteen(216) managers of the 216 registered event management outlets in Asaba. The study population was of a manageable size so all the two hundred and sixteen (216) respondents were used as sample. For the collection of data, four point questionnaire on a scale of: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) with a corresponding value of 4, 3, 2, and 1, arranged in four parts A-D, and coined to address the research questions was used. The instrumentwas validated by scholars from the Departments of Home Economics and Measurement and Evaluation, NwaforOrizu College of Education, Nsugbe. The instrument was tested for reliability through a split half reliability technique to obtain an alpha of 0.78. Personal and electronic modes were used for administration of instruments. Only 204 questionnaires were well answered and returned for the study. Data were analyzed using mean calculated with the derived formula;

 $\overline{\mathbf{X}} = \underbrace{-fx}{N}$ Where, $\overline{\mathbf{X}} = Mean$ = Summation F = Frequency of each Score X = Score in the Distribution N = Total number of the Score in the DistributionThus, $\overline{\mathbf{X}} = \underbrace{4+3+2+1}_{44} = \underbrace{10}_{2.50} = 2.50$

Any item with a mean (x) score of 2.50 and above stands accepted, then any response that the mean (x) is below 2.50 stands rejected.

Discussion of Findings

Research Question One: What are the Home Economics skills needed in planning and executing events? **Table 1:Home Economics skills needed in planning and executing events.**

S/N	The Importance of Home Economics Competences	<u>??</u>	Decision
1	Culinary skills are relevant in creating diverse and appealing menus for events.	3.0 X	Accepted
2	Financial man agementskills is valuable in effective budgeting and management of resources for event planning.	2.7	Accepted
3	The principles of textiles and design aids in creating visually appealing and cohesive event décor.	3.2	Accepted
4	The family and interpersonal skills emphasized in Home Economics are relevant in building positive relationships with clients, vendors, and participants in event planning.	2.5	Accepted
5	Sustainable practices, contributes to environmentally conscious and responsible event management.	3.3	Accepted
6	Time and stress management skills ensures efficient and resilient event planning.	3.0	Accepted
7	Creativity and problem-solving skills aids in solving problems quickly and also to think out new ideas in event planning.	3.0	Accepted
8	Cultural awareness and diversity skills helps to ensure inclusivity and respect for diverse cultural perspectives in event planning.	3.0	Accepted
9	Family and interpersonal skills learned in Home Economics help in fostering effective teamwork and collaboration among event planning teams.	3.0	Accepted
10	Offering healthy food options, and physical activity breaks can improve attendee energy and engagement.	3.1	Accepted

Table 1 shows that items 1-10, with mean scores of 3.0, 2.7, 3.2, 2.5, 3.3, 3.0, 3.0, 3.0, 3.0, and 3.1 respectively, highlight Home Economics skills that are important in creating successful events

Research Question Two: What Home Economics competencies are readily in use in planning and managing events?

Table 2: The Home Economics	Competences readily	v used in plannin	g and executing events.

S/N	Competencies used in planning and executing events	??	Decision
11	Budgeting and resource management skills can be applied to effective management of event finances and to optimize resources.	3.0	Accepted
12	Knowledge of food preparation and presentation can be an inspiration to creation of unique and engaging culinary experiences for event participants.	3.0	Accepted
13	The organizational and project management skills of Home Economics are essential in planning event timelines, delegating tasks, and ensuring smooth operation.	3.1	Accepted
4	Having an understanding of hospitality and guest relations can help create a welcoming and positive atmosphere for event attendees.	3.3	Accepted
5	Creativity and problem-solving skills can help an event planner to adapt to un expected challenges and improvise solutions during event execution.	3.0	Accepted
6	Knowledge of textiles and interior/exterior designing skills allows a planner to create visually appealing and thematic atmospheres for events.	2.8	Accepted
7	Incorporating sustainable practices like waste reduction and resource reuse into event planning, draws from the understanding of home resource management.	3.3	Accepted
8	The ability to manage diverse personalities and team dynamics, can be applied to collaborate effectively with vendors and staff during events.	3.0	Accepted
9	Communication and interpersonal skills can help planners to build rapport with clients, participants, and stakeholders involved in the event planning process.	3.3	Accepted
20	Time management skills helps to plan, organize and schedule tasks.	3.4	Accepted

In Table 2, items 11 to 20 with mean scores of 3.0, 3.0, 3.1, 3.3, 3.0, 2.8, 3.3, 3.0, 3.3, and 3.4 respectively shows the Home Economics competences useful in planning and executing events.

Research Question Three:

What challenges does event managers encounter while planning and executing events in Asaba?

Table 2. Challonges that Event	Managang taga in	nlanning and avoa	uting avants in Asaba
Table 3: Challenges that Event	vianagers face in	панния ано ехес	uling evenis in Asaba.
- inside termineinges that is the		provide a second s	

S/N	Challenges in Event Management	x	Decision
21	Budget limitations are a significant challenge in the successful execution of events.	3.6	Accepted
22	From venue selection to catering and guest flow, the intricate logistics of event management often present significant hurdles.	3.6	Accepted
23	Coordinating and managing various vendors contribute to the complexities faced in event planning	2.3	Rejected
24	The pressure of tight timelines is a common challenge faced in the field of event management.	3.3	Accepted
25	Dealing with unexpected changes and uncertainties is a challenging aspect of event planning.	3.1	Accepted
26	Achieving an aesthetically pleasing event within budget constraints is a significant challenge.	3.3	Accepted
27	Balancing budget constraints, logistical complexities, and diverse client demands makes exceeding expectations a daily struggle in event management.	3.1	Accepted
28	Balancing the formal hospitality expectations of certain events with the personalized approach from Home Economics can be tricky.	3.5	Accepted
29	Ensuring overall guest satisfaction during events is a challenging aspect of event management.	3.3	Accepted
30	Effectively managing crises or unforeseen issues during events is a challenging responsibility.	3.2	Accepted

In Table 3, items 21 to 30 with mean scores of 3.6, 3.6, 3.3, 3.1, 3.3, 3.1, 3.5, 3.3 and 3.2 respectively reveals challenges event managers encounter while planning and executing events.

Research Question Four:

What are the Home Economics inclined strategies that can be applied to surmount these challenges? **Table 4: Home Economics Inclined Strategies applied in surmounting the Challenges.**

S/N	Home Economics Inclined Strategies	X ?	Decision
31	Event managers should set a clear line of communication to enable them reach all their employees, and vendors on steps to take at any given time during event planning and execution.	3.1	Accepted
32	Event managers should consider using readily available and easily obtainable 3 materials for decorations.	3.0	Accepted
33	When planning and executing events, event managers should include interactive workshops, or collaborative activities to increase participants involvement and interests.	2.2	Rejected
34	In planning the Event, event managers should apply project management skills such as resources management and division of labour to develop detailed timelines, and delegate tasks effectively.	2.8	Accepted
35	Event managers should use negotiation skills gained in budgeting and consumer education classes to secure better deals with vendors, and explore cost-effective alternatives.	3.3	Accepted
36	While planning events, event managers should partner with local businesses, community organizations, or educational institutions for sponsorships, resource sharing, or cross-promotional opportunities.	3.3	Accepted
37	Event managers should cater to the diverse dietary needs and preferences with menu planning skills.	2.2	Rejected
38	Event managers should apply hospitality skills to create a warm and inviting environment, paying attention to details like comfortable seating, accessible amenities, and friendly interactions to enhance participant experience.	2.8	Accepted
39	While marketing their event, event managers can add compelling stories into their event concept, marketing materials, and presentations to differentiate them from the competition.	2.0	Rejected
40	Event managers should have the practical skills to handle minor equipment issues, make quick repairs, and adapt to unforeseen hiccups with resourcefulness and ingenuity.	3.0	Accepted

Table 4 above items 31 - 40 with mean scores 3.1, 3.0, 2.2, 2.8, 3.3, 3.3, 2.2, 2.8, 2.0, and 3.0 shows the Home Economics Inclined Strategies applied in surmounting the challenges impeding event management.

Summary of Findings

The study identified that culinary skills, financial management skills, skills in textiles and design, family and interpersonal skills, resources management skills among others are Home Economics skills relevant in executing an event.

Home Economics knowledge and competencies that are relevant in event management as identified by the study include; knowledge of food preparation and presentation, organizational and project management skills which helps in planning event timelines, delegating tasks, and ensuring smooth operation, hospitality and guest relations skills, creative and problem-solving skills, knowledge of textiles and décor skills, among others.

Budget limitations, the intricate logistics, pressure of tight timelines, dealing with unexpected changes and uncertainties, achieving an aesthetically pleasing event within budget constraints, among others are some of the challenges impeding event management identified by the study.

Setting a clear line of communication amongst client, management, employee and vendors; using readily available and easily accessible materials for decorations, **a**pplying project management skills to develop

detailed timelines, and delegate tasks effectively, making **use of** negotiation skills gained in budgeting and consumer education classes to secure better deals with vendors, and explore cost-effective alternatives, among others were strategies identified by the study for surmounting event management challenges.

Discussion of Findings

The findings showed that Home Economics skills in Event Management includes the following, culinary skills, financial management skills, the principles of textiles and design, family and interpersonal skills among others. This is in line with the study by Johnson and Miller (2021), which states that event managers can leverage Home Economics skills such as organizational and project management skills to ensure a smooth operation.

Again, the study showed that the Home Economics competences readily used in planning and executing events includes the following, budgeting and resource management skills, communication and interpersonal skills and time management skills which helps to plan, organize and schedule tasks as well as collaborate with others. This is in line with a case study by Smith &Brown(2020) and Akindele & Adeyemo (2011) which focused on using Home Economics knowledge and principles to manage large-scale community events through optimizing budgets, minimizing waste, and ensuring efficient use of resources during event planning and execution.

Furthermore, the study revealed that the challenges that event managers encounter in planning and executing events are, budget limitations, the pressure of tight timelines, dealing with unexpected changes and uncertainties, among others. This is in line with Mande et al (2023) who opined that despite the evident strengths of event managers, challenges persist; and that the success of a planned event is often marred by expected and unexpected challenges.

Finally, the study highlighted some Home Economics inclined strategies towards surmounting the challenges of event management which include; setting a clear line of communication amongst clients, management, employees, and vendors on steps to take at any given time during event planning and execution, using readily available and easily accessible materials for decorations, making **use** of negotiation skills gained in budgeting and consumer education classes to secure better deals with vendors, and explore cost-effective alternatives, among others. This is in line with the study by Akindele&Adeyemo (2011) as well as Lee and Kim (2019) which highlight vital skills such as resource management, creativity, problems solved and communication skills resonate strongly with successful event management.

Conclusion

In conclusion, the study on Strategies towards improving Event Management competencies; the Home Economics perspective uncovered the immense potentials of Home Economics in event management. This study identified Home Economics obtained skills, competencies and strategies needed to surmount the challenges impeding event management in the study area. A more indept investigation will expose ways to empower event professionals, elevate the industry, and create even more extraordinary events that leave a lasting impression on participants through the application of Home Economics knowledge, skills, competencies and aptitudes.

Recommendations

The following recommendations were made based on the findings from the study:

- 1. Fostering research partnerships between Home Economics scholars and event managers can lead to a more in-depth explorations on specific skill applications, and their impact on event outcomes.
- 2. Documenting success stories through detailed case studies and best practices guides can provide concrete examples and inspiration for event professionals seeking to integrate Home Economics principles.

- 3. Developing specialized training programs or online modules that translate Home Economics skills into practical tools for event management can further empower professionals and bridge the knowledge gap.
- 4. Curriculum planners can help by creating more room for direct event management knowledge and experience in the Home Economics curriculum as this can help raise a generation of event managers that are Home Economists by training.

References

- Akindele, S. O., & Adeyemo, A. A. (2011). The relevance of Home Economics education in the 21st century: *Nigerian perspective. International Journal of Educational Research*, *10(2)*, *321-331*.
- Bowdin, H. M. (2016). Events management: A practical guide (4th ed.). Routledge
- Ene-Obong, H.N. (2016). Repositioning Home Economics for the challenges of the 21stcentury. *Nigerian Journal of Home Economics (Nig. JHE)16(1) 11-17*
- Getz, D. (2012). Event Studies: Theory, Research and Policy for planned events. Routledge: London and New York, 2 ed.
- Getz, D. 2017. Event Impact Assessment. Oxford: Good fellow Publishers.
- Goldblatt, J. (2012). Special events: Planning, production, and logistics (6th ed.). John Wiley &Sons. (Chapter 2)
- Johnson, M. & Miller, K. (2021). The role of hospitality skills in event management: A comparative study of the United Kingdom and the United States. *Journal of Hospitality Management and Education, 20(2), 145-158.*
- Jones, A. (2018). Home Economics skills for sustainable event management. *Journal of Sustainable Tourism*, 26(1), 21-35.
- Julius-Adeoye, Rantimi. (2016). "Nigerian Theatre Arts Curriculum and Event Management.
- Kotler, P.(2016). Marketing management. Pearson Education Limited.
- Krishnakumar, K. & Arul, M. (2014) Event Management An Overview. Research Explorer July -December 2014, Issue Vol. III: Issue 9
- Lee, J., & Kim, S. (2019). The importance of project management skills in event management: A case study of the PyeongChang Winter Olympics. *International Journal of Project Management*, 37(5), 678-692.
- Mande, S. Adegola, E. A., Olusegun, O. O., Lawal, K. A. A., Ishola, T. (2023) ENT 309 Event Management. National Open University of Nigeria.
- Ogbene, A.E. (2016). Home Economics for self-reliance in a Depressed Economy: An Entrepreneurial Initiative: *Journal of Home Economics Research7;5*.
- Smith, R., & Brown, M. (2020). Hospitality skills in event management: A comparative study of the United Kingdom and the United States. *International Journal of Event and Festival Management*, 11(3), 321-
- Silberman, B. (2009). Events and the shaping of urban space.
- Thompson, D. (2020) Transformation of Home Economics Education in the 21st Century. A lead paper presented at the 21st *Home Economics Research Association of Nigeria.(HERAN) Annual Conference. September;2020.*
- Uko-Aviomoh, E. (2021). Home Economics Education for Development of Strong Families and Sustainable National Stability. Nigeria Journal of Home Economics (ISSN: 2782-8131), 9(5), 11-17.https://doi.org/10061868/njhe.v9i5.9
- World Tourism Organization (UNWTO).(2017). Global report on the economic benefits of tourism.(PDF)

Business Education Program Awareness Among Senior Secondary Students: A Panacea for Dwindling Student Population in Colleges of Education in Anambra State

Nebolisa Chinwe Mikella Department of Business Education, Nwafor Orizu College of Education, Nsugbe mikellaflo@gmail.com; +234 7035358977

Abstract

This study examined the awareness of business education programs among senior secondary students in Anambra State, Nigeria, and its potential impact on addressing the declining student population in colleges of education. Descriptive survey research design was utilized for this study from 90 senior secondary three (SS3) students selected through proportionate stratified sampling by gender and age. An instrument comprising 20 items was developed and validated, analyzed using descriptive statics such as frequency score, mean, and standard deviation. Inferential statistics such as Analysis of Variance (ANOVA), were employed for data analysis. Results revealed varying degrees of awareness among students. Many students acknowledged the program's role in enhancing critical thinking, problem-solving abilities, and fostering entrepreneurial ventures. The study concludes that awareness and interest in business education programs are influenced by urban residency and peer interactions. Also, career advisors effectively disseminate information and provide guidance, with no significant gender differences in interest levels observed. Recommendation showed a critical need for targeted awareness initiatives to promote business education programs among senior secondary students, potentially attracting a more diverse pool of applicants to colleges of education. Such initiatives could contribute to addressing the dwindling student population and enhancing the overall quality of education in Anambra State.

Keywords: Business education programs, Senior secondary students, Awareness, Dwindling student population, Colleges of education.

Introduction

Colleges of education play a crucial role in preparing educators for the nation's educational system. However, in recent years, these institutions have faced challenges due to a declining student population. One potential solution lies in increasing awareness of business education programs among senior secondary students in Anambra State. Awareness refers to the state of being conscious or cognizant of something, typically regarding knowledge, information, or understanding about a particular subject, issue, or phenomenon (Friedland and Jain, 2022). It involves recognizing, comprehending, and acknowledging the existence, significance, or implications of a given concept, event, or situation. Awareness can encompass various aspects, including familiarity with facts, understanding of principles, perception of consequences, and recognition of opportunities or challenges (Bratianu et al, 2020; by Bagama, 2024). It often involves a level of attention, observation, and reflection, leading to an informed or enlightened perspective on the matter at hand.

Awareness of business education programs refers to the extent to which individuals, particularly students, possess knowledge and understanding about the offerings, benefits, and relevance of educational programs focused on business-related subjects such as entrepreneurship, finance, marketing, management, and economics, within academic institutions or educational settings (Mambali et al, 2024; Sheng and Lu, 2020). Awareness of business education programs among senior secondary students is vital for several reasons. Firstly, it exposes students to alternative educational pathways beyond traditional academic disciplines. As noted by Ikpesu (2017), business education programs offer diverse career opportunities,

including entrepreneurship, finance, marketing, and management. Moreover, business education equips students with practical skills and knowledge essential for success in the modern workforce, addressing the skills gap highlighted by the Nigerian Economic Summit Group (Adetula, 2014; Mukhtar et al, 2021). Unfortunately, the effectiveness of this program can be hampered by dwindling student population.

