

ASSESSING THE IMPACT OF DIGITAL LITERACY RESOURCES IN ADVANCING CLOTHING CONSTRUCTION IN TERTIARY INSTITUTIONS IN POST-FUEL DEREGULATION ERA

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Abstract

This paper focuses on the assessment of the digital literacy resources in the teaching and learning of Clothing construction, an aspect of Home Economics Education in post-fuel deregulation era. The study adopted a descriptive survey research design. The population for the study (19) were all the teachers of Clothing Construction across the tertiary institutions offering clothing construction in Lagos State and were adopted as the sample size of the study. Purposive sampling technique was adopted for this study, reason being that the teachers of clothing construction were limited in number. Variables related to the study were reviewed. A total of 19 questionnaires were distributed to teachers of Clothing Construction and retrieved. Responses were analyzed using the Statistical Packages for Social Sciences. The study found that most tertiary institutions lack the necessary digital literacy resources for teaching and learning clothing construction. The paper further discovered that there are challenges militating availability and utilization of digital literacy initiatives in spite of the potentials inherent in use of resources in the process of educational development. The paper made recommendations among others that DLR should be made available to impact positively in the teaching and learning of clothing construction to bring about wider wealth of knowledge that could gear up the benefactors to compete constructively, collaborate, gain technical proficiency and digital identity even during and after P-FDR.

Keywords: Digital literacy, Resources, Clothing construction, Teacher Education. Deregulation

Introduction

Digital literacy (DL) is one of the indices of quality education. It has numerous tendency to impact individual, society and the economy which birthed quality education. Quality Education is one of the agenda of the Sustainable Development Goals (SDGs). This agenda is one of the paramount issues to the development of a country. The Federal Government of Nigeria (FGN) has several

policies to ensure that every citizen is educated in order to make life affordable, enjoyable and satisfactory and contribute positively to National development. In order to measure up with the SDGs there is need to stern up the process of disseminating quality teaching and learning in order to result in quality outcome for individual and national development in post-fuel deregulation era.

The Federal government of Nigeria in an attempt to brace up to the contemporary world in computer education, in 1988, enacted a policy on education which was to establish pilot schools and thereafter diffuse the innovation first to all secondary school and later to the primary schools in the country (FGN, 2014). Further, the importance of ICT in curriculum implementation is recognized by the Nigeria Policy on Education where it stated that the government shall provide facilities and necessary infrastructures for the promotion of ICT and e-learning (NPE, 2004). Home Economics Education is one of the Vocational and Technical Education courses geared toward teaching and training individuals with general education coupled with practical knowledge and sellable skills for individual self-reliance, economic benefit and national development. Digital literacy is the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship. Digital literacy resources are the devices that involve in information processing and electronic communications, such as computers, internet, e-mail, computer software, satellite, mobile communication gadgets, and other allied electronic devices for in teaching and learning, dissemination of knowledge and information in a wider range.

Quality education signifies an educational experience that effectively supports and promotes the holistic development of students. It encompasses meaningful learning, relevant content, effective teaching

methods, assessment aligned with learning goals and the development of critical thinking, problem-solving and lifelong learning skills which appeared to be more needed in this post-fuel deregulation era (P-FDE).

The United Nations (2015) stated that Sustainable Development Goal 4 is about quality education and is among the 17 Sustainable Development Goals established by the United Nations in September 2015. The full title of SDG 4 is "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

Clothing construction is a lucrative course that advance individual for self-reliance, economic empowerment and transcend to national development. It provides students with sound foundation for garment manufacturing techniques and designed to develop skills in students related to body measurements using appropriate tools, sewing by non-automatic and automatic machines at advanced level, application of appropriate constructional stitches, and preparation of fabric for clothing construction. Owodiong-Idemeko, et al (2018) stated that creativity allows individuals to devise interesting processes such as technologies which gives several advantages to entrepreneur's work life. They also noted that the changing social and economic conditions of modern technologies have made it mandatory to clothing entrepreneurs to acquire creative skills and to adapt to the time and specific needs for improved social and economic conditions for families and the world at large. For this