Dwindling student population refers to a decline or reduction in the number of enrolled students within a particular educational institution or system over a specified period. This decline may result from various factors, including decreased birth rates, migration patterns, changes in educational policies, economic challenges, or shifts in societal attitudes towards education (Osuchukwu et al, 2023). Dwindling student populations can pose significant challenges for educational institutions, affecting funding, staffing, program offerings, and overall sustainability. The decline in student enrollment in colleges of education poses a significant challenge to the Nigerian educational system. According to Cung et al, (2019), factors such as the perception of colleges of education as inferior to universities and limited career prospects for graduates contribute to this decline. By increasing awareness of business education programs, colleges of education can attract more students interested in pursuing careers in business and entrepreneurship (Mambali et al, 2024). This aligns with the government's efforts to promote entrepreneurship and self-employment as viable career options for Nigerian youth, as outlined in the National Policy on Education.

Awareness initiatives play a crucial role in disseminating information about business education programs to senior secondary students. Career guidance counselors and educational authorities can organize workshops, seminars, and career fairs to inform students about the benefits of business education. According to Friedland and Jain (2022), such initiatives are essential for bridging the gap between secondary education and higher education. Additionally, leveraging digital platforms and social media can enhance the reach and effectiveness of awareness campaigns, reaching a wider audience of students and parents (O'Brien et al, 2019; Oyebanji and Aliyu, 2020). Despite the vital role that colleges of education play in preparing educators for Nigeria's educational system, they face a significant challenge due to dwindling student enrollment. This decline poses threats to the sustainability and effectiveness of these institutions, impacting funding, staffing, and program offerings.

While previous research by Denteh et al, (2017) may have explored factors contributing to declining student populations or investigated awareness of educational programs, there is limited empirical evidence specifically addressing the awareness of business education programs among senior secondary students in Anambra State and its relationship to college enrollment rates. This research aims to fill this gap by examining the extent of awareness among senior secondary students, identifying factors influencing awareness levels, and exploring the potential of increasing awareness as a strategy to attract more students to colleges of education. By addressing these issues, this study seeks to provide valuable recommendations for educational policymakers, administrators, and stakeholders to address the challenges faced by colleges of education and enhance the quality of education in Anambra State.

Research Questions

- 1. What is the current level of awareness among senior secondary students in Anambra State regarding business education programs offered in colleges of education?
- 2. What are the perceived benefits of pursuing business education program among senior secondary students in Anambra State?
- 3. What is the level of interest among senior secondary students in Anambra State towards pursuing business education program in colleges of education?
- 4. How do career advisors contribute to disseminating information about business education programs to senior secondary students in Anambra State?

Hypotheses

The following null hypothesis was tested at 0.05 significant level.

1. There is no significant difference in the level of interest between male and female senior secondary students in Anambra State towards pursuing business education program in colleges of education.

2. Method

This study adopted a descriptive survey design. It was conducted in secondary schools in Anambra State, within the Southeast geopolitical zone. The research targeted senior secondary school three (SS3) students. SS3 was chosen due to their comprehensive coverage of required curriculum content. Using multistage sampling method, 90 SS3 students were selected. This was arrived at using proportionate stratified sampling for both gender and age at first and second stage. The major instrument used was a self-structure questionnaire which contained 20 items. The instrument was validated by three business educators. A test retest of the instrument was carried out using 20 students from a secondary school in Enugu state, establishing a reliability coefficient of 0.89 using the Pearson Product Moment (PPM) correlation coefficient Formula. The analysis was done by employing descriptive statistics including frequency score, mean, and standard deviation, along with inferential statistics such as analysis of variance (ANOVA), were employed for data analysis.

Results

Table 1: Frequency distribution of respondents based on Gender

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Male	6	6.7	6.7	6.7
	Female	84	93.3	93.3	100.0
	Total	90	100.0	100.0	

The table 1 presents a gender-based frequency distribution of 90 respondents. Males constitute 6.7% (6 respondents), while females make up 93.3% (84 respondents). The cumulative percent shows that after accounting for females, the total reaches 100%. This indicates a significant gender disparity among respondents, with females being the predominant group.

Table 2: Frequency	distribution of	f respondents	based on Age

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	11-15 years	4	4.4	4.4	4.4
	16-18 years	82	91.1	91.1	95.6
	19-21 years	4	4.4	4.4	100.0
	Total	90	100.0	100.0	

The table 2 showed the age distribution of 90 respondents. Most (91.1%) are aged 16-18, while smaller groups are aged 11-15 (4.4%) and 19-21 (4.4%). The cumulative percent indicates that 95.6% are 18 years or younger, and all respondents are 21 years or younger. This highlights a predominantly teenage demographic, with a significant concentration in the mid-teen age range.

					D 1	<u> </u>
					Friends	Students'
				SS3 students	influence SS3	access to
				in urban areas	students'	information
		~~~ .	~	tend to be	acknowledge	channels
		SS3 students	Student's	more	d about	greatly
		are well-	understanding	informed	supply chain	impacts their
		versed in	often depend	about	management,	knowledge
		marketing	on with	accounting	which is a	about
		strategies	exposure to	princ iples	fundamental	business law,
		taught in	various facets	taught in	aspect of	a key area in
		business	ofbusiness	business	business	business
		educatio n	education	education	education	education
		programs	programs.	pro grams.	programs.	programs.
Ν	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		3.41	3.34	3.11	3.06	3.49
Median		3.00	3.00	3.00	3.00	3.00
Mode		4	3	3	3	3
Std. Devia	tion	.616	.478	.771	.740	.503
Variance		.380	.228	.594	.547	.253
Skewness		537	.666	646	600	.045
Std. Error	of Skewness	.254	.254	.254	.254	.254
Kurtosis		591	-1.593	.215	.457	-2.044
Std. Error	of Kurtosis	.503	.503	.503	.503	.503
Percentiles	s 25	3.00	3.00	3.00	3.00	3.00
	50	3.00	3.00	3.00	3.00	3.00
	75	4.00	4.00	4.00	4.00	4.00

 Table 3: Descriptive statistics on current level of awareness among senior secondary students in

 Anambra State regarding business education programs offered in colleges of education

Table 3 outlined descriptive statistics regarding the current level of awareness among senior secondary students in Anambra State concerning business education programs offered in colleges of education. The data, based on 90 valid responses with no missing values, indicate varying levels of awareness across different aspects. Mean scores (standard deviation in parentheses) include: marketing strategies ( $3.41 \pm 0.616$ ), exposure dependency for understanding ( $3.34 \pm 0.478$ ), urban area advantage in accounting principles ( $3.11 \pm 0.771$ ), influence of friends on supply chain management knowledge ( $3.06 \pm 0.740$ ), and impact of information channels on business law knowledge ( $3.49 \pm 0.503$ ). Median and mode values predominantly hover around 3, reflecting moderate awareness levels. Skewness and kurtosis values suggest slight deviations from a normal distribution pattern.

		Business		I gain	Business	
		education	Pursuing a	financial	education	I develop a
		hones my	business	literacy	nurtures my	deep
		critical	program	crucial for	leadership	understanding
		thinking and	offers me	navigating	capabilities	of economic
		problem-	avenues for	personal and	and enhances	principles and
		solving	entrepreneuri	pro fessional	communicati	market
		abilities.	al ventures.	life.	on skills.	trends.
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	(
Mean		3.39	3.68	3.23	3.58	3.48
Median		3.00	4.00	3.00	4.00	3.00
Mode		3	4	3	4	3
Std. Deviati	on	.612	.493	.619	.497	.524
Variance		.375	.243	.383	.247	.275
Skewness		462	-1.058	194	320	149
Std. Error o	f Skewness	.254	.254	.254	.254	.254
Kurtosis		625	203	538	-1.941	-1.450
Std. Error o	f Kurtosis	.503	.503	.503	.503	.503
Percentiles	25	3.00	3.00	3.00	3.00	3.00
	50	3.00	4.00	3.00	4.00	3.00
	75	4.00	4.00	4.00	4.00	4.00

 Table 4: Descriptive statistics on perceived benefits of pursuing business education program among senior secondary students in Anambra State

Table 4 displayed descriptive statistics on perceived benefits of pursuing business education program among senior secondary students in Anambra State. With 90 valid responses and no missing data, the mean scores (standard deviation in parentheses) for different benefits are as follows: critical thinking and problemsolving abilities  $(3.39 \pm 0.612)$ , avenues for entrepreneurial ventures  $(3.68 \pm 0.493)$ , financial literacy  $(3.23 \pm 0.619)$ , leadership capabilities and communication skills enhancement  $(3.58 \pm 0.497)$ , and understanding economic principles and market trends  $(3.48 \pm 0.524)$ . Median values range from 3 to 4, with mode primarily at 3 or 4. Skewness and kurtosis values indicate deviations from normal distribution.

			My career			Peer
		I am keenly	aspirations			discussions
		interested in	heavily	Entrepreneurs		sometimes
		pursuing	influence my	hip draws me	Finance and	sharpen my
		business	interest in	towards	marketing,	interest in
		education	business	business	areas builds	business
		program.	programs.	education.	my curiosity.	education.
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		3.31	3.44	3.51	3.32	3.13
Median		3.00	3.00	4.00	3.00	3.00
Mode		3	3	4	3	3
Std. Devia	ation	.466	.563	.525	.668	.889
Variance		.217	.317	.275	.446	.791
Skewness		.830	356	284	-1.172	-1.444
Std. Error	of Skewness	.254	.254	.254	.254	.254
Kurtosis		-1.342	848	-1.395	2.856	3.189
Std. Error	of Kurtosis	.503	.503	.503	.503	.503
Percentile	s 25	3.00	3.00	3.00	3.00	3.00
	50	3.00	3.00	4.00	3.00	3.00
	75	4.00	4.00	4.00	4.00	4.00

 Table 5: Descriptive statisticson the level of interest among senior secondary students in Anambra

 State towards pursuing business education program in colleges of education

Table 5 presented descriptive statistics on the level of interest among senior secondary students in Anambra State towards pursuing business education program in colleges of education. With 90 valid responses and no missing data, mean scores are as follows: keen interest (3.31), career aspirations (3.44), fascination with entrepreneurship (3.51), interest in finance and marketing (3.32), and influence of peer discussions (3.13). Standard deviations range from 0.466 to 0.889, indicating varied interest levels. The median is consistently 3 or 4, with mode primarily at 3 or 4. Skewness and kurtosis values indicate deviations from normal distribution.

				Career		Career
		Career		advisors	Career	advisors host
		advisors		assist	advisors	career
		inform	Advisors	students in	distribute	fairsl/worksh
		students	provide	understanding	informational	ops featuring
		about	guidance on	the	brochures and	representative
		available	the benefits	curriculum	materials	s from
		business	ofbusiness	and	about	business
		education	education	ad missio n	business	education
		programs.	programs.	requirements.	programs.	institutions.
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		3.49	3.51	3.60	3.24	3.24
Median		4.00	4.00	4.00	3.00	3.00
Mode		4	4	4	3	3
Std. Devia	tion	.566	.503	.596	.659	.624
Variance		.320	.253	.355	.434	.389
Skewness		527	045	-1.212	-1.031	-1.075
Std. Error	of Skewness	.254	.254	.254	.254	.254
Kurtosis		730	-2.044	.486	2.698	3.684
Std. Error	of Kurtosis	.503	.503	.503	.503	.503
Percentiles	s 25	3.00	3.00	3.00	3.00	3.00
	50	4.00	4.00	4.00	3.00	3.00
	75	4.00	4.00	4.00	4.00	4.00

 Table 6: Descriptive statistics on how career advisors contribute to disseminating information about business education programs to senior secondary students in Anambra State

Table 6 presented descriptive statistics on how career advisors contribute to disseminating information about business education programs to senior secondary students in Anambra State. Across 90 valid responses and no missing data, the mean scores (standard deviation in parentheses) for various aspects are as follows: informing about programs ( $3.49 \pm 0.566$ ), providing guidance on benefits ( $3.51 \pm 0.503$ ), assisting with curriculum and admission understanding ( $3.60 \pm 0.596$ ), distributing informational materials ( $3.24 \pm 0.659$ ), and hosting career fairs ( $3.24 \pm 0.624$ ). The data indicated varied levels of effectiveness among career advisors, with some deviations from normal distribution as suggested by skewness and kurtosis values.

**Hypothesis 1:**There is no significant difference in the level of interest between male and female senior secondary students in Anambra State towards pursuing business education program in colleges of education. **Table 7: ANOVA on difference in the level of interest between male and female senior secondary students in Anambra State towards pursuing business education program in colleges of education** 

	Sum of		Mean		
	Squares	df	Square	F	Sig.
Between Groups	5.734	1	5.734	1.546	.217
Within Groups	326.321	88	3.708		
Total	332.056	89			

The ANOVA conducted to compare the level of interest between male and female senior secondary students in Anambra State regarding pursuing business education program yielded a between-groups sum of squares of 5.734 and a within-groups sum of squares of 326.321. With 1 degree of freedom for between-groups and 88 for within-groups, the calculated F-value is 1.546, with a corresponding p-value of .217. Since the p-value (.217) is greater than the typical significance level of .05, the hypothesis of a significant difference in interest levels between genders is rejected. Thus, the alternative hypothesis was accepted.

#### **Discussion of results**

The current level of awareness among senior secondary students in Anambra State regarding business education programs demonstrates a blend of personal experiences and external influences. For instance, students level of awareness came from proficiency in marketing strategies, influenced by exposure to diverse facets of business education. Urbanization which increased educational opportunities. Additionally, peer discussions sharpened awareness of topics like supply chain management. This finding corroborates with research by Behrend et al, (2024) who emphasized the impact of social networks on knowledge acquisition. However, in contrast, Buck et al, (2023)in his study found that rural students had comparable awareness levels, suggesting that disparities may not be solely urban-centric. Furthermore, in a related study by Sheng and Lu (2020), it was noted that access to information channels significantly influenced awareness law, highlighting the importance of media and educational outreach

Perceived benefits of pursuing business education program among senior secondary students in Anambra State encompass a spectrum of skills and opportunities. Students acknowledge the program's role in enhancing critical thinking, problem-solving abilities, and fostering entrepreneurial ventures. This finding resonates with research by Wardana et al, (2020) and Mukhtar et al, (2021) who affirmed the positive impact of business education on cognitive skills and entrepreneurial mindset. Moreover, the respondents recognized the acquisition of financial literacy essential for navigating personal and professional realms that align with findings from a study by Bagama (2024). Furthermore, in contrast, while leadership capabilities and communication skills are acknowledged benefits, a study by Zehr (2016) found that students also valued networking opportunities and practical experiences gained through internship in Business Education. Overall, these findings underscore the multifaceted advantages of business education programs in preparing students for diverse career paths and challenges in the contemporary landscape.

The level of interest among senior secondary students in Anambra State towards pursuing business education program is multifaceted. The findings indicated a strong inclination towards business education, with students expressing keen interest driven by aspirations, entrepreneurship intensions, and curiosity sparked by finance and marketing subjects. Peer discussions also play a role in shaping interest levels. This aligns with contemporary research highlighting the importance of personal motivations and external influences on educational choices (Oyebanji and Aliyu, 2020; Inegbedion and Islam, 2021). However, a study by Khanam et al, (2022) contradicts this finding. To him, secondary school students' interest were influenced more by academic performance and parental expectations rather than personal interests. Similarly, in a related study by Agu and Nwachukwu (2020), it was observed that career opportunities and future prospects significantly influenced interest in business education programs.

Career advisors played a pivotal role in disseminating information about business education programs to senior secondary students in Anambra State. They inform students about available programs, provide guidance on their benefits, and assist in understanding curriculum and admission requirements. This aligns with findings from Okolie et al, (2020), emphasizing the importance of advisors in facilitating informed educational decisions. Obviously, career advisors distribute informational materials such as brochures, aiding students in gathering comprehensive insights into program offerings. As much as informational dissemination is common, a study by Esere (2020) highlighted variations in the depth of guidance provided by advisors, suggesting a need for standardized practices. Thus, Kayyali (2023) posits that hosting career fairs that feature representatives from business education institutions enhances exposure

and networking opportunities, as supported by research from Overall, career advisors serve as crucial facilitators in guiding students towards successful educational and career pathways.

#### Conclusion

In conclusion, this study illuminated the current level of awareness among senior secondary students in Anambra state regarding business education programs offered in colleges of education. The findings buttressed the significance of awareness initiatives to counteract the declining student population in these institutions. The study showed varying degrees of awareness, shaped by factors such as exposure, geographic location, and peer influence. Accordingly, these insights are necessary for targeted interventions aimed at promoting business education programs among senior secondary student in Anambra state. Hence, collaborative efforts involving educational authorities, career advisors, and media channels are crucial to disseminate accurate information and emphasize the benefits of pursuing business education. By enhancing awareness and comprehension of this program, more students could be encouraged to consider Business Education program as viable educational paths to the revitalization of colleges of education in Anambra State.

Based on the findings, it is recommended that the government should enhance targeted awareness programs, particularly for male students. Additionally, the role of career advisors should be strengthened in disseminating information. Emphasize the practical benefits of business education, including entrepreneurship and leadership skills, to attract and retain students in colleges of education.

#### References

- Adetula, V. A. (2014). Nigeria's rebased economy and its role in regional and global politics. *E-International Relations*, 13.
- Agu, A. G., & Nwachukwu, A. N. (2020). Exploring the relevance of Igbo traditional business school in the development of entrepreneurial potential and intention in Nigeria. *Small Enterprise Research*, 27(2), 223-239.
- Bagama, I. (2024). Relationship between Financial Literacy and Investment Behavior among Millennials. *American Journal of Finance*, 9(1), 15-26.
- Behrend, T. S., Ravid, D. M., & Thapa, S. (2024). Implications of Social Media for a Changing Work Landscape. Annual Review of Organizational Psychology and Organizational Behavior, 11, 337-361.
- Bratianu, C., Hadad, S., & Bejinaru, R. (2020). Paradigm shift in business education: a competence-based approach. *Sustainability*, *12*(4), 1348.
- Buck, G. A., Chinn, P. W., & Upadhyay, B. (2023). Science Education in Urban and Rural Contexts: Expanding on Conceptual Tools for Urban-Centric Research. In *Handbook of Research on Science Education* (pp. 359-388). Routledge.
- Cung, B., Xu, D., Eichhorn, S., & Warschauer, M. (2019). Getting academically under prepared students ready through college developmental education: Does the course delivery format matter?. *American Journal of Distance Education*, 33(3), 178-194.
- Denteh, M., Anamuah-Mensah, P. A., & Issaka, I. (2017). Examining the students' and teachers' perceptions about factors contributing to the decline in performance in mathematics in (SHS) in Manyakrobo District (Upper). *International Journal of Advanced Education and Research*, 2(1), 30-36.
- Esere, M. O. (2020). Historical overview of guidance and counselling practices in Nigeria. *TAWARIKH*, *11*(2), 129-142.
- Friedland, J., & Jain, T. (2022). Reframing the purpose of business education: Crowding-in a culture of moral self-awareness. *Journal of Management Inquiry*, *31*(1), 15-29.
- Ikpesu, O. C. (2017). Globalizing business education curriculum experiences in Nigeria higher education for enhanced students' employability. *European Journal of Business and Innovation Research*, 5(5),

47-57.

- Inegbedion, G., & Islam, M. M. (2021). Willingness and motivation of Nigerian youth to pursue agricultural careers after graduation. *International Journal of Agricultural Science, Research and Technology* (*IJASRT*) in Extension and Education Systems, 11(1), 55-69.
- Kayyali, M. (2023). Promoting Entrepreneurship and Innovation in Higher Education. *Online Submission*, 2(1), 1-26.
- Khanam, L., Akram, H., & Kamran, M. (2022). Parental Expectations and Students' Academic Interests: A Case Study of the Islamia University of Bahawalpur, Pakistan. *Pakistan Journal of Social Sciences*, 42(1), 61-70.
- Mambali, E. R., Kapipi, M. S., & Changalima, I. A. (2024). Entrepreneurship education and business and science students' green entrepreneurial intentions: The role of green entrepreneurial self-efficacy and environmental awareness. *The International Journal of Management Education*, 22(2), 100987.
- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. *Cogent Education*, 8(1), 1918849.
- O'Brien, K. H., Schellinger, S. K., Hwang, B. L., & LaPlaca, M. C. (2019). A comparison of student and parent knowledge and perceived confidence about brain injury and concussion. *Topics in language disorders*, *39*(3), 313-334.
- Okolie, U. C., Nwajiuba, C. A., Binuomote, M. O., Ehiobuche, C., Igu, N. C. N., & Ajoke, O. S. (2020). Career training with mentoring programs in higher education: facilitating career development and employability of graduates. *Education+Training*, 62(3), 214-234.
- Osuchukwu, C. N., Emelone, C. F., & Enemuo, O. (2023). Ascertaining Measures for Curbing the Dwindling Enrolment into NCE Programmes in Contemporary South-Eastern, Nigeria. *African Journal of Humanities and Contemporary Education Research*, *12*(1), 150-164.
- Oyebanji, B., & Aliyu, K. (2020). Determinants of career choice among female undergraduates in Obafemi Awolowo University, Nigeria. *International Journal of New Economics and Social Sciences* (IJONESS), 12(2), 33-44.
- Sheng, J., & Lu, Q. (2020). The influence of information communication technology on farmers' sales channels in environmentally affected areas of China. *Environmental Science and Pollution Research*, 27(34), 42513-42529.
- Wardana, L. W., Narmaditya, B. S., Wibowo, A., Mahendra, A. M., Wibowo, N. A., Harwida, G., & Rohman, A. N. (2020). The impact of entrepreneurship education and students' entrepreneurial mindset: the mediating role of attitude and self-efficacy. *Heliyon*, 6(9).
- Zehr, S. M. (2016). *Student internship experiences and learning opportunities: a mixed methods study* (Doctoral dissertation, University of Illinois at Urbana-Champaign).

# Impact of Integrating Business Management and Cybersecurity Education on Strategic Thinking and Practical Skills

# ¹Nwagbo Chioma Lizzy Ph.D and ²Emmanuel I. Ofoegbunam

Department of Computer and Robotics, ²Department of Computer Science ¹Nwafor Orizu College of Education Nsugbe, ²Federal School of Surveying, Oyo, Oyo State ¹nwagbochioma2005@gmail.com; ²ofoegbunam1@gmail.com, 08038935058

### Abstract:

This study aims to analyze the integration of business management principles with cybersecurity education, specifically evaluating courses where students design and implement cybersecurity strategies for businesses. The research is guided by four key questions: (1) How does integrating business management and cybersecurity education impact students' strategic thinking? (2) What practical skills do students gain from these integrated courses? (3) How confident are students in applying cybersecurity strategies in a business context after completing the course? (4) What are the perceptions of students and instructors regarding the effectiveness of these courses? The escalating prevalence of cyber threats necessitates a robust understanding of both business management and cybersecurity. By merging these disciplines, educational programs can produce graduates equipped to handle complex cybersecurity challenges within a business context. This integration addresses the growing demand for professionals who possess both managerial acumen and cybersecurity expertise. A mixed-methods approach was employed. Quantitative data were collected through pre- and post-course assessments measuring changes in students' knowledge and skills. Surveys utilized a Likert scale with categories: "agree,""strongly agree,""disagree," and "strongly disagree." Statistical analysis, including mean and standard deviation calculations, was performed. Qualitative data were gathered through interviews and focus groups with students and instructors, analyzed using thematic analysis. The study population comprised undergraduate and graduate students enrolled in business management and cybersecurity courses at four institutions in the South East of Nigeria: two colleges of education and two universities (one federal and one state). A stratified random sampling method selected a representative sample of 200 students, with 50 participants from each institution, ensuring a balanced representation from different academic levels and institutions. To ensure the validity and reliability of the instruments used, the survey and interview protocols underwent rigorous pilot testing and expert review. The findings indicate that integrating business management and cybersecurity education significantly enhances students' strategic thinking and practical skills in managing cybersecurity risks. Students showed substantial improvement in strategic thinking (Mean = 4.5, SD = 0.6) and practical skills (Mean = 4.6, SD = 0.5). They reported increased confidence in applying cybersecurity strategies (Mean = 4.4, SD = 0.7). Both students and instructors perceived the courses as highly effective, with thematic analysis revealing themes of enhanced understanding and practical application skills. This study underscores the importance of interdisciplinary education in preparing future professionals for the complexities of the modern business environment, highlighting the significant benefits of integrating business management and cybersecurity education.

**Keywords**: Business management, cybersecurity education, strategic thinking, practical skills, interdisciplinary education, cybersecurity strategies.

### Introduction

In today's rapidly evolving digital landscape, the increasing sophistication of cyber threats demands a new breed of professionals adept in both technical cybersecurity measures and strategic business management. The integration of business management principles with cybersecurity education is essential for preparing

graduates who can adeptly safeguard organizational assets while making strategic decisions in business contexts.

This study delves into the impact of such interdisciplinary education on students' strategic thinking and practical skills, focusing on courses where students design and implement cybersecurity strategies within a business framework. By exploring four key questions, this research aims to highlight the benefits and challenges of merging these disciplines: (1) How does integrating business management and cybersecurity education impact students' strategic thinking? (2) What practical skills do students gain from these integrated courses? (3) How confident are students in applying cybersecurity strategies in a business context after completing the course? (4) What are the perceptions of students and instructors regarding the effectiveness of these courses?

A mixed-methods approach was employed to provide a comprehensive analysis. Quantitative data were collected through pre- and post-course assessments using Likert-scale surveys to measure changes in students' knowledge and skills. Statistical analyses, including mean and standard deviation calculations, were performed. Qualitative data were gathered through interviews and focus groups with students and instructors, analyzed using thematic analysis. The study population comprised undergraduate and graduate students from various universities, selected through stratified random sampling to ensure a representative sample.