course to reach the expected goals and for students to measure up to the world expectation there will be need for inclusion of digital resources in the teaching and learning process at our institutions of learning. Hall (2011) added that the internet and emerging technologies are all about meeting and working with entrepreneurs. Entrepreneurship has always been about networking. The internet and technology revolution has continued to intensify those basics. Adesoji (2012) cited that e-learning comprises computer and ICT materials and applications, which aid information collection and dissemination, research and global exchange of ideas that are critical for advancing meaningful, educational initiatives and understanding issues related to global development. The introduction of e-learning facilities to the education systems is aimed at improving educational delivery and preparing students for a role in an information age. Amedu (2014) pointed out that e-learning facilities are useful in Home Economics as a tool for curriculum delivery, assessment, research, and hands-on experience. Teachers of Home Economics need to use digital resources to enhance curriculum delivery, practical lessons, and follow-up of students' learning activities. Aburime and Uhomoibhi (2024) noted that through digital literacy resources new skills, knowledge and ways of learning to prepare students for living and working in the 21st century can be attained for global interconnectedness. E-learning facilities do not only help students but also assist teachers in the preparation of teaching (Okoroh, 2016). As the globe is becoming an e-space,

inflation and skyrocketing prices of commodities which are as a result of government policy it is expected that every teacher and students of Clothing construction should be digital inclined and conversant; hence the need for digital literacy resources to remain relevant in the teaching and learning of Clothing construction/Home Economics Education programme in this present era of P-FD.

Challenges Militating Digital Literacy Resources and Clothing Construction

The world is turning e-space, policies are not in favour of the masses and Nigeria educational sector needs to take the bull by the horn in order to compete constructively with the developed and developing world. The FRN in his bit made available some digital resources which some are outdated and some that are recent could not be used maximally due to unstable power supply. These efforts are not measuring up to the huge human capital and natural endowment available in the country to be counted as one of the developing nations fully implementing DLR in education sector. Hence, it has become imperative for Nigeria to replace the traditional pedagogical practice with digital practices in order to meet the SDGs of providing quality and inclusive education for all by 2030 and also to make its teachers and students compete constructively with counterpart in the e-space of Clothing.

Despite the importance of DLR as tools for societal advancement, there are some factors that appeared to impede the availability and utilization of DLR for attaining quality

education generally and are outlined as follows:

1. Insufficient funding: insufficient funding is a menace to Home Economics education/Vocational and Technical Education, this could impede the purchase of digital resources and even consumable for the teaching and learning of clothing construction in and out of school practices. Uko (2024) stated that inadequate funding is a major challenge facing the administration of universities in Nigeria.
2. Lack of sufficient qualified teachers: digitally oriented expertise\teachers are not sufficient in the area of clothing construction to influence and put up position letters for the utilization of DLR.
3. Industrial Training Fund/Students Industrial Work Scheme: these bodies should advance and ensure the organizations students are taking up training are measuring up digitally in order to proffer the students with practical knowledge that are not available in institutions of learning.
4. Negative attitude: Shinga, Bappah and Sani (2021) cited that it is not unconnected, that poor societal attitudes are manifested in low enrolment of technical and vocational education. It is without stress to maintain this position with non-challance attitude towards provision of equipment and unavailability of digital resources in tertiary institutions.
5. Poor leadership skills: Boyi (2014) points out that the sequence of leadership in Nigeria is a problem of the development of VTE/HE which results to lack of basic

equipment for effective teaching and learning, this poor leadership leads to the failure of producing basic equipment for effective teaching and learning and has hindered huge success to economic and national development. In some institution that have DLR such as interactive board, projectors, computer etc. They are obsolete, malfunction, depreciated, hence, little or nothing could be achieved through them.

6. Interrupted power: Regular and stable electricity supply is needed to run DLR. Lack of power to run the DLR hamper the effective application to teaching and learning and schools could not provide standby power generating plant for this purpose in the face of the present economic hardship and skyrocketing inflation.