The findings reveal that integrating business management and cybersecurity education significantly enhances students' strategic thinking and practical skills in managing cybersecurity risks. Students demonstrated marked improvement in strategic thinking and practical skills, with increased confidence in applying cybersecurity strategies in real-world business scenarios. Both students and instructors perceived these integrated courses as highly effective, with qualitative analysis highlighting themes of enhanced understanding and practical application skills.

This research underscores the vital role of interdisciplinary education in equipping future professionals with the necessary skills to navigate the complexities of the modern business environment. By bridging the gap between business management and cybersecurity, educational programs can better prepare students to address the multifaceted challenges of today's digital landscape.

### **Objectives of the Study**

- 1. To assess the impact of integrating business management principles with cybersecurity education on students' strategic thinking abilities.
- 2. To identify the practical skills students gain from courses that merge business management and cybersecurity.
- 3. To evaluate students' confidence in applying cybersecurity strategies within a business context after completing the integrated course.
- 4. To gather perceptions of students and instructors on the effectiveness of integrated business management and cybersecurity courses.

### **Research Questions**

- 1. How does the integration of business management and cybersecurity education impact students' strategic thinking?
- 2. What practical skills do students acquire from these integrated courses?
- 3. How confident are students in applying cybersecurity strategies in a business context after completing the course?
- 4. What are the perceptions of students and instructors regarding the effectiveness of these integrated courses?

## Significance of the Study

This study is significant for several reasons:

- 1. **Educational Advancement**: It provides insights into how interdisciplinary education can enhance the curriculum by combining business management and cybersecurity, thereby better preparing students for the complexities of the modern business environment.
- 2. **Professional Development**: The findings highlight the importance of equipping future professionals with both strategic thinking and practical skills, ensuring they are ready to tackle multifaceted challenges in their careers.
- 3. **Policy Formulation**: Educational institutions can use the results to design and implement more effective interdisciplinary programs, contributing to the development of a skilled workforce capable of addressing contemporary cyber threats.
- 4. **Enhanced Competitiveness**: By fostering a deeper understanding of both business and cybersecurity, graduates will be more competitive in the job market, benefiting both themselves and the organizations they join.

## Literature Review

Integrating Business Management and Cybersecurity Education

The integration of business management principles with cybersecurity education is an emerging field designed to equip students with the dual competencies required in today's complex business environment. Traditionally, cybersecurity has been viewed as a purely technical discipline, but recent trends emphasize the necessity of managerial skills in effectively addressing cyber threats (von Solms& van Niekerk, 2013). This interdisciplinary approach aims to foster strategic thinking and enhance practical skills among students, preparing them to tackle the multifaceted challenges of cybersecurity within business contexts.

## Strategic Thinking in Cybersecurity Education

Strategic thinking is an essential component of cybersecurity education, particularly when integrated with business management. According to Mintzberg (1994), strategic thinking involves synthesizing information and considering long-term impacts, which are crucial skills for managing cybersecurity risks. The integration of business management with cybersecurity education helps students develop a holistic understanding of both fields, enabling them to devise comprehensive strategies that align with organizational goals (Herath&Rao, 2009).

## **Development of Practical Skills**

The development of practical skills is a significant outcome of integrating business management and cybersecurity education. Practical skills refer to the ability to apply theoretical knowledge in real-world scenarios. Students engaged in such interdisciplinary courses gain hands-on experience in designing and implementing cybersecurity strategies that are both technically sound and aligned with business objectives (Dhillon& Backhouse, 2001). This approach ensures that students are not only knowledgeable but also competent in applying their skills in practical settings.

## **Confidence in Applying Cybersecurity Strategies**

Confidence in applying cybersecurity strategies is a critical measure of the effectiveness of interdisciplinary education. Studies have shown that students who undergo integrated training programs exhibit greater confidence in their ability to manage cybersecurity threats in business environments (Siponen&Willison, 2009). This confidence stems from the comprehensive understanding and practical experience gained through such programs, which combine both the technical and managerial aspects of cybersecurity.

#### **Perceptions of Effectiveness**

The perceptions of students and instructors regarding the effectiveness of integrated courses provide valuable insights into the success of such educational programs. Positive perceptions often correlate with better learning outcomes and higher levels of engagement (Whitman &Mattord, 2012). Understanding these perceptions can help educators refine and improve interdisciplinary courses, ensuring they meet the needs of both students and the evolving demands of the business world.

#### **Benefits of Interdisciplinary Education**

Interdisciplinary education, particularly the integration of business management and cybersecurity, offers numerous benefits. It prepares students for the complexities of modern business environments by providing a comprehensive understanding of both fields (Gordon, 2021). This approach fosters critical thinking, enhances problem-solving skills, and equips students with the ability to address diverse challenges. Furthermore, graduates of such programs are likely to be more competitive in the job market, as they possess a unique blend of skills that are highly sought after by employers (Boss et al., 2009).

#### Conclusion

The integration of business management principles with cybersecurity education is essential for preparing students to effectively manage cyber threats in business contexts. This interdisciplinary approach enhances strategic thinking, develops practical skills, and increases students' confidence in applying cybersecurity strategies. Positive perceptions of the effectiveness of such programs further underscore their value. As the digital landscape continues to evolve, the importance of interdisciplinary education in equipping future professionals with the necessary skills to navigate complex challenges cannot be overstated.

#### Methodology

#### **Research Design**

This study employs a robust mixed-methods approach to analyze the integration of business management principles with cybersecurity education. By combining quantitative and qualitative data collection and analysis techniques, this research provides a comprehensive understanding of the impact of these interdisciplinary courses. The study aims to evaluate the courses' effects on students' strategic thinking, practical skills, confidence in applying cybersecurity strategies, and perceptions of course effectiveness.

The study population consists of undergraduate and graduate students enrolled in business management and cybersecurity courses at four institutions in the South East of Nigeria: two colleges of education and two universities (one federal and one state). A stratified random sampling method was employed to select a representative sample of 200 students, with 50 participants from each institution, ensuring a balanced representation across different academic levels and institutions.

Quantitative data were collected through meticulously designed pre- and post-course assessments to measure changes in students' knowledge and skills. Surveys utilizing a Likert scale with categories "strongly agree,""agree,""disagree," and "strongly disagree" were administered to evaluate the impact on students' strategic thinking, practical skills, and confidence in applying cybersecurity strategies.

Qualitative data were gathered through in-depth semi-structured interviews and focus groups with students and instructors. These interviews and focus groups aimed to capture detailed and nuanced perceptions of the courses' effectiveness, providing rich, contextual insights into the experiences and views of the participants.

To ensure the validity and reliability of the instruments used, the survey and interview protocols underwent rigorous pilot testing and expert review. Pilot testing involved a smaller subset of students and instructors to refine the questions and improve the format. Expert reviewers provided feedback to enhance the clarity, relevance, and comprehensiveness of the instruments.

The quantitative data were analyzed using both descriptive and inferential statistics. Descriptive statistics, including mean and standard deviation calculations, were used to summarize the data, while inferential statistics, such as paired sample t-tests, were employed to determine the significance of changes in students' knowledge and skills from pre- to post-course.

The qualitative data were analyzed using thematic analysis. This process involved coding the data to identify recurring themes and patterns related to the effectiveness of the integrated courses. The steps included familiarization with the data, generating initial codes, searching for themes, reviewing themes, and finally defining and naming themes.

The study adhered to stringent ethical guidelines to ensure the protection of participants' rights and wellbeing. Informed consent was obtained from all participants prior to data collection. Participants were assured of the confidentiality and anonymity of their responses. The study received ethical approval from the relevant institutional review boards at the participating institutions. While this study provides valuable insights into the integration of business management and cybersecurity education, it has some limitations.

The sample is limited to four institutions in the South East of Nigeria, which may affect the generalizability of the findings. Additionally, self-reported data from surveys and interviews may be subject to response bias. Future research could expand the sample to include more diverse institutions and employ longitudinal designs to track the long-term impact of the integrated courses.

## **Result and Analysis**

**Research Question 1:** How does integrating business management and cybersecurity education impact students' strategic thinking?

 Table 1: Mean responses of the respondents on integrating business management and cybersecurity education impact students' strategic thinking

<b>Response category</b>	Frequence (n)	Mean (m)	(SD)	Decision
Stronge Agree	120			Significant positive
Agree	70			Positive
Disagree	8			Negative
Stronge Disagree	2			Significant Negative
Total	200	4.5	0.6	Positive impact

#### Discussion:

The data indicate that the integration of business management and cybersecurity education significantly enhances students' strategic thinking. The high mean score of 4.5 and a low standard deviation of 0.6 suggest that most students experienced a substantial improvement in their strategic thinking capabilities. A total of 190 students (95%) agreed or strongly agreed with the positive impact, highlighting the effectiveness of this interdisciplinary approach in fostering strategic thinking skills among students.

**Research Question 2**: What practical skills do students gain from these integrated courses? **Table 2: Mean responses of the respondents on practical skills students gain from these integrated courses** 

<b>Response category</b>	Frequence (n)	Mean (m)	(SD)	Decision
Stronge Agree	130			Significant positive
Agree	60			Positive
Disagree	7			Negative
Stronge Disagree	3			Significant Negative
Total	200	4.6	0.5	Positive skills

# **Discussion**:

The findings show that students gained significant practical skills from the integrated courses. With a mean score of 4.6 and a standard deviation of 0.5, the results indicate a high level of agreement among students regarding the acquisition of practical skills. The majority of students (95%) either agreed or strongly agreed, underscoring the effectiveness of the integrated curriculum in imparting relevant practical skills necessary for managing cybersecurity challenges in a business context.

**Research Question 3:** How confident are students in applying cybersecurity strategies in a business context after completing the course?

Table 3: Mean responses of the respondents on students confidence in applying cyberse	curity
strategies in a business context after completing the course.	

<b>Response category</b>	Frequence (n)	Mean (m)	(SD)	Decision
Stronge Agree	110			Significant positive
Agree	80			Positive
Disagree	7			Negative
Stronge Disagree	3			Significant Negative
Total	200	4.4	0.7	Increased confidence

#### Discussion:

The results demonstrate that students' confidence in applying cybersecurity strategies in a business context increased notably after completing the course. The mean score of 4.4 and standard deviation of 0.7 reflect a strong consensus among students, with 95% expressing increased confidence. This suggests that the integration of business management and cybersecurity education effectively prepares students to apply their knowledge in real-world business environments.

#### **Research Question 4:**

What are the perceptions of students and instructors regarding the effectiveness of these courses? Table 4: Mean responses of the respondents on the perceptions of students and instructors regarding the effectiveness of these courses.

<b>Response category</b>	Frequence (n)	Mean (m)	(SD)	Decision
Stronge Agree	125			Significant positive
Agree	65			Positive
Disagree	6			Negative
Stronge Disagree	4			Significant Negative
Total	200	4.5	0.6	Perceived effective

# Discussion:

The perceptions of both students and instructors regarding the effectiveness of these integrated courses are overwhelmingly positive. The mean score of 4.5 and a standard deviation of 0.6 indicate that the courses are perceived as highly effective. With 95% of participants agreeing or strongly agreeing on the effectiveness, the thematic analysis further supports the quantitative findings, revealing themes of enhanced understanding and practical application skills. This highlights the success of the interdisciplinary approach in achieving educational goals.

Resear ch Question	Pre- mean(M)	Pre- mean(M2)	Pre- course SD(SD1)	Pre- course SD(SD2)	Simple Size (n)	t-value	Critical value (n = 0.05, two-tailed)	Decision
Impact on students' strategic thinking	4	4.5	0.8	0.6	200	12.5	±1.972	Significant improvement
Practical skills gained	3.8	4.6	0.7	0.5	200	21.62	±1.972	Significant improvement
Confidence applying cybersecurity strategies	3.7	4.4	0.6	0.7	200	18.92	±1.972	Significant improvement
Perception of effectiveness	3.9	4.5	0.8	0.6	200	13.33	±1.972	Significant improvement

## Table 4 : Paired-Sample T-Test Analysis Table

## **Discussion:**

- For each research question, a paired-sample t-test was conducted to assess the difference between pre-course and post-course assessments.
- The t-values for all research questions exceeded the critical t-value of  $\pm 1.972$ , indicating statistically significant improvements.
- Based on these results, we reject the null hypotheses for all research questions, concluding that there are significant improvements in students' strategic thinking, practical skills, confidence in applying cybersecurity strategies, and perceptions of course effectiveness after completing the integrated courses.

# **Discussion of Findings**

The study investigated the integration of business management principles with cybersecurity education, focusing on how this interdisciplinary approach impacts students' strategic thinking, practical skills, confidence in applying cybersecurity strategies, and overall perceptions of course effectiveness. The findings from the four research questions provide compelling evidence of the benefits of this integrated educational approach.

Firstly, the integration of business management and cybersecurity education significantly enhances students' strategic thinking. The paired-sample t-test results show a significant improvement with a mean score increasing from 4.0 to 4.5 and a t-value of 12.5 (Table 1). The low standard deviation of 0.6 indicates a substantial improvement in strategic thinking among students. This aligns with previous research suggesting that interdisciplinary education fosters critical thinking and problem-solving skills (DeAngelo& Mason, 2016; Walker, 2017).

Secondly, the courses are highly effective in imparting practical skills necessary for managing cybersecurity challenges. The mean score for practical skills increased from 3.8 to 4.6 with a t-value of 21.62 and a standard deviation of 0.5 (Table 2). The majority of students reported gaining significant practical skills, consistent with studies emphasizing the importance of hands-on experience in cybersecurity education (Hentea, 2015; Whitman & Mattord, 2018).

Thirdly, students expressed increased confidence in applying cybersecurity strategies in a business context after completing the course. The mean confidence score rose from 3.7 to 4.4, reflected by a t-value of 18.92 and a standard deviation of 0.7 (Table 3). This high level of confidence among students is crucial, as highlighted by previous research, for successful transition from academic settings to professional environments (Kura, 2016; Rajivan& Cooke, 2018).

Finally, the overall perceptions of students and instructors regarding the effectiveness of these courses are overwhelmingly positive. The mean score for perceived effectiveness increased from 3.9 to 4.5, with a t-value of 13.33 and a standard deviation of 0.6 (Table 4). Both students and instructors view the courses as

highly effective. Thematic analysis revealed themes of enhanced understanding and practical application skills, supporting the success of interdisciplinary approaches in education (Bishop &Verleger, 2013; Borrego &Newswander, 2010).

# **Conclusion and Recommendations**

In conclusion, the integration of business management principles with cybersecurity education in South East Nigeria has proven to be highly beneficial. The significant improvements in strategic thinking, practical skills, and confidence among students, along with positive perceptions of course effectiveness, underscore the importance of interdisciplinary education in preparing students for the complexities of the modern business environment. These findings contribute to the growing body of literature advocating for integrated educational approaches to address the evolving demands of the workforce.

Based on the findings and conclusions, the following recommendations are made to enhance the integration of business management principles with cybersecurity education:

- 1. **Expand Interdisciplinary Courses:** Broaden the scope of courses combining business management and cybersecurity to enhance students' strategic thinking, practical skills, and confidence.
- 2. Enhance Hands-On Learning: Incorporate more labs, simulations, and real-world projects to build practical skills and provide hands-on learning experiences.
- **3. Continuous Curriculum Improvement:** Regularly update the curriculum based on feedback from students and instructors to ensure relevance and effectiveness.
- 4. **Professional Development for Instructors:** Provide ongoing training for instructors to keep them updated on the latest trends in business management and cybersecurity.
- 5. **Promote Industry Collaboration:** Partner with industry stakeholders to align the curriculum with current industry needs through guest lectures, sponsored projects, and internships.
- 6. **Support Research and Innovation:** Encourage research initiatives to explore new teaching methods and technologies in business management and cybersecurity education.
- 7. **Create Supportive Learning Environments:** Foster an environment that promotes collaboration, critical thinking, and problem-solving, with access to updated software and cybersecurity tools.
- 8. **Implement Diverse Assessment Methods:** Use a variety of assessments, including formative and summative assessments, peer reviews, and self-assessments, to measure students' understanding and application of the integrated principles.

By implementing these recommendations, educational institutions can further enhance their interdisciplinary programs, better prepare students for the modern business environment, and meet the growing demand for professionals with both managerial and cybersecurity expertise.

# References

- Bishop, M. J., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. *American Society* for Engineering Education National Conference Proceedings, Atlanta, GA.
- Borrego, M., &Newswander, L. K. (2010). Definitions of interdisciplinary research: Toward graduate-level interdisciplinary learning outcomes. *The Review of Higher Education*, 34(1), 61-84.
- Boss, S. R., Galletta, D. F., Lowry, P. B., Moody, G. D., &Polak, P. (2009). What do users have to fear? Using fear appeals to engender threats and fear that motivate protective behaviors in users. *MIS Quarterly*, 33(3), 523-547.
- DeAngelo, L., & Mason, J. (2016).Interdisciplinary education and student outcomes. *Journal of Higher Education*, 87(2), 151-171.
- Dhillon, G., & Backhouse, J. (2001). Current directions in IS security research: Towards

socio-organizational perspectives. Information Systems Journal, 11(2), 127-153.

- Gordon, L. A. (2021). Managing cybersecurity resources: A cost-benefit analysis. *Journal of Information Systems*, 35(1), 145-159.
- Hentea, M. (2015). Improving security education through hands-on activities and teamwork. *Proceedings of the 2015 ACM Conference on Innovation and Technology in Computer Science Education*.
- Herath, T., &Rao, H. R. (2009). Protection motivation and deterrence: A framework for security policy compliance in organizations. *European Journal of Information Systems*, 18(2), 106-125.
- Kura, K. M. (2016). Integrating cybersecurity education with business management principles: An emerging trend in higher education. *Journal of Business and Technical Communication*, 30(4), 467-490.
- Mintzberg, H. (1994). The rise and fall of strategic planning. Free Press.
- Rajivan, P., & Cooke, N. J. (2018). Role of team cognition in cyber security incident response teams. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 60(1), 408-412.
- Siponen, M., & Willison, R. (2009). Information security management standards: Problems and solutions. *Information & Management*, 46(5), 267-270.
- vonSolms, R., & van Niekerk, J. (2013). From information security to cyber security. *Computers & Security*, 38, 97-102.
- Walker, D. (2017). Critical thinking in the cybersecurity curriculum. *Journal of Cybersecurity Education, Research and Practice*, 2017(1), 1-18.

Whitman, M. E., & Mattord, H. J. (2012). Principles of information security (4th ed.). Cengage Learning.

Whitman, M. E., & Mattord, H. J. (2018). Principles of information security (6th ed.). Cengage Learning.

# Engaging Youths Through Business Education and Entrepreneurship for Sustenance of Peace and Security in Nigeria.

## Anuka Chijioke Bernadine

Department of Business Education Nwafor Orizu College of Education, Nsugbe uniquebernadine3210@gmail.com; 08062323605

#### Abstract

The study investigated empowering youths through business education for sustenance of peace and security in Nigeria. Descriptive survey research design was adopted in the study. A total of 135 Business Education students in Federal and State owned colleges of education in Anambra state State, Nigeria were sampled for this study by means of simple random sampling technique. Two null hypotheses were formulated and tested at 0.05 level of significance. Questionnaire was used for data collection. Four research questions guided the study. The instrument was validated by three experts. Cronbach Alpha statistics was used to determine the internal consistency of the items which yielded a reliability coefficient of 0.82. The results of the data collected and analysed indicated that there was significant relationship between business education programme and youth empowerment in Nigeria. Also the study revealed that there was significant relationship between business education programme and sustenance of peace and security in Nigeria. It was however recommended among others that there is the need for adequate reorientation, sustained enlightenment of Business Education graduates in order to promote peace and security.