Statement of the Problem

Despite the numerous importance of DL resources in today's technology-driven world for advancement globally. It appears that educational institutions in Nigeria still struggle to leverage on this space for development, for acquaint and empower people for the challenges or resultant effect of the P-FDE. The goal in National Policy on Education for tertiary institutions to give train and impart desirable skills to persons to be relevant and reliant, this, Joe (2019) stated can be achieved through teaching more desirable practical skills that are relevant to meet the yearning of the competitive present labour workforce market. Home economics /Clothing Construction has not been embraced as a tool for creating jobs and

national development. The graduates are still not employed either by the government, private organizations or be self-reliant due to the way the courses are being taught so they lack adequate skills. This menace Anyakoha (2013) criticised is because the emphasis is more on theoretical teaching than practical in schools, students not being exposed to ICT use in teaching and learning Home economics to be abreast with adequate information, knowledge and current global trend, innovations and changes. The challenges of not teaching enough practical as observed are due to learners' poor knowledge in ICT, lack of ICT infrastructure/equipment, fund and interest the course, among others. Studies have shown that training lectures and students to be ICT compliance, equipping laboratory with adequate facilities for practical teaching and learning, personal computer possession by lecturers and students and improving access to other institution website and database, giving incentives to excelling students and lecturers in ICT use, among others are the ways to revitalizing Home Economics education through ICT use for skill acquisition and global relevance. Hence, this study sought to assess the utilization of digital resources in enhancing quality teaching and learning of Clothing construction in this post-fuel deregulation era in order to cushion the benefactors to remain relevant and resilience. Could the DLR available for the teaching and learning of Clothing Construction in the tertiary institutions equip individuals for the resultant effects of post-fuel deregulation era?

Purposes of the Study

The purpose of the study was to assess the impact of digital literacy resources on teaching and learning of clothing construction in tertiary institutions in post-fuel deregulation era.

Specifically, to:

- a. Determine the use of digital literacy resources in teaching and learning Clothing Construction in tertiary institutions;
- b. Assess the impact of digital literacy resources on teaching and learning of Clothing Construction in tertiary institutions;
- c. Explore the challenges faced in employing digital literacy resources in teaching and learning of Clothing Construction in tertiary institutions

Research Questions

1. What extent are the DL resources available for teaching and learning Clothing Construction in tertiary institutions?
2. How does the DL resources impact on the teaching and learning of Clothing Construction in tertiary institutions?
3. What are the challenges faced in employing digital literacy resources in teaching and learning process in tertiary institution?

Methodology

The paper adopted descriptive survey design. The population for the study were all clothing construction teachers (CCT) in tertiary institutions in Lagos State, Federal College of Education (Technical) Akoka (3), University

of Lagos (1), Yaba College of Education and University of Nsukka Affiliated to Yabatech (5), Lagos State University of Education (4), Michael Otedola College of Education (3), Lagos State University (3). The simple random and purposive sampling techniques were adopted reason being that there are limited Clothing Construction teacher, hence the available Clothing Construction teachers were used. The sample size for the study were 19 teachers across all the tertiary institutions in Lagos State. A structured questionnaire was used to gather data. The questionnaire was validated by two Clothing Construction teachers considering the objectives of the study. Corrections made were effected. The questionnaire was administered to 12 CCT,

collected, collated and analysed using SPSS Cronbach alpha and the reliability coefficient of 0.462 was attained.

The questionnaire contains three parts. The first part elicits information on the extent of use of DLR with 4-point scale from 'Great Extent' (4) to 'Not Available' (1). The second part elicit information on the impact of DLR on with 4-point scale ranging from 'Strongly agree' (4) to 'Strongly disagree' (1) while the third part elicits on challenges face in employing DLR with a yes or no options. The Statistical Package for the Social Sciences (SPSS) software was used to analysed the data collected from the questionnaire

Results

Research Question 1: To what extent are the DL resources available for teaching and learning Clothing Construction in tertiary institutions?

Table 1: Mean responses of respondent on the extent are the DL resources available for teaching and learning Clothing Construction in tertiary institutions

S/N	Extent of availability of digital literacy resources in teaching and learning Clothing Construction	Mean	Remarks
1	Interactive board	2.27	Disagreed
2	E-library	2.65	Agreed
3	Multimedia Projectors/PowerPoint	2.78	Agreed
4	Computer laboratory for clothing	2.16	Disagreed
5	Laptop with assisted clothing construction software	2.32	Disagreed
6	On-line/Internet Computers	2.34	Disagreed
7	Off-line/ordinary Computers	2.36	Disagreed
8	web based learning	2.67	Agreed
9	Drawing App for fashion illustration	2.21	Disagreed
10	3D dynamic fashion	2.18	Disagreed

Grand mean= 2.39; n =19

Table 1 revealed that seven of the questionnaire items have a mean rating between 2.16 and 2.36 indicating that the respondents were of the opinion that most of the DLR were not available in an extent that could advance for the teaching of clothing construction in our tertiary institutions. Only

three of the items have a mean rating between 2.65 and 2.78 that e-library, multi-media projector and web based learning were available to an extent that could advance the teaching and learning of clothing construction.

Research Question 2: How does the DL resources impact on the teaching and learning of Clothing Construction in tertiary institutions?

Table 2: Mean responses of respondent on the impact of DL resources on teaching and learning Clothing Construction in tertiary institutions

S/N	Impact of digital Literacy Resources on teaching and learning Clothing Construction	Mean	Remarks
1	Provides platform for group learning	2.63	Agreed
2	improves the quality of teaching	2.67	Agreed
3	Helps to storage and retrieval of teaching materials.	2.75	Agreed
4	gives up to date information	2.55	Agreed
5	Gives opportunity for learning and relearning.	2.76	Agreed
6	Widens teaching and learning scope	2.89	Agreed
7	Gets one ready for improved teaching	2.67	Agreed
8	Helps to cover a wider contents	2.74	Agreed
9	Saves time and energy used in teaching	2.43	Disagreed
10	Gives access to student to re-learn after class	2.66	Agreed

Grand mean = 2.67; n =19

Table 2 revealed that all the items raised on the impact of DLR on the teaching and learning of Clothing construction have a rating ranging from 2.55 to 2.89. This indicated that the DLR have impacts on the

teaching and learning of Clothing construction. However, item with the mean rating of 2.43 which revealed that DLR does not saves time and energy used in teaching

Research Question 3: What are the challenges faced in employing digital literacy resources in teaching and learning process in tertiary institution?

Table 3: Mean responses of respondents on the Challenges faced in employing of DL resources in teaching and learning Clothing Construction

S/N	Challenges faced in employing digital literacy resources in teaching and learning	Mean	Remarks
1	Frequent electricity power interruption	2.68	Agreed
2	Lack of qualified and skilled manpower	2.56	Agreed
3	Poor funding attitude on projects	2.75	Agreed
4	Poor digital technology policy and implementation	2.66	Agreed
5	High cost of digital technology materials and soft-ware	2.67	Agreed
6	Purchase and supply of obsolete resources	2.57	Agreed
7	Access to DLR in schools	2.63	Agreed
8	Sponsoring ICT training and retraining for lecturers	2.43	Disagreed
9	Acquiring and installation of modern digital resources.	2.74	Agreed
10	Upgrading of available digital resources for teaching and learning	2.56	Agreed
Grand Mean = 2.65; n =19			

Table 3 revealed that the respondents responded to all the items on the Table with same opinion with the mean rating ranging from 2.56 to 2.75 indicating that there are challenges faced in the utilization of DLR in the teaching and learning of clothing construction while only one item was not tagged as a challenge in teaching and learning clothing construction which states that sponsoring ICT training and retraining for lecturers was not a challenge.