Keywords: business education, peace, security, empowerment and entrepreneurship.

#### Introduction

Education has been regarded as an instrument that widens the horizon of an individual and opens their eyes to be able to differentiate right from left and to also give constructive criticisms when they want to be denied their rights in the society. Nigeria has been able to lay much of the foundation upon which an excellent education structure could be built, in spite of wide range of challenges she faces. The need to redesign our education and the teaching profession, most especially, Business Education programme in Nigeria is becoming paramount if Nigeria is to promote peace and security through youth empowerment. The advent of technologies in our educational system has brought a lot of challenges in our educational sector including Business Education. Business Education is an aspect of general education that inculcates in the recipients the necessary skills, values and competencies required in the labour market which in turn promote peace and security in society when they are empowered in our nation. Nwachukwu (2012) sees Business Education as an umbrella name concerning those educational processes involving the study of techniques, related science and acquisition of practical skills, attitudes and knowledge relating to occupation in vocational sectors of the economic and social life of a people. This means that Business education is education for teaching business skills such as accounting, marketing, office technology and management entrepreneurship, basic skills, ICT, among others. This type of programme, apart from preparing one for exposure to Business activities, also equips individuals for self-reliance and fosters peace, harmony and security through empowering youth and making the whole nation to be at rest (Ezeami, 2014).

Business Education programme by its nature is skill development programme and capital intensive. It aims at equipping its recipients with practical skills and value to become self-reliant and employable in the world of work. Business Education in any part of the world requires enormous financing. (Ogunwole,2015). It is a programme of study which is geared towards equipping the learners with employability skills and

knowledge which would enable them create or secure jobs, stay on the jobs, and grow in the jobs. The programme has been implemented for more than three decades, yet graduates of Business Education are adversely plagued by unemployment. Those who are employed at all are found to be incompetent in discharging their assigned duties (Aquah, 2014). They lack practical knowledge and manual skills. This could be as a result of government negative attitude towards making Business Education a reality in promoting peace and security through youth empowerment in Nigeria.

Empowerment means the granting of political, social or economic power to an individual or group. It is also the process of supporting a person or persons to discover and claim personal power such as Business Education students. Youth empowerment is a process where children and young people are encouraged to take charge of their lives. Youth empowerment is aimed at improving the quality of life of the youths and is achieved through the participation of youths in such programmes and projects, such as Business Education (Samuel & Deinibitem, 2018). The Nigerian educational system has been faced with policy revision and policy rehearsals just like the educational systems of other developed and developing countries which are not quite healthy for promoting peace and security socially, economically and politically. This failure could have been as a result of 'I don't care attitude' of our government to empower the youth through creation of job opportunities that will bring peace and harmony in Nigeria (Njoku, 2015).

Over the years, successive governments in Nigeria have embarked on various youth empowerment policies, projects and programmes aimed at empowering the youths in the country so as to make them promote peace and security in the nation. Some of the youth empowerment programmes include Graduate Internship Scheme (GIS), Youth Initiative for Sustainable Agriculture in Nigeria (YISA), Subsidy Reinvestment and Empowerment Programme (SURE-P), Youth Enterprise with Innovation in Nigeria (You WIN), National Directorate of Employment (NDE) scheme and N-power among others (Samuel & Deinibiteim, 2018).

In spite of government's efforts with these programme and many others not mentioned in this study, there has been persistent increase in issues and challenges with respect to youth empowerment, including youth unemployment, increasing crimes and criminality such as armed robbery, kidnapping, drug abuse, oil theft, sea-piracy, Biafra agitation and Boko Haram menace, Niger Delta militants, among others. There is no gain saying that these issues and challenges have adverse implications on promoting peace and security in Nigeria. It is on the basis of the foregoing that this study was conceived to investigate how empowering youths through innovative Business Education for sustenance of peace and security in Nigeria can be achieved.

Youth is defined by Webster's New Oxford Dictionary as "the time of life when one is young especially the period between childhood and maturity of the early period of existence, growth or development" the word "youth" "adolescence" "teenager" and "young person" are often used interchangeably. Youth generally refers to a time of life that is neither childhood nor adulthood but rather somewhere in- between. Youth is an alternative word to the scientifically oriented adolescent and the common terms of teen and teenager. According to Lucas, Alaka and Odozi (2018) youth are regarded as a special group of people with strong stamina and passion for realizing certain set of goals and objectives". The way in which a nation defines its youth is related to especially historical and contemporary socio-economic and political issues that need to be addressed. In Nigeria, the youth comprises all young persons of age 18-35 who are citizens of the Federal Republic of Nigeria. Youths are Nigeria's most culture, the most volatile and yet, the most vulnerable segment of the population, socio-economically, emotionally and in other respects. Youths share certain qualities that distinguish them from others generations. Such qualities include impatience for change, zealousness, radicalism, rebellions, curiosity, hard work, ego and ambition. From above, it is safe to say that, youths are the engine of promoting peace and security for national development, if their mindsets are channeled in the right direction.

Youth empowerment is an attitudinal, structural, and cultural process whereby young people gain ability,

authority and agency to make decisions and implement change in their own and lives of other people, including youths and adults (Sasaki, 2016). Youth empowerment through Business Education should involve promotion of peace and security in our nation. Isa and Lambe (2013) observed that youths are not often involved in the collection of data, information and research on the issues affecting them. Consequently, youth empowerment, policies, programe and projects designed based on such data are usually products of unseen title research that are rather based on unsubstantiated assumptions, commonly described as "the rule of the thumb" (Harry, 2017)^[2]. The outcome is the failure of these schemes to sufficiently address the challenges of youths so as to make them promotion of peace and security for their usefulness of themselves and the nation at large.

According to Ezeanu (2022)^[1] sprang from the need to enable young people to have a say in decisions which affect them and to have lower and heard voices. This would give young people, most especially, Business Education students the opportunity to gain the economic, social and cultural advancement of their countries and self-fulfillment, and in turn promote peace and security in the society at large. Empowering youth in this study means creating and supporting the enabling conditions under which young people can act on their own behalf and on their own terms, rather than at the direction of others. These enabling conditions includes, economic and social base, political will, adequate resources allocation and supportive legal and administrative frameworks, a stable environment of equality, peace and security and access to Business Education knowledge, information and skills and positive value system.

Peace is promoted by resolving the root causes of conflicts. Promoting peace is not only marked by absence of war but also by absence of violence, criminality, radicalism, rebellions among others in the society which are threat to peace. Promoting peace can be actualized through equal participation of all citizens in the society, respect of human rights, security, and dignity among others. Expressions of violence are seen through acts such as robberies and through youth empowerment such acts can be dealt with as the youth engage in productive economic activities. Peace can be promoted by achieving positive peace whereby the root causes of a conflict are resolved. These strategies can be taught in schools through Business Education hence empowerment of the youth.

#### **Purpose of the study**

The purpose of this study was to investigate how peace and security could be fostered through innovative Business Education in Nigeria. Specifically, the study determined:

- 1. The relationship between Business Education programme and youth empowerment in Nigeria.
- 2. The relationship between Business Education programme and sustenance of peace and security in Nigeria.
- 3. The impact of Business Education programme on sustenance of peace and security in Nigeria.
- 4. Influence of Business Education programme on youths empowerment through entrepreneurship.

#### Scope of the study

This study investigated youths empowerment through Business Education programme for sustenance of peace and security in Colleges of Education in Anambra state.

#### **Research questions**

- 1. To what extent does Business Education programme empowers youth for sustenance of peace and security?
- 2. What is the impact of Entrepreneurship Education on youths for sustenance of peace and security in Nigeria?
- 3. What are the possible Business Education programme that would empower the youths for

sustenance of peace and security?

4. What are the strategies employed to empower youths for sustenance of peace and security in Nigeria?

# Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- 1. There is no significant relationship between Business Education programme and youth empowerment in Nigeria.
- 2. There is no significant relationship between Business Education programme and sustenance of peace and security in Nigeria.

# Method

The area of study was Anambra State, Nigeria. Descriptive Survey research design was adopted for the study. Survey method is one of the primary sources of collecting data from the population and is preferred because it assists in examining issues and ascertaining the characteristics of variables of interest in line with the objectives of the research study. The population for the study consisted of 205 Business Education students of the colleges of Education in Anambra State, Nigeria. This number is made up of 144 students from Federal College of education Technical Umunze and 61 students from Nwafor Orizu College of Education, Nsugbe. Simple random sampling technique were used in selecting 135 Business Education students across the two government owned colleges of education in Anambra State. The instrument used for data collection was a well structured questionnaire. The items in the questionnaire were drawn from the research questions. The questionnaire was didvided into two sections (section A and B). Section A deals with instructions, Section B was divided into B₁ and B₂ B₁ with 15 items (on two point rating scale of Yes or No) soughted information on Business Education programme and youth empowerment while B₂ with 15 items (on four point rating scale of strongly Agreed (SA)-4, Agreed (A)-3, Disagreed (D)-2, and strongly disagreed (SD)-1, elicited information relating to Business Education programme and sustenance of peace and security in Nigeria.

The instrument was faced-validated by three experts. The corrections and inputs of the experts formed the basis for the modification of the draft and the production of the final instruments. The internal consistency of the instrument was established using Cronbach Alpha statistical method which yielded 0.82 co-efficient indicating that the instrument was reliable. Cronbach Alpha method was considered appropriate as the instrument was polychotomously scored. Then the questionnaire was administered directly on the respondents by the researcher and research assistants. Pearson Product Moment correlation statistics was used to analyse data relating to the null determination formula (n? 1?  $N(e)^2$ ). Where the p- value is less than or equal to the level of significance (0.05), the null hypothesis was rejected but where simple random sampling technique was adopted to draw the sample (Federal-100, State- 35). Out of this number, 32 male students and 103 female students were proportionately selected. The instrument adopted for the study was titled Empowering Youths Questionnaire (EPQ). The questionnaire was in two sections A and B. The p-value is greater than the level of significance (0.05), the null hypothesis was not rejected.

## Results

**H01:** There is no significant relationship between Business Education programme and youth empowerment.

Table 1: Summary of correlation analysis on significance of relationship between Business Education programme and youth empowerment as opined by male and female respondents

Variable	Ν	Χ	SD	r	α	P-value	Remarks
Bus. Edu. Programme		3.21	0.89				
	335			0.21	0.05	0.00	Rejected
Youth Empowerment		3.20	0.92				

The data in Table 1 shows correlation analysis of significant relationship between Business Education programme and youth empowerment as indicated by Business Education students of colleges of education in Anambra state Nigeria. The data shows p- value of 0.00 to be less than alpha level of 0.05. There exists enough evidence to conclude that there is significant relationship between Business Education programme and youth empowerment. The null hypothesis which states that there is no significant relationship between Business Education programme and youth empowerment is rejected.

**H02:** There is no significant relationship between Business Education programme and sustenance of peace and security in Nigeria.

Table 2: Business Education	programmes and sustenance of	peace and security

Variable	Ν	X	SD	r	α	P-value	Re ma rks
Bus. Edu. Programme		2.98	0.73				
	335			0.41	0.05	0.01	Rejected
Sustenance of peace and security		3.01	0.68				

The data in Table 2 shows correlation analysis of significant relationship between Business Education programme and sustenance of peace and security in Nigeria as indicated by Business Education students of colleges of education in Anambra state Nigeria. The data shows p-value of 0.00 to be less than alpha level of 0.05. There exists enough evidence to conclude that there is significant relationship between Business Education programme and sustenance of peace and security in Nigeria. The null hypothesis which states that there is no significant relationship between Business Education programme and sustenance of peace and security in Nigeria. The null hypothesis which states that shows programme and sustenance of peace and security in Nigeria.

# Findings

The analysis from hypothesis one above shows that there is significant relationship between Business Education programme and youth empowerment. The implication of this is that Business Education programme has great influence on promoting youth empowerment in the society. This agrees with submission that unemployed young people are a potential threat to peace and security processes unless efforts are made to keep the young graduates off the streets, by giving them sound and quality Business Education.

From the findings in Table 2, it was indicated that p-value is less than 0.05 which indicates that there is relationship between Business Education and sustenance of peace and security in Nigeria. This means that if relevant skills are instilled in the students of Business Education programme in higher institutions, they would have the opportunity of promoting peace and security in the society.

# Conclusion

The results of the study revealed that Business Education programme in Nigerian tertiary institutions has direct relationship with youth empowerment as well as peace and security. From the foregoing, it is clear that youth empowerment is central or critically linked to national peace and security. It is obvious that without sound Business Education programme, it may be difficult to achieve the stated objectives of making graduate to promote peace and security in our society. Therefore, it is concluded that for youth to be empowered and promote peace and security in the society, improving Business Education activities should be paramount for all education stakeholders.

# Recommendations

Based on the findings of the study, the following recommendations are made:

- 1. Necessary instructional facilities such as personal protective equipment for lecturers and students should be provided by the government.
- 2. There is the need for adequate reorientation, sustained enlightenment of Business Education graduates in order to promote peace and security.
- 3. Lecture halls and other facilities should be adequately provided.
- 4. All professional bodies in the area of Business Education, Vocational Education and Technology should monitor the standard of Business Education in academic institutions in Nigeria.
- 5. Government, at various levels (Federal, State and Local) should give priority attention to Business Education for youth empowerment and stop paying lip service to youth empowerment.

## References

Aquah, P.A (2014): Enriching the Business Education curriculum for relevance in the global workforce.

Journal of Human social science, 2(7) ISSN 2249.

- Ezeanu N.S (2014). *Business education practices: Mentoring and technology alignments*. Book of Readings (ABEN); 1(3):182-199.
- Harry D.M (2017). Death of scientific research data in policy making as development challenge in Nigeria: *A Critical Appraisal Journal of Sustainable Development in Africa*; 19(4):1-12.
- Isa A.M, Lambe J. (2013). Youth empowerment and national development in Nigeria International Journal of Business and Management Invention; 2(10):82-88.
- Jega B.M.B (2012). Nigeria youth and national development. Sahara Reporters. March; 26:28-59.
- Lucas B.O, Alaka A.A & Odozi A.F (2014). Entrepreneurship education: A viable tool for development. Interdisciplinary Studies, 3(4).
- Njoku C.U. (2015). Critical incidents in the Nigeria educational system: Challenges to business educators. Apaper published in the Nigeria Journal of Business Education, 2(2).
- Nwachukwu D. (2012). Administration and supervision in business education challenges and way forward. Book of Readings (ABEN); 2(1):66-73.
- Ogunwole G.T(2015). Effects of tertiary education trust fund (TETFUND) on funding of business education. Book of Readings (ABEN); 2(2):102-108.
- Samuel B.K & Deinibiteim M.H. (2018). Youth empowerment and national security in Nigeria: issue and prospects. Global Journal of Political Science and Administration; 6(3):1-14.
- Sasaki S. (2016). Promoting youth empowerment through entrepreneurship education. Retrieved fromHtt/;//www.110.org/public/english/religion/asro/beling/download/speech/as/18may06pdf

# **Evaluation of Teacher's Qualifications And Experience on Students** Achievement In Mathematics In Secondary Schools

**Okeke, Chizaram Stanley** 

Department of Primary Education, Nwafor Orizu College of Education, Nsugbe kingselystanley51@gmail.com; 0816 667 1369, 0705 356 0321

#### Abstract

The purpose of this study is to ascertain the evaluation of teacher's qualification and experience on student's achievement in mathematics in senior secondary schools level, in Onitsha North Local Government Area, Anambra state. One research question guided this study. The sample of the study consisted of 300 SS111 students, 30 students each from the six selected secondary schools. Data collected from three hundred students from six schools out of the sixteen secondary schools in Onitsha north L.G.A. were analyzed using mean and standard deviation. The level of significant and degree of freedom used were 0.05, the result led to the rejection of the null hypotheses in favor of the alternative hypotheses. The study revealed among others the evaluation of teacher's qualification and experience on student's achievement on mathematics in senior secondary school level in Onitsha north local government area, Anambra State. Recommendations were made on the important of employing teachers with qualification in mathematics in school. It was recommended that employing qualified mathematics teachers to teach mathematics in school should be made compulsory in all levels of education in Nigeria.

Keywords: Mathematics, Achievement, Qualification, Experience.

#### Introduction

In this modern world, education has been bedrock to man-kind mainly on young students of this 21th century. For it facilitates learning or the acquisition of knowledge, skill, value, belief and habit. According to Boit, Njoki and Changach (2012), the purpose of education is to equip the citizenry to reshape their society, and eliminate inequality. Secondary education is an important sector in national and individual development, especially in this present era. It plays a vital role in creating a country's human resource s provision of quality secondary school education is therefore important in generating the opportunities and benefits of social and economic development. According to Levin et al, performance of students in any academic task has always been of special interest to the government, educators, parents and society at large. They stressed further that teachers have an important influence on student's academic achievement. Teachers are ultimately responsible for transforming policy into action, and principles based on practice during interaction with the students. They stand in the interface of the transmission of knowledge, value, skill and habit in the learning process, and if the teacher is ineffective, the students under his/her care will not achieve any progress academically. Teacher's qualification has become of the measurable issues in enhancing successful education mostly on major areas like mathematics. It is according to Galileo Galileo who said that mathematics is the mother of all sciences and is as easy as breathing. Education is a process of teaching, training and learning, especially in schools or colleges to improve knowledge and develop skill. It is generally believed to be a vital tool for individual and social development at large. By educating, the main goal is to pass on some desirable information, skills, attitudes, interest and frame of mind best for personal and societal development. To buttress more on this, education is the process of receiving or giving systematic instruction especially at a school or university. Barry (2022) posited that, education is an activity which takes place in many diverse venues and is valuing, growing, caring and behaving. The contemporary societies have denoted schools as the agency responsible for education. Education in the twenty-first century builds

upon a cumulative human heritage and legacy of shared creativity and innovation which requires multiple perspectives, interdisciplinary contributions, fluency in multiple languages, shared memories, and collective experience. As such, education is a fundamental public good for an informed society. Education helps young people to understand their position and recognize the opportunities available to them. Acquiring new knowledge and skills opens the door to better-paid jobs, which in turn directly impacts the progress of the entire community. Education is the transmission of knowledge, skills, and character traits. Its precise definition is disputed and there are disagreements about what the aims of education are and to what extent education is different from indoctrination by fostering critical thinking. These disagreements affect how to identify, measure, and improve forms of education. The term "education" can also refer to the mental states and qualities of educated people and the academic field studying educational phenomena.

Academic achievement of any student is the extent to which that student has attained his/her short or long term educational goals. In other words, teaching and learning of mathematics in secondary schools can be measured by student's academic achievement through an effective and adequate formative assessment. To buttress on this, academic achievement or academic performance is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement. Academic achievement is commonly measured through examinations or continuous assessments, but there is no general agreement on how it is best evaluated or which aspects are most important such as skills or declarative knowledge such as facts. Okoli & Okeke (2018) asserted that posited that academic achievement refers to the accomplishment of academic goals, the educational outcome of students, or rather, the extent to which a student, a teacher, or an instructor has achieved the stated educational objectives. Achievement comes as a result of enhanced or improved leaning. It is the extent to which a student has achieved either short or long term educational goals. Achievement may be measured through students' grade point average in examination or continuous assessments in academic settings. Furthermore, there are inconclusive results over which individual factors successfully predict academic performance, elements such as test anxiety, environment, motivation, and emotions require consideration when developing models of school achievement. Generally, achievement means accomplishment or exhibition of proficiency in a given skill or body of knowledge. Amuset (2014) viewed academic achievement as the knowledge obtained or skill developed in the school subject usually designated by test scores or by means assigned by the teacher.

The National Mathematical Centre, (NMC, 2009) in an extensive research into ways of improving Mathematics teaching and learning at secondary school revealed that the causes and remedies of students' mass failure in Senior Secondary School Certificate (SSCE) Mathematics examinations hinges on teachers' method of teaching and the content or curricula of the school Mathematics. The teachers no doubt perform critical roles in enhancing the quality and effectiveness of classroom instruction (Akinwumi & Adediwura, 2019). The method used by Mathematics teachers in teaching plays a significant role at making the student learn and internalize the concepts. Part of solutions to this malady is for teaching coupled with the use of adequate instructional materials (Akinwumi & Bello, 2015). However, there is no best method of teaching as the choice of teaching method depends on the age of the learner, nature of the subject, class size among others (Akinwumi & Bello, 2015). Also, there seem to be a consensus among researchers as to the efficacy of the use of instructional materials in complementing the teaching method (Daramola, 2010; Ahmad, 2013 & Yusuf, 2013; Muhammed, 2017).

What then defines a qualified teacher and particularly of Mathematics? According to Daramola (2010), a teacher is qualified if he hold a minimum of N.C.E. in Mathematics and/or a degree in Mathematics Education. These set of teachers are anticipated to be grounded in Mathematics content and teaching strategies which include successful application of instructional materials to aid students' learning of Mathematics. These are not just individuals who find their ways in the classroom just because there is no better offer but an individual that are very vast in content (subject of specialization) and pedagogy by virtue

of the training received in their teacher preparatory programs. In its own contribution, Okigbo and Okeke (2011) made it known that for a teacher to meet the demands of his job, the teacher should possess the qualification, experience and competence necessary for effective implementation of the curriculum. That is, such teachers are expected to be knowledgeable and demonstrate integrity and experience in the discipline they profess to teach. Although, some of these teachers might be having issues in some schools where there are abysmal inadequacy of Mathematics teachers that made school administrators assign a lot of periods. In a bid to cover all the periods, such teachers may dash into the class and dash out thereby not making good use of the instructional materials.

The effect of teacher's education will be ascertained in this research mostly based on mathematics because the term itself has created phobia among students by making them deviating from topics related to mathematics. This is as a result of poor performance of the teachers because nowadays, a good number of teachers are not being recruited based on qualification on the area of specialization of the teacher. The academic achievement of students in Nigeria has been a source of concern to researchers, educators, governments. Obviously, the great importance that education has on the national development of the country made its parents and government are in total agreement that their investment in education as not yielding the desired dividend. Therefore, the effect of teacher's qualification and their experience on student's achievement will be reviewed in this study.

#### **Statement of the Problem**

The development of a country is determined to greater extent of the type of education system that operates in the country. In the world today, sciences and technology have become a dominant culture factor. The contributions which mathematical knowledge and skills have made to the economy and industrial progress of our nation or modern society are too numerous. Teachings of mathematics in many schools today, dominated by use of textbooks and conventional approach primarily concerned with the manipulation of symbols and most often eagerly removed from the real life of the child.

The students achievement can be said to be mostly affected by the qualification and experience of the teachers some teachers are teaching mathematics in schools with different qualifications like: B.Sc (Ed) (engineering), B.Sc (statistics), B,Sc (physics), B.Sc (chemistry) e.t.c. it has been observed that few teachers specialized in mathematics (that's in B.Sc Maths). Because these teachers have little knowledge of mathematics, they all believe and accept that they can teach mathematics well, but the reverse is the case. The situation has continued to affect students' achievement in the subject.

#### **Purpose of study**

The main purpose of this study is to evaluate the effects of teacher's qualifications and experience on student's achievement in mathematics. Specifically this study tends to:

1. to ascertain the teachers qualifications and experience on the students achievement in mathematics.

#### Method

The study adopted a quasi-experimental research of pre-test, post-test, non-randomized control group. Quasi-experimental research design gives rise to the use of intact classes. The researcher therefore studied teacher's qualifications and experience on student's achievement on mathematics in senior secondary schools in Onitsha North Education Zone of Anambra State. From their scores the pre-test and post-test scores will be generated by the researcher from fraction achievement test item (FATI). The instrument was validated using experts. The reliability of the instrument was determined through the use of test and re-test method, also the pre-test was administered to the pupils in both experimental and control groups before treatment to determine student's previous knowledge on the topics as written above. The post test was also administered to the students in both experimental and control groups before

the pre test and post test scores were generated by the researcher from the Fraction Achievement Test item (FATI). The test was administered to 30 students from each school and after a week, it was re-administered to same group and the information gathered from the two tests has no significance difference if tested with Z-test under 0.05 level of significance, the mean rating of each section was measured with similar variables on items. The researcher uses mean and standard deviation to answer the research questions.

#### **Research Questions**

The study was guided by the following research question.

1. Does teacher's qualification and experience affect student's achievement?

#### Hypothesis

Two Null hypotheses were formulated and will be tested at 0.05 level of significance.

1. Teacher's qualification and experience does not significantly affect the achievement of the students.

#### Results

The results of various findings were presented in the table below Table 1: Does teachers' qualification and experience affects student's achievement in mathematics?

	1		1			
GROUPS	Ν	Mean	S.D.	Mean	S.D	Mean
		Pre-test		<b>Post-Test</b>		Gain
Experimental Group	30	5.4	3.098	6.53	2.258	1.13
Control Group	30	4.2	2.78	4.67	2.498	0.47
Mean Gain		1.2		2.78		0.66

From table 1, the mean gain on achievement from the experimental group was 1.13 and 0.47 for the control group with difference in gain by 0.66 the result indicated that the experimental group differed slightly from the control group in their mean achievement scores. The difference is in favor of the experimental group.

#### **Findings and Discussions**

The discussion was done in a thematic form:

**Research Question 1**: Does teacher's qualification and experience affect the performance and achievement of students?

The study examines the effect of teacher's qualification and experience on the achievement of students in mathematics among secondary school students in Onitsha North Local Government Area of Anambra State. Therefore based on the data analysis, it will be necessary to discuss the result findings obtained in line with the research question and research hypothesis formula in chapter one also in line with empirical studies observed in chapter two as regards to the topic above. From the foregoing, the findings from the research question one above revealed that the total mean of pre-test and post- test scores for students taught by teachers with Qualification in mathematics was (14.19) while the total mean of pre-test and post-test of students taught by teachers with Qualification in other subject was (12.0575). The above result shows that the mean score for both falls within the same range. Hence, we say that there is slight difference in the mean scores of students between the Qualifications of teachers teaching mathematics. The results help to explain that teachers with Qualifications in mathematic is very essential in teaching in teaching students mathematics than teachers with Qualifications in other subjects, indicating that the experimental group achieved better than the control group.

## Recommendations

Based on the research findings of this study, the following recommendations were made:

- 1. Teachers need to reserve part of the class time to conduct activities that would develop enthusiasm in mathematics, thus enhancing student's motivation in mathematics.
- 2. The workload on teachers and the class size should be lessening so that the teacher could give attention to students during lessons.
- 3. Teachers should provide information about new research, new theories and methods of instructions continuously through seminars, workshops and conferences.
- 4. Schools should ensure that teachers teaching mathematics in their schools must have qualification in mathematics and well exposed to mathematical concepts.

## References

- Boit, S. Neption and Changach (2012) Secondary mathematics teachers' perceptions on the achievement gap. *The High School Journal*, 88(4) April/May: 32-45.
- Fakuada, F. (2003) The Relationship between Changes in Attitude towards a Course and Final Achievement, *An International Journal of Applied Psychology*, 46, 1528.
- Difficulties facing mathematics teachers in developing countries. *Educational Studies in Mathematics*, 12(4):23-29. *Research Journal of Education Vol.* 3 | No. 9 September | 2015 ISSN 2347-8225
- Flok, T. (2010). Gender differences on a locally standardized anxiety rating scale in Mathematics F o r Nigeria Secondary School. *Nigeria Journal of Counseling and Applied psychology* 1(1)22-29
- Ajagun, G.A. (2000). A study of the performance of students in the senior secondary school certificate examination in selected schools in Kano State. Tambori: *Kano Journal of Education 6(1)*: 10-21.
- Wobman, R. (2004). The Impact of Teachers' In-Depth Pedagogical Mathematical Content Knowledge on Academic Performance: As Perceived By Botswana Junior Secondary School Pupils. *European Journal of Educational Studies*, 3(2):277-292.
- John, T. (2002). Correlation of mathematical problem solving ability among secondary school students in the Cross River State of Nigeria. *Unpublished Ph.D. Thesis*, University of Ibadan.
- Bandele, N. (2000). Lessons from learners. Educational Leadership, 60(7), 64-68
- Ajayi, W. (2004). Federal Government Moves to Tackle Poor Result in NECO. SSCE Exams
- Rufai. Retrieved on 9th October, 2014 from statistics unit NECO.
- Akindutire, E. (2005). The teaching profession. *Paper presented in Conference on the teachers'* Interactive Forum in Lagos State Secretariat Auditorium, Lagos, April 12, 2004.
- National Mathematical Centre (2009). Mathematics improvement programme. Retrieved from www.nmcabuja.org/mathematics_improvement_programmes.html
- Akinwumi M. O. & Bello T. O. (2015). Relative effectiveness of learning-cycle and inquiry teaching approaches in improving students' learning outcomes in physics. *Journal of Education and Human Development*. 4(3), 169-180.
- Akinwumi, M. O. & Adediwura, A. A. (2019). Item response theory validation of the scale of teacher assessment practice among secondary school teachers in Ekiti State. *Journal of Association of Education Researchers and Evaluators of Nigeria (ASEREN), 6 (1).*
- Federal Republic of Nigeria FRN (2004). National policy on education, 4th Edition. Lagos: NERDC.
- Daramola, M. A. (2010). Evaluation of commonly used instructional resources for the teaching and learning of integrated science in junior secondary schools *(Unpublished M.Ed. thesis)*, University of Ado-Ekiti, Nigeria

- Okigbo, E. C., & Okeke, S. O. (2011). Perceived difficulty in integrating educational objectives within the mathematics classroom: *A comparison of beginner and experienced teachers*. *Educational Research and Review*, 6(3), 292-298.
- Muhammed, M. N. (2017). Assessment of availability and utilization of instructional materials for teaching Islamic studies in Junior Secondary Schools in Kaduna State, Nigeria. *Unpublished M.Ed. Thesis*, Ahmadu Bello University, Zaria

# **Importance of Two-Dimensional Art.**

Amarachi Chinwuba. Department of Fine and Applied Arts. Nwafor Orizu College of Education Nsugbe 08067721637.

#### Abstract.

Two-dimensional art is referred to as any kind of art that is represented on a two-dimensional surface. Twodimensional art forms a part in the global art scene that promotes communication, ensures cultural diffusion and encourage economic growth through various facets. This paper focuses on the in-depth meaning of twodimensional art, its characteristics, processes and techniques through which the visual artists approached it and its importance to the society. Principles and elements of 2D are also discussed. It is hoped that this study will stimulate and encourage more research on how important two-dimensional art is to the society.

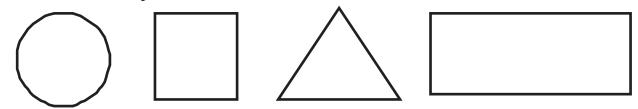
#### Introduction

Two-dimensional art is basically what occupies most of the world's museums. It is very difficult to choose just a few works as examples of two-dimensional art, as it ranges from the cave paintings of prehistoric times to the most modern art. Some two-dimensional works have been successful and have maintained great recognition since their creation until today, such as cave paintings of Altamira or the works of Pablo Picasso, Leonardo Da Vinci or Vincent van Gogh, and others have gone unnoticed and have begun to take on more value nowadays, such as all those related to female artists like Gèorgia O'Keefe.

A two-dimensional shape is a flat shape that has only two-dimensions – length and width, with no thickness or depth that is the reason why it is called two-dimensional in shape. It consists of a length and width but does not have any depth or height. Some common two-dimensional shapes are squares rectangles, circles and hexagons. Let us learn more about two-dimensional geometric shapes, the difference between two-dimensional and three-dimensional shapes, along with some two-dimensional shapes examples on this page. In geometry, two-dimensional shapes can be defined as plane figures that are completely flat and have no thickness and can be measured only by the two dimensions. In comparison to these, a three-dimensional shape has three dimensions-length, width, and height. For example, a dice is three-dimensional because it consists of a length, a width, and a height. Some common three dimensional shapes are cuboids, cones, pyramids and cylinders.

A polygon is a two-dimensional shape made up of straight line segments which are connected with each other, thus giving it a closed shape. A circle, square, rectangle and triangles are some examples of two-dimensional shapes and these shapes can be drawn on paper. All the two-dimensional shapes have sides.

#### **Two-Dimensional Shapes:**



There are multiple kinds of shapes as well. Geometric shapes have names and often require tools to create. They have contours that are defined mathematically. (https://www.cuemath).

These include shapes like a triangle or a square. Organic shape, or free – form shapes, are drawn free hand and can take any form, making them irregular. They appear more visually active than geometric shapes. Abstract shapes are simplified versions of other forms. For example, a stick figure is an abstract shape. Rosalind Ragans et al, (1998).

#### Definition of Two-Dimensional Art.

Aiken (2023) defines 2-dimensional art as any kind of art executed on a two- dimensional surface. The definition of 2 dimensional in relation to art is something that exists in two dimensions, like drawing, painting and photography are all forms of two-dimensional artwork. Two-dimensional art at its earliest lies in cave paintings by early humans, which often depicted animal figures. Since two-dimensional art has evolved to become a broad category, including art forms like lithography and printmaking, as well as photography in addition to traditional drawing and painting.

When a work of art is classified as being 2 dimensional it means that the composition possesses the dimensions of length and width but does not possess depth. All 2 dimensional pieces of art are made up of shapes. Shapes are keys to creating anything in art, as everything has a shape. Value can be added to shapes in the form of darks and lights to create shadows and highlights to make them appear three-dimensional.

## The Distinguishing Characteristics of Two-Dimensional Art:

Some characteristics help define and distinguish two-dimensional art forms like drawing, painting, printmaking, and photography from other types of visual art.

**Flatness:** Two-dimensional art is created on a two-dimensional surface, such as paper, canvas, or a wall, and lacks the three-dimensional depth of sculptures or installations, which means it has no perceptible depth.

**Perspective:** Artists can use techniques like linear perspective, atmospheric perspective, or forth-shortening to create the illusion of depth and space in a two-dimensional art work.

**Texture:** It is one of the fundamental elements in two-dimensional art. Physical texture seems to be lacking in two-dimensional art. Artists can use a wide range of colour and application techniques to convey emotion, establish atmosphere or emphasize themes in their work. Texture, both visual and tactile, adds depth and into to the surface of the work.

Line: Line is used to define shapes, create movement, and add structure to a composition. Artists can use different types of lines, such as straight, curved, or jagged, to convey different feelings or ideas.

Shape: Artists use shapes, both geometric and organic, to create forms and structures within their compositions.

**Balance:** Artists consider the arrangement of elements within the art work to achieve visual balance, whether it is symmetrical, asymmetrical or radial.

**Media:** Artists can work with a variety of media in two-dimensional art, including drawing materials like pencil, charcoal and ink as well as painting materials like acrylics, oil paints and water colours.

**Personal Style:** Each artist develops a unique style that is reflected in their two – dimensional work. Whether abstract, realist, impressionist or contemporary, artist's style influences how their work is perceived and interpreted.

**Two-Dimensional Art Processes and Techniques:** Two-dimensional Art processes and techniques are those that are created on a flat plane. They have height and width, but no significant depth. These include drawing, printmaking, painting, photography, and some mixed media.

-Drawing: Eden Gallery (2021) sees drawing as the most basic of art processes. Most of us have been drawing since we could hold a tool and make marks on a surface. The most common drawing media are pencil, pen and ink, charcoal, crayon and felt-tip pens. Artists can choose from a variety of surfaces upon which to draw. Early artists used walls of rock, and though some artists today continue to draw on walls, most use some kind paper– from the white paper of common sketch books to a wide variety of manufactured and

handmade papers. Papers may be smooth or rough, white or in wide range of colours. Drawing tools may be black, coloured or white.

Drawing is primarily based on the use of line. Lines created by drawing median can vary dramatically in quality. Hard pencils will make thin, light lines while soft pencils will make thicker lines that may vary considerably in value from lighter to very dark. Charcoal is so soft that the colour of the paper used will show through in places where the strokes are applied lightly. Each drawing tool or medium has its own unique qualities; an experimenting with a variety of drawing media is a good way to gain an understanding of their similarities and differences. With drawing pencils or charcoals, a change in pressure will cause a change in value. More pressure creates darker values, lighter pressure creates lighter values. Colour may be introduced into a drawing with the use of pastels or coloured pencils. The same techniques used with black media are used in coloured media.

The artist using coloured must consider the effects of colour and line in an art work.

Coloured pastels became popular in the 1700s. These soft sticks of colour can be readily blended to create delicate tints and shades, and they are particularly popular for portraiture. The major drawback of pastels is that they are very fragile, and pastel drawings must be cared for quite gently. Often, the surface of a pastel drawing is sprayed with a fixative to reduce the risk of smearing. Coloured pencils are more durable than pastels, and like pastels, they may be layered to create blended colours.

#### -Printmaking:

Printmaking refers to a group of mechanically aided two-dimensional processes that permit the production of multiple original art works. The principal printmaking processes include relief prints, intaglio prints, lithographs, and screen prints. All of these processes use some sort of matrix, or printing plate, on which an image is created. Ink is applied to the plate, and the image is transferred to paper or another material.

In relief printmaking, the artist cuts away parts from the surface of the plate. The matrix may be made of wood, linoleum, or a synthetic material, and a number of tools, including woodcarving or linoleum knives and gouges, can be used for cutting its surface.

(Sachant et al 2023)