Discussion of Findings

The results from analysis revealed that the extent of availability of DLR for teaching and learning Clothing construction in tertiary institutions in Lagos State is of low extent. This result could be as a result of misplace priority of our leaders towards Vocational Technical Education which clothing construction falls in the group, this could also

be traced to issue of poor funding which was noted by Uko (2024) that inadequate funding is a major challenge facing the administration of universities in Nigeria. For the nation to advance in this post-fuel deregulation era and fast growing technological world, the government need to place their priority right, fund education appropriately and put measures in place for judicious use of fund, monitor procurement of resources, installation and utilization of the resources and infrastructures in all institutions of learning. The digital resources identified in this paper when made available in a reasonable extent will enhance the advancing of clothing construction during and after the post-fuel deregulation era whereby the benefactors will be shielded to face the effects.

The results also revealed that the availability of digital resources would have great impact in advancing teaching and learning of Clothing construction in post-fuel deregulation era. This finding is corroborate with the submission of Adesoji (2012) that cited that e-learning comprises computer and ICT materials and applications, which aid information collection and dissemination, research and global exchange of ideas that are critical for advancing meaningful, educational initiatives and understanding issues related to global development. Clamouring for advancement is to make available the necessary facilities and enabling environment to attain what is being agitated for. This study revealed that through the utilization of DLR in our tertiary institutions quality of teaching can be improved, teaching and learning scope are widened, technical proficiency, collaboration, digital identity, among others might be attained. The study revealed that the use of DLR for teaching would not have saved time and energy which is may be contrary to other studies that have recorded that digital resources helps to save time and energy, this could be as a result of the level of the respondents exposed to the DLR. The use of DLR might take a toll on them before getting acquainted to the utilization which has the tendency of saving time and energy. The study of Azonuche (2020) supported this finding as noted that the type of education that equips the learner with needed skills and competencies to bridge the gaps between the classroom and the real world and enables them to use the knowledge acquired for creativity,

innovations and business ideas to carry out job activities well is needed. It, therefore, becomes imperative to close the gap between classroom teaching and learning of Home Economics and needed skills in the world of work (Ejiofor & Nawkile, 2016).

Finally, the study revealed that there are several challenges militating against the availability and utilization of DLR in the teaching of Clothing construction which would have transcend to advancement of individual for self-reliant, job creation, poverty alleviation and economic benefit in the P-FDR. Frequent electricity power interruption, lack of qualified and skilled manpower, poor funding attitude on projects, high cost of digital technology materials and soft-wares, upgrading of available digital resources for teaching and learning among others were identified as challenges affecting DLR for teaching Clothing construction. This finding is supported with the submission of Boyi (2014) that the sequence of leadership in Nigeria is a problem of the development of VTE/HE which results to lack of basic equipment for effective teaching and learning, this poor leadership leads to the failure of producing basic equipment for effective teaching and learning and has hindered huge success to economic and national development. When these challenges are taken care of, there will be advancement of Clothing construction in our institution of learning.

Recommendations

Based on the findings of the study, the paper recommended that:

1. Digital literacy resources should be made available for the teaching and learning of clothing construction in an extent that it will facilitate advancement of self and nation economically and developmentally as well as prepare the benefactors against the unfavourable consequences that might arise;
2. DLR should be made available to impact positively in the teaching and learning of clothing construction to bring about wider wealth of knowledge that could gear up the benefactors to compete constructively, collaborate, gain technical proficiency and digital identity even during and after P-FDR and that
3. The challenges militating the availability and utilization of DLR in the tertiary institutions should be taken care of and eradicated in order to make be able to stand up to the consequences that could emanate from P-FDE and also for accessible and attainable for quality education as stipulate by SDGs.

Conclusion

The study concluded that digital literacy resources can be used to advance clothing construction in tertiary institutions in this post-fuel deregulation era when the needed resources are made available and enabling environment are created and all the challenges militating against the availability and utilization of the digital resources are resolve.

References

- Aburime, M. O. & Uhomoibhi, J. O. (2024). Impact of technology and culture on home economics and nutrition science education in developing countries. *Multicultural