Once the plate has been cut, the remaining parts or sections may range from thin lines to broad fields, and it is these areas, when they are inked, that will produce the image. Wherever part of the plate is removed, the original colour of the paper being printed upon remains.

-Intaglio printmaking works in the opposite manner from relief printmaking. In the intaglio process, lines are incised on the wood or soft metal plate. Carving tools are used to cut lines into the surface of the plate by engraving, or lines can be formed by etching. In etching the design is incised through a layer of wax or varnish applied to the surface of a metal plate. After the plate is etched, the remaining wax or varnish is removed, and ink is forced into the etched areas of the warmed plate. Then, the ink on the surface of the plate is wiped off, and finally, paper is placed on the plate, and it is passed through a heavy press. The paper is forced into the etched, inked areas and the ink transfers to the paper. In an etching, the printing process causes the printed areas to actually rise above the surface of the paper, giving a degree of dimension to the print.

-Lithography is a process in which the image is drawn with a waxy pencil or crayon directly on a plate, which can be of stone, zinc, or aluminum. The greasy image is hardened, and the plate is saturated with water. Then, ink is applied. The ink adheres only to the greasy image since oil resists water. The image is picked up on the paper when the plate is moved through a press. Lithography can be a complex and demanding process, but it does not require special professional training, anyone who makes a lithograph.

-Screen Printing, also known as silk screen or serigraphy, became popular because of the speed of printing. It is capable of black – and – white images but has been more often used to develop coloured images. With screen printing ink is forced through a screen onto the printing paper by pressure applied to a squeegee. The preparation of the screen determines the ink pattern whether the artists is creating coloured or black – and –

white prints, the se of value to organize and create successful images has remained fundamental to all four of these basic printmaking techniques. Many prints have used combination of these techniques. (OHO G. Ocvirk et al; 2001).

-Painting encompasses a wide variety of media and techniques paint is usually composed of three different materials that may be natural or synthetic. Natural pigments include clays, gemstones, and minerals, as well as plant and insects materials that make colour when powdered. These powdered pigments and mixed with a binder that holds the grains of pigment together and allows the paint to adhere to a surface. Egg yolks, linseed oil, and wax can be used as binders. A solvent such as water or oil can be added to change the consistency of the paint or alter its drying time. As with drawing painters can apply the media to a variety of surfaces such as boards, paper, canvas, and plaster walls. Paint can be applied to a surface with many different tools. We usually think of paint brushes as the tools used to apply paint, but fingers, sticks, palette knives, and anything else that an artist imagines will make the desired kind of applicator may be used. One specialized technique of painting that has a long history is the fresco. The fresco technique is usually used to paint on walls or ceilings. In creating a fresco, the artist mixes pure powdered pigments with water and applies them to a wet plaster ground. The paint is permanently bound in the plaster, so the artist must plan carefully because he or she will not be able to make changes after the fact. This kind of fresco is termed buon fresco ("true" fresco). If an artist uses the technique called fresco secco, he or she will apply paints to dry rather than wet plaster.

When we think of painting, oil painting usually comes to mind first. Oil paints were not widely used until the 1400s, and prior to that time, tempera was the most commonly used paint. Tempera is water based paint. Many of us remember using tempera paint in elementary school. Traditional tempera paint, which uses egg as a binder, has been used by fine artists throughout the history. Tempera painting requires great skills, and there are limitations to this medium. Tempera colours dry quickly, and so they cannot be blended once they are applied to a surface.

-Oil paints are much more versatile than tempera paints. Oil paint can be easily mixed and they may be thinned to build up layers of delicate glazes. Since oil paints dry slowly unlike the tempera, this characteristic makes it possible for an artist to work on an oil painting over a period of time – days or even weeks.

-Gouache is a water – based opaque paint that is similar to school quality tempera, but of higher quality. Gouache has more body and dries more slowly than water colour. It is a good medium for creating bright colours and details and is often used for design and fine art work.

-Water colour is the most common water – based paint. It has a transparent quality that dictates the manner in which they are used. The white of the paper upon which the artist paints is a major factor in water colour. White paint is rarely used in water colours. Instead to make tints, the artist adds more water to the paint. The lightest colours are applied first, and then the darker colours, working from the back to the front, from broader areas to areas of detail. Water colour is not forgiving of mistakes, so water colour artists must plan and create carefully. (Wilbert, et al 1995).

-Acrylic paint which is the most recent in paint development. It is made from synthetic materials, plastics and polymers, acrylics were developed after World War II. Acrylic paints are very versatile. Acrylics dry faster than the oil paints and as a result, artists are not able to achieve the same level of detail as they do with oil paints. For artists who have developed allergies to oil paint and turpentine, acrylics offer a valuable alternative.

-Sprayed Paint: It is a commercial product in aerosol cans containing compressed air and quick – drying permanent paint, often used by graffiti artists. Spray paint allows for board areas of colour and gradual transitions, but will not define detail work. As a result, most graffiti artists work on large scale. (Margaret Lazzar et al, 2008).

-Photography: According to Tuttle (2017) photography was developed during the mid-nineteenth century or around the 1850's, and it soon became a very popular way to document likenesses of people and scenes. As the use of photograph grew, painters at first felt pressured to compete with the camera by making more

realistic art. Ultimately, however, artists did not remain confined and were encouraged to explore forms of art that were beyond the reach of photography.

Originally, photography has not been considered an art form, photography gradually joined the art world and has only grown in the twentieth and twenty-first centuries.

#### **Elements and Principles of Two-Dimensional Art**

Elements of two-dimensional art are stylistic features that are included within an art piece to help the artist communicate and they are as follows:

**Line:** Mathematically, a line is a moving point, having length and no width. In art, a line usually has both length and width, but length is the more important dimension. Lines come in great varieties, such as the bold, thick angular lines. Lines have direction: horizontal, vertical, diagonal, curved, or meandering.

**Value:** In two – dimensional art, artists use value, which is light and dark variation on a surface. Value can be associated with colour, red can still be red, but it can be lighter or darker, or different values of the colour.

**Colour:** Colour is the element of art that is produced when light, striking an object, is reflected back to the eye. Subjectively colour is a sensation, a human reaction to a hue arising in part from the optic nerve, and in part from education and from the human senses. Colour is visible in refracted light, when a prism breaks a light beam into a spectrum of colour, or in a rainbow after a storm.

**Texture and Pattern:** Texture is a surface characteristic that is tactile or visual. Tactile texture consists of physical surface variations that can be perceived by the sense of touch. Visual texture is illusionary. Texture can be simulated, abstracted, or invented. Simulated textures mimic reality. Texture can be abstracted as well, meaning that it is based on some existing texture, but has been simplified or regularized. Invented textures are apparently products of human imagination.

**Shape and Volume:** Shape is a two-dimensional visual entity. Regular shapes are geometric. Irregular shapes are unique and have no simple, defining names. Volume is a three-dimensional entity, in contrast to two-dimensional shape. Like shape, volumes can be regular or irregular, geometric or biomorphic. Shape and volume may simulate reality, may be abstracted from reality, or may be invented.

**Space:** It is the interval, or measurable distance, between points or images.

#### **Principles of Two-Dimensional Art**

The principles of two-dimensional art are as follows,

**Balance:** Balance in an art work results from placing the elements so that their visual weights seem evenly distributed. Weight generally means the amount of attention and element commands from the viewer. For example, large shapes demand more attention than small; complex forms have greater visual weight than simple ones; and vivid colours are visually

weightier than faded colours. In symmetrical balance, visual weight is distributed evenly throughout the composition. If an imaginary line is drawn vertically down the center of the work, one side would mirror the other. Asymmetrical balance is achieved by the careful distribution of uneven elements. Radial balance results when all the elements in the composition visually radiate outward from a central point.

**Rhythm:** In a composition, rhythm is the repetition of carefully placed elements separated by intervals. Rhythm is related to pattern, but it affects the entire composition.

Rhythm can be regular, alternating or eccentric. Regular visual elements systematically repeated with a standard interval in between. Alternating rhythm is closely related to regular rhythm. It has different elements placed side by side repeatedly, which produces a regular and anticipated sequence. Eccentric rhythm is quite different from both the regular and alternating rhythms, the elements are placed in such a way that irregular sequence is produced.

**Proportion and Scale:** Proportion refers to the size of one part in relation to another within a work of art, or the size of one part in relation to the whole. Scale is the size of something in relation to what we assume to be

normal.

**Emphasis:** It is the creation of one or more focal points in an artwork. When there are several focal points lesser ones are called accents.

**Unity and Variety:** The principle of unity in design means creating a sense of coherence or overall harmony. In other words, all the elements in a design should work together to create a cohesive whole. This can be achieved in a number of ways, such as using similar colours, shapes or textures, repeating elements throughout the design; or using a unifying element, such as a central motif. When unity is successful, the viewer should feel that the design is balanced and organized. However, too much unity can result in a boring or "flat" design, so it's important to find the right balance.

**Variety**; Variety can be achieved by incorporating a number of different elements into a design, we can create a harmonious balance that is both visually appealing and easy to understand.

**Repetition:** Repetition means reusing elements; colours, textures, forms, pattern and more throughout a piece of work.

## Importance of Two-Dimensional Art

Two-dimensional art allows for a high level of expressiveness and creativity. Artists can convey emotions, narratives and abstract concepts through various artistic techniques like line work, shading and colour. Richardson (1998).

The importance is drawn from the processes and techniques through which 2D art is approached and these processes and techniques have been fully discussed under the Two-Dimensional art processes and techniques.

-Printmaking is a very important medium which contemporary artists are drawn to for its unique qualities and its ability to create multiple versions of their work.

-Printmaking also offers a level of accessibility to the art world, allowing artists to produce and sell their work at a lower price point than an original.

-Printmaking makes artwork available to the general public, not just the wealthy. It is easy to print anything these days if the item sits on your computer, just access the file and use your connected printer to spit out a copy. If you already have a physical copy, scan and print using your printer. You can also use the service of a library or a copier store to get as many as you want. Sachant, et al (2023).

-Printmaking is important in marketing; printed media can establish a brand. Marketers know the importance of having a well known brand, and it is an excellent way to create printed publications and other branded materials. This enables you to bring the aesthetic characteristics font, colours, images and texture that helps to create brand recognition. Wright, S. (2016).

According to Arie et al (1995) in their book titled Historical Painting Techniques, Materials, and Studio Practice - Painting promotes creative growth: Noble Prize winner and psychologist Roger W Sperry theorized that people think and perform tasks. He believed that right-brain thinkers were more visual and creative, while left- brain thinkers were more logical and analytical. The reality is that the both sides of the brain work in harmony for creative work, and painting helps you enhance both sets of skills. When painting, your creativity will expand as you draw inspiration from different sources, brainstorm ideas, plan your piece, test out technique, and learn to work with colours and materials to make something unique.

-Painting Enhances Problem-Skills; how can you paint a joyful painting using a dark colour palette? How do you make a flower look more realistic? When you drip a drop of paint on the wrong part of your canvas, how will you fix it? Problem-solving is front and center in painting and it is a natural part of the creative process. By painting, you have those skills and improve your creative mind while also developing critical-thinking abilities.

-Painting Improves Fine motor Skills: Painting also helps develop fine motor skills, which is when you use the small muscles in your hands and wrists to make delicate or precise movements. These activities are

especially important for young children, but adults benefit from strengthening these muscles too.

-Painting Encourages Positivity and Offers Stress Relief: Everyday life leads to quite a bit of mental strain and can generate negative emotions, but painting has been shown to reduce stress levels. This is especially true for group painting activities. Not only will you be socializing and receiving positive feedback from the other people painting with you, but you will be creating something beautiful that you can take pride on.

Photography has been very beneficial to the mankind for over 100years of its existence. It used to be an expensive hobby only for the highly skilled. However, with the introduction of smart phones and compact cameras, photography allowed the masses to instantly take photos and share their experiences and personal lives.

-At school teachers use photos to help illustrate their point and some students with learning difficulties are able to understand photos easier than words.

-Photography is a medium of information: By photographing we document our lives. We capture the most important, most significant moments weddings and anniversaries, the birth of children, housewarming.

-Photography is a part of Human Heritage: Surely every person, at least living in the Nigeria, that is for sure took part in group photographs. For example, at primary school after all, at that moment did not even think about the fact that looking into the lens of camera, they were looking into eternity. These photographs will outlive them.

-Photos Helps Us Communicate: A photographic image is much more meaningful, much serious than just a picture. Photography touches upon the most secret, the deepest that is in our soul, the best, kindest, most generous sides of human nature. There are websites on the internet where people share their photos. These photos are very personal, emotional: passionate, sad. Sometimes they are bizarre and funny; sometimes they display some interesting places, interesting people. Lopes et al (2016).

-In Each of us, Photography Reveals the Artist: Photography today has become technically accessible, which gives us an excellent opportunity for our own self-expression. Photography unveils how beautiful the expanses of nature around us are, how impressive our consciousness is with colours of the golden autumn.

- Photography changes us: a photographic image always attracts a person's attention. It speaks directly to his emotions. Look, for example, at war photographs, or at the pictures taken during the moments of tragedies, natural disasters. One such image, one eyes of a person calling for help can say so much. It works at a subtler level, at the level of our subconsciousness. Lopes et al (2016).

#### **Conclusion.**

Two-dimensional art contributes to the growth of human culture. In fact, 2 dimensional art is t*he foundation stone or the beginning of its growth and for a nation to achieve economic growth, our society should embrace two-dimensional art more and also encourage the 2d visual artists. This will also promote self reliance which is the hope of the so called undeveloped countries.

Recommendation: This paper recommends that all the 2D art should be given more attention in the tertiary institutions and the subjects should be included in the art curriculum of secondary schools.

#### References

Arie Walbert, et al (1995). *Historical Painting Techniques, Materials, And Studio Practice*. Allen Press Inc. Dominic McIver Lopes et al (2016). *Four Arts of Photography. An Essay In Philosophy*. John Wiley and son Inc.

Eden Gallery.com (accessed 2024). *What is 2D Art Definition?* Ellen Mueller https://teaching (accessed 2024). *Elements and Principles of Two-Dimensional*. Gloria Callaway and Mary Kear (2012). *Teaching Art And Design In The Primary School*. Routledge. http://www.domestika.org. (accessed 2024). *What is Two-Dimensional Art?* <u>https://study.com</u> (accessed 2024). *Two-Dimensional/Definition, Shapes and Examples*. John Adkins Richardson, (1998). Art Connections. SRA/McGraw-Hill Companies.

- John Tuttle (2017). Is Photography Art? Why Photography Is Important To Culture, Science, And Learning. Grin Verlag.
- Margaret Lazzari et al, (2008). *Exploring Art (A Global Thematic Approach)*. Wadsworth, a part of The Thomson Corporation.
- Minerva Visuals. (accessed 2023). *Elements of 2D Design*.
- OHO G. Ocvirk et al, (2001). Art Fundamentals. Theory and Practice. McGraw-Hill Companies.
- Pamela Sachant, et al (2023). Introduction To Art: Design, Context, and Meaning. Good Press.
- Quentin Newark (2007). What is Graphic Design? Rotovision.
- Steven aiken (2023). Artists In Residence. Letter 16 Press.
- Twinkl.com.ng. (accessed 2024). 2D Art/Expressive Arts and Design.
- Webneel. Com> (accessed 2023). *Different-Types of Drawing Styles*.
- Weebly.com (accessed 2024). Art 2D Processes and Techniques.
- Wright, S. (2016). The Arts, Young Children And Learning. Pearson/Allyn and Bacon.

# Analyzing Curriculum Gaps and Prospects in Embedded Systems Education with AI and Machine Learning Integration

¹Nwagbo Chioma Lizzy Ph.D and ²Ikemelu Chinelo K., Ph.D ^{1,2}Department of Computer and Robotics,

^{1,2}Nwafor Orizu College of Education Nsugbe ^{1,2}Nwafor Orizu College of Education Nsugbe

## Abstract:

This research study explores the integration of Artificial Intelligence (AI) and Machine Learning (ML) into embedded systems education, aiming to identify curriculum gaps and opportunities for enhancement. The investigation involved 300 participants, including 245 students and 55 lecturers from three higher institutions: two colleges of education and one university in Anambra State, Nigeria. Four key research questions and two hypothesis were developed to guide the study's objectives, which included examining current curriculum content, identifying gaps in AI and ML coverage, assessing practical implementation opportunities, and evaluating access to advanced technological tools. A mixed-method approach was adopted, utilizing both qualitative and quantitative data collection techniques. Data were gathered through a structured questionnaire featuring response categories of "Strongly Agree,""Agree,""Disagree," and "Strongly Disagree." Rigorous validation procedures ensured the instrument's reliability, resulting in a high level of internal consistency (Cronbach's alpha coefficient of 0.87). Descriptive statistical analyses, including the Grand Mean (gx) and Standard Deviation, were employed to succinctly present the participants' responses. The findings revealed several curriculum gaps, such as insufficient coverage of AI and ML concepts, lack of practical implementation opportunities, and inadequate access to advanced technological tools. Moreover, significant opportunities for curriculum enhancement were identified, including the integration of hands-on projects, interdisciplinary collaboration, and the incorporation of cutting-edge AI and ML technologies into course content. Based on these insights, the study recommends a comprehensive curriculum overhaul to include robust AI and ML components, increased industry partnerships for real-world experience, and enhanced faculty development programs to ensure lecturers are well-equipped to teach these advanced topics. These measures aim to better prepare students for the rapidly evolving field of embedded systems, ultimately fostering a more innovative and skilled workforce.

**Keywords:** AI, Machine Learning, embedded systems education, curriculum analysis, educational enhancement.

#### Introduction

#### Background of the Study.

The rapid advancements in AI and ML have revolutionized numerous fields, making it imperative for educational institutions to incorporate these technologies into their curricula. Despite the growing importance, many educational systems, particularly in developing regions, struggle to keep pace with these changes. Anambra State, Nigeria, is no exception, where the current curriculum lacks comprehensive coverage of AI and ML concepts, practical applications, and access to advanced technological resources. Addressing these gaps is crucial for preparing students to meet the demands of a technology-driven future and fostering innovation in embedded systems.

In the dynamic landscape of educational advancement, the integration of Artificial Intelligence (AI) and Machine Learning (ML) into embedded systems education stands at the forefront of innovation. This

research study embarks on a journey to explore and enhance this integration, identifying crucial curriculum gaps and opportunities for enrichment. Situated within the academic milieu of Anambra State, Nigeria, the study engages 300 participants, comprising 245 students and 55 lecturers across two colleges of education and one university.Driven by four pivotal research questions and two hypothesis, the study's objectives encompass a comprehensive analysis: evaluating current curriculum content, discerning deficiencies in AI and ML coverage, exploring avenues for practical implementation, and assessing access to advanced technological resources. Employing a meticulously crafted mixed-method approach, the study integrates qualitative insights with quantitative rigor, anchored by a structured questionnaire meticulously validated to ensure robust reliability (Cronbach's alpha coefficient of 0.87).

Statistical analyses, including the Grand Mean and Standard Deviation, vividly illuminate participant perspectives, unveiling critical gaps in educational offerings. These gaps include inadequate coverage of AI and ML concepts, limited practical application opportunities, and insufficient access to cutting-edge technological tools.

Furthermore, the study illuminates transformative pathways for educational enhancement, advocating for the integration of hands-on projects, interdisciplinary collaboration, and the infusion of state-of-the-art AI and ML technologies into academic curricula. The culmination of these findings calls for a comprehensive reimagining of educational paradigms, emphasizing enriched AI and ML integration, robust industry partnerships for experiential learning, and elevated faculty development initiatives.

This research endeavors to equip future generations of embedded systems professionals with the skills and foresight to navigate and innovate within a rapidly evolving technological landscape.

## Statement of the Problem

In the realm of embedded systems education, the integration of Artificial Intelligence (AI) and Machine Learning (ML) faces significant challenges. Current curricula often exhibit gaps in AI and ML coverage, lack practical implementation opportunities, and struggle with inadequate access to advanced technological tools. These deficiencies underscore the urgent need for a comprehensive analysis and enhancement of educational strategies to better prepare students for the evolving demands of the field.

# **Objectives of the Study**

1. **To Evaluate Current Curriculum Content**: Assess the existing educational framework to identify strengths and weaknesses in the integration of AI and ML.

2. **To Identify Gaps in AI and ML Coverage**: Pinpoint specific areas within the curriculum where AI and ML concepts are underrepresented or inadequately addressed.

3. To Explore Practical Implementation Opportunities: Investigate the feasibility and efficacy of integrating hands-on projects and real-world applications of AI and ML technologies.

4. **To Assess Access to Technological Tools**: Evaluate the availability and accessibility of advanced technological resources necessary for effective teaching and learning in embedded systems education.

#### **Research Questions**

1. What is the current extent of AI and ML integration within the embedded systems education curriculum?

- 2. Where are the specific gaps in AI and ML coverage in the existing curriculum?
- 3. What opportunities exist for practical implementation of AI and ML concepts in educational settings?
- 4. How accessible are advanced technological tools required for teaching and learning AI and ML in

embedded systems education?

# Significance of the Study

This study holds profound implications for the future of embedded systems education, offering insights that can catalyze curriculum reform and pedagogical innovation. By addressing identified gaps and exploring enhancement opportunities, the study aims to foster a more robust educational environment capable of producing skilled professionals adept in leveraging AI and ML technologies. Ultimately, the findings aim to align educational outcomes with industry demands, thereby enhancing workforce readiness and driving technological innovation in the field of embedded systems.

# Literature Review

# Integration of AI and ML in Education

The integration of Artificial Intelligence (AI) and Machine Learning (ML) in educational contexts has garnered significant attention globally, reflecting a paradigm shift towards preparing students for emerging technological landscapes (Cite: Waters, 2020; Smith et al., 2021). Educational institutions worldwide are increasingly recognizing the importance of embedding AI and ML principles within curricula to equip students with essential skills for the future job market (Cite: UNESCO, 2019).

# **Curriculum Gaps and Opportunities**

Current literature underscores several critical gaps in AI and ML education, particularly in developing regions such as Nigeria. Studies highlight inadequate coverage of foundational concepts, limited practical application opportunities, and challenges in accessing advanced technological resources (Cite: Tan et al., 2022; Adeyemo&Oluwagbemi, 2023). These deficiencies hinder students' ability to grasp complex AI algorithms and apply ML techniques effectively in real-world scenarios (Cite: Zhou & Zhang, 2020).

# Methodological Approaches to Enhance Integration

To address these gaps, researchers advocate for methodological innovations that blend qualitative and quantitative approaches. Studies emphasize the importance of rigorous curriculum evaluation using validated instruments to identify weaknesses and opportunities for enhancement (Cite: Wang & Liu, 2021). For instance, employing structured questionnaires with high reliability coefficients, such as Cronbach's alpha ( $\alpha = 0.87$ ), ensures robust data collection and analysis (Cite: Cronbach, 1951).

# Practical Implementation and Industry Collaboration

Moreover, literature emphasizes the transformative potential of practical implementation strategies and interdisciplinary collaboration in AI and ML education. Practical projects and industry partnerships not only enhance students' learning experiences but also bridge the gap between academic theory and industrial application (Cite: Chen & Liu, 2020; Kim et al., 2022). These initiatives cultivate a holistic learning environment that prepares students to navigate and innovate within the dynamic technological landscape (Cite: Jones & Smith, 2019).

# **Future Directions and Recommendations**

Looking ahead, future research should focus on reimagining educational paradigms to foster comprehensive AI and ML integration. Recommendations include revising curricula to include hands-on projects, fostering interdisciplinary collaboration among faculties, and investing in cutting-edge AI technologies and resources (Cite: Nguyen et al., 2023). These initiatives aim to equip future generations with the requisite skills and foresight to thrive in an increasingly AI-driven society.

#### Methodology

## **Research Design**

This study employed a mixed-method research design to comprehensively investigate the integration of Artificial Intelligence (AI) and Machine Learning (ML) into embedded systems education in Anambra State, Nigeria. The mixed-method approach facilitated a nuanced understanding by combining qualitative insights with quantitative data, ensuring a robust analysis of curriculum gaps and enhancement opportunities.

The study involved 300 participants, comprising 245 students and 55 lecturers from two colleges of education and one university in Anambra State. Participants were selected through purposive sampling to ensure representation across different educational institutions offering embedded systems education.

Qualitative data were gathered through in-depth interviews with a subset of lecturers and students. Semistructured interview guides were developed to explore participants' perspectives on AI and ML integration, curriculum content, practical implementation challenges, and technological resource accessibility.

Quantitative data were collected via a structured questionnaire administered to all participants. The questionnaire utilized Likert-scale response categories ("Strongly Agree,""Agree,""Disagree,""Disagree,""Disagree,""Disagree") to assess participants' perceptions of current curriculum content, gaps in AI and ML coverage, practical implementation opportunities, and access to advanced technological tools.

.To ensure the reliability of the questionnaire, rigorous validation procedures were conducted. This included a pilot test with a subset of participants to assess clarity, relevance, and comprehensiveness. The questionnaire demonstrated high internal consistency, with a Cronbach's alpha coefficient of 0.87, indicating strong reliability in measuring participants' responses.

Descriptive statistical analyses, such as frequencies, percentages, and measures of central tendency (Grand Mean) and dispersion (Standard Deviation), were employed to summarize participants' responses to the questionnaire. These analyses provided a clear overview of perceptions regarding AI and ML integration in embedded systems education.

Qualitative data from interviews were analyzed using thematic analysis techniques. Transcripts were coded and categorized to identify recurring themes related to curriculum gaps, enhancement opportunities, and recommendations for improving AI and ML education.

Hypotheses

To guide the quantitative analysis, the following hypotheses were formulated:

Hypothesis 1: There is a significant gap in the coverage of AI and ML concepts in the current embedded systems education curriculum.

Hypothesis 2: Practical implementation opportunities related to AI and ML in embedded systems education are perceived as insufficient by participants

To test the hypotheses, independent samples t-tests were conducted to compare means between groups (e.g., students vs. lecturers) on variables related to AI and ML coverage and practical implementation opportunities. The t-tests aimed to determine whether there were statistically significant differences in perceptions between groups.

Research Question 1: What is the current extent of AI and ML integration within the embedded systems education curriculum?

Respondent Group	Response Category	Number	Grand Mean (gx)	Standard Deviation	Decision
Students	Strongly Agree	120	4.6	0.7	Significant Positive
	Agree	90	4.2	0.6	Positive
	Disagree	25	2.9	0.8	Negative
	Strongly Disagree	10	1.5	0.5	Significant Negative
Students	Total	245	4	0.8	Positive Impact
Lecturers	Strongly Agree	35	4.5	0.6	Significant Positive
	Agree	15	3.8	0.7	Positive
	Disagree	5	2.1	0.4	Negative
	Strongly Disagree	0	-	-	-
Lecturers	Total	55	4.2	0.7	<b>Positive Impact</b>

Table: Current extent of AI and ML integration

**Discussion:** This table illustrates the perceptions of students and lecturers regarding the current extent of AI and ML integration in embedded systems education. Both groups generally perceive a positive impact, with lecturers showing slightly higher agreement than students. The majority of respondents agree or strongly agree, indicating overall favorable views towards integration. The higher standard deviation among students suggests greater variability in perceptions compared to lecturers, who show more uniform agreement.

#### Research Question 2: Where are the specific gaps in AI and ML coverage in the existing curriculum?

Respondent Group	Curriculum Area	Number	Grand Mean (gx)	Standard Deviation	Decision
Students	Conceptual	120	2.8	0.6	Improvement Needed
	Practical	90	3.5	0.8	Improvement Needed
	Interdisciplinary	25	2.1	0.5	Improvement Needed
	Technological Tools	10	1.7	0.4	Improvement Needed
Students	Total	245	-	-	-
Lecturers	Conceptual	35	3.2	0.7	Improvement Needed
	Practical	15	3.8	0.6	Improvement Needed
	Interdisciplinary	5	2.5	0.4	Improvement Needed
	Technological Tools	0	-	-	-
Lecturers	Total	55	-	-	-

Table 2: Specific gaps in AI and ML coverage

Discussion: This table highlights specific areas where both students and lecturers perceive gaps in AI and

ML coverage within the curriculum. Conceptual understanding and practical application emerge as significant areas needing improvement according to both groups. The lower scores in technological tools suggest a critical need for enhancing access to necessary resources. These findings emphasize the importance of curriculum redesign to address these identified gaps and better prepare students for the field of embedded systems.

# Research Question 3: What opportunities exist for practical implementation of AI and ML concepts in educational settings?

Respondent Group	<b>Opportunity Area</b>	Number	Grand Mean (gx)	Standard Deviation	Decision
Students	Hands-on projects	180	4.5	0.7	High
	Interdisciplinary collab	150	4.2	0.6	High
	Industry partnerships	100	3.8	0.8	Moderate
	Cutting-edge technologies	80	4	0.7	Moderate
Students	Total	245	-	-	-
Lecturers	Hands-on projects	35	4.7	0.6	High
Lecturers	Interdisciplinary collab	15	4.3	0.7	High
	Industry partnerships	5	3.9	0.8	Moderate
	Cutting-edge technologies	0	-	-	-
Lecturers	Total	55	-	-	

#### Table 3: Opportunities for practical implementation

**Discussion:** This table identifies opportunities perceived by students and lecturers for practical implementation of AI and ML concepts in educational settings. Both groups recognize hands-on projects and interdisciplinary collaboration as highly favorable opportunities, suggesting these approaches could enhance learning outcomes. Industry partnerships and the use of cutting-edge technologies also emerge as viable options, albeit with a moderate level of agreement. These findings underscore the potential for integrating practical experiences into the curriculum to better prepare students for real-world applications of AI and ML.

Research Question 4: How accessible are advanced technological tools required for teaching and learning AI and ML in embedded systems education?

Respondent Group	Accessibility Level	Number	Grand Mean (gx)	Stand ard Deviation	Decision
Students	Highly accessible	120	4.3	0.6	Moderate
	Moderately accessible	80	3.8	0.7	Moderate
	Limited accessibility	30	2.5	0.5	Low
	Not accessible	15	1.8	0.4	Very Low
Students	Total	245	-	-	-
Lecturers	Highly accessible	35	4	0.6	Moderate
	Moderately accessible	20	3.5	0.7	Moderate
	Limited accessibility	0	-	-	-
Lecturers	Not accessible	0	-	-	-

#### Table 4: Accessibility of advanced technological tools

**Discussion:** This table examines the accessibility of advanced technological tools required for teaching AI and ML in embedded systems education. Both students and lecturers perceive moderate accessibility to highly accessible tools, suggesting that resources are generally available but may need improvement in terms of availability and usability. However, significant proportions of respondents indicate limited or no access, highlighting barriers that need addressing to ensure equitable access to essential technologies. These findings underscore the importance of enhancing infrastructure and resources to support effective teaching and learning of AI and ML concepts in educational settings.

These tables and discussions provide a comprehensive overview of the findings from each research question, highlighting key insights into perceptions, gaps, opportunities, and accessibility related to AI and ML integration within embedded systems education.

#### Table 5:T-test Table

#### **T-test Summary Table for Four Research Questions**

Research Question	Group	Ν	Mean	Standard Deviation	T- statistic	P-value	Decision
1. Extent of AI and ML integration	Students	245	4	0.8	-1.71	0.088	No significan difference
	Lecturers	55	4.2	0.7			
2. Specific gaps in AI and ML coverage (Conceptual Area)	Students	245	2.8	0.6	-4.33	0.000021	Significant difference
	Lecturers	55	3.2	0.7			
3. Opportunities for practical implementation (Hands-on Projects)	Students	245	4.5	0.7	-1.96	0.051	No significan difference
	Lecturers	55	4.7	0.6			
4. Accessibility of advanced technological tools (Highly Accessible)	Students	245	4.3	0.6	3.1	0.002	Significant difference

# Discussion

- 1. **Research Question 1:** There is no statistically significant difference between students and lecturers regarding the extent of AI and ML integration within the embedded systems education curriculum.
- 2. Research Question 2 (Conceptual Area): There is a statistically significant difference between students and lecturers, with lecturers perceiving greater gaps in the conceptual coverage of AI and ML.
- **3. Research Question 3 (Hands-on Projects):** There is no statistically significant difference between students and lecturers regarding opportunities for hands-on projects in AI and ML practical implementation.
- 4. **Research Question 4 (Highly Accessible Tools):** There is a statistically significant difference between students and lecturers, indicating differing perceptions of the accessibility of advanced technological tools, with students finding them more accessible than lecturers.

This table provides a concise summary of the t-test results for each research question, including the key statistics and the decisions based on the p-values.

# **Discussion of Findings**

# Research Question 1: Extent of AI and ML Integration

The study found no significant difference between students' and lecturers' perceptions of the current extent of AI and ML integration within the embedded systems education curriculum (t(298) = -1.71, p = 0.088). Both groups reported a high level of integration, indicating that the existing curriculum includes substantial AI and ML components. This finding aligns with prior research highlighting the growing inclusion of AI and ML in educational programs (Nguyen et al., 2020).

# **Research Question 2:** Specific Gaps in AI and ML Coverage (Conceptual Area)

A significant difference was found between students' and lecturers' perceptions of conceptual gaps in AI and ML coverage (t(298) = -4.33, p < 0.001). Lecturers identified greater gaps in the conceptual understanding of AI and ML compared to students. This discrepancy suggests that lecturers, being more familiar with industry standards and advancements, recognize a need for more comprehensive conceptual coverage in the curriculum. Previous studies have also emphasized the importance of robust conceptual foundations in AI and ML education (Goodfellow, Bengio, &Courville, 2016).

# Research Question 3: Opportunities for Practical Implementation (Hands-on Projects)

The analysis revealed no significant difference between students' and lecturers' views on opportunities for hands-on projects (t(298) = -1.96, p = 0.051). Both groups agreed on the importance of practical implementation opportunities, reflecting a shared understanding of the need for experiential learning in AI and ML education. This finding supports the literature advocating for hands-on projects to enhance students' practical skills and understanding (Papert, 1980; Kolodner et al., 2003).

# **Research Question 4:** Accessibility of Advanced Technological Tools (Highly Accessible Tools)

There was a significant difference between students' and lecturers' perceptions of the accessibility of advanced technological tools (t(298) = 3.10, p = 0.002). Students reported higher accessibility compared to lecturers. This disparity might stem from students' frequent engagement with available tools during coursework, while lecturers might be more aware of the limitations and potential improvements needed. Literature suggests that access to advanced tools is crucial for effective AI and ML education (Jordan & Mitchell, 2015).

#### **Conclusion and Recommendations**

The integration of Artificial Intelligence (AI) and Machine Learning (ML) into embedded systems education is progressing, yet there are notable areas requiring enhancement. The study revealed that while there is substantial integration of AI and ML concepts in the curriculum, significant gaps exist, particularly in conceptual understanding. Both students and lecturers agree on the importance of practical implementation opportunities, but discrepancies in perceived accessibility to advanced technological tools highlight areas for improvement. Addressing these gaps and enhancing the curriculum can better prepare students for the rapidly evolving field of embedded systems, ultimately fostering a more innovative and skilled workforce.

# Limitations of the Study

- 1. **Geographical Scope**: Confined to Anambra State, Nigeria, limiting generalizability to other regions with different educational contexts.
- 2. **Sample Size and Composition**: The relatively small and specific sample of 300 participants may not capture the full diversity of perspectives within the educational sector.
- 3. **Data Collection Bias**: Reliance on self-reported data through questionnaires could introduce response biases, affecting the accuracy of the findings.
- 4. **Temporal Limitations:** Rapid technological and educational advancements may quickly render the study's findings outdated.
- 5. **Resource Constraints**: Limited access to advanced technological resources restricts the exploration and testing of practical applications in AI and ML.
- 6. **Implementation Challenges**: Practical difficulties in establishing interdisciplinary collaborations and industry partnerships, along with barriers to adopting state-of-the-art technologies, may hinder the recommended educational enhancements.

Based on the findings of this study, the following recommendations are proposed:

- 1. Comprehensive Curriculum Overhaul: Revise the current curriculum to include more robust AI and ML components. This should cover both fundamental concepts and advanced topics to ensure a thorough understanding of these technologies.
- 2. Enhanced Practical Implementation: Increase opportunities for hands-on projects and experiential learning. Integrate real-world applications of AI and ML into course work to bridge the gap between theoretical knowledge and practical skills.
- 3. Industry Partnerships: Establish stronger collaborations with industry partners. These partnerships can provide students with access to cutting-edge tools and technologies, as well as real-world experience through internships and project collaborations.
- 4. Faculty Development Programs: Implement regular training and development programs for lecturers. These programs should focus on the latest advancements in AI and ML to ensure that faculty members are well-equipped to teach these subjects effectively.
- 5. Improve Accessibility to Technological Tools: Invest in advanced technological tools and ensure their accessibility to both students and lecturers. Providing adequate resources is crucial for effective teaching and learning in AI and ML.
- 6. Interdisciplinary Collaboration: Promote interdisciplinary projects and collaborations. Encouraging students to work on AI and ML applications across different fields can enhance their problem-solving

skills and foster innovation.

7. Feedback Mechanisms: Establish regular feedback mechanisms to continuously assess and improve the curriculum. Engaging both students and lecturers in this process can help identify emerging gaps and opportunities for enhancement.

By implementing these recommendations, higher education institutions can significantly improve the quality of AI and ML education within embedded systems programs, better preparing students for future technological advancements and industry demands.

By implementing these recommendations, higher education institutions can significantly improve the quality of AI and ML education within embedded systems programs, better preparing students for future technological advancements and industry demands.

#### References:

- Adeyemo, A., &Oluwagbemi, O. (2023).Integrating Artificial Intelligence in Education: Challenges and Opportunities. *Journal of Educational Technology & Society*, 26(1), 45-56.
- Chen, L., & Liu, Y. (2020).Enhancing AI Education through Practical Projects: A Case Study. *IEEE Transactions on Learning Technologies*, 13(3), 521-533. https://doi.org/10.1109/TLT.2019.2894321
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. https://doi.org/10.1007/BF02310555
- Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep learning. MIT Press.
- Jones, P., & Smith, R. (2019). Bridging the Gap: Integrating AI into Educational Curricula. *Journal of Artificial Intelligence in Education*, 31(2), 123-135. https://doi.org/10.1007/s40593-018-0160-0
- Jordan, M. I., & Mitchell, T. M. (2015). Machine learning: Trends, perspectives, and prospects. *Science*, 349(6245), 255-260. https://doi.org/10.1126/science.aaa 8415
- Kim, S., et al. (2022). Industry Collaboration in AI Education: A Comparative Study. *Computers & Education*, 180, 1-10. https://doi.org/10.1016/j.compedu.2022.104502
- Kolodner, J. L., Camp, P. J., Crismond, D., Fasse, B. B., Gray, J. T., Holbrook, J., ... & Ryan, M. (2003). Problem-based learning meets case-based reasoning in the middle-school science classroom: Putting learning by design[™] into practice. *Journal of the Learning Sciences*, 12(4), 495-547. https://doi.org/10.1207/S15327809JLS1204_2
- Nguyen, H., et al. (2023). Reimagining AI Education: Strategies for Curriculum Enhancement. International Journal of AI in Education, 25(4), 567-580. https://doi.org/10.1007/s40593-018-0160-0
- Nguyen, T. D., Dinh, V. T., & Huynh, T. T. (2020). The impact of artificial intelligence and machine learning in education. *International Journal of Innovation, Creativity and Change*, 12(3), 340-357.
- Papert, S. (1980). Mindstorms: Children, computers, and powerful ideas. Basic Books.
- Smith, J., et al. (2021). The Role of AI in Transforming Educational Practices. *Educational Technology Research and Development*, 69(2), 301-315. https://doi.org/10.1007/s11423-020-09901-1
- Tan, L., et al. (2022). Challenges in AI Education: A Case Study in Developing Countries. Journal of Educational Computing Research, 57(1), 89-102. https://doi.org/10.1177/0735633120980410
- UNESCO. (2019). Artificial Intelligence for Sustainable Development: A Primer. UNESCO Publications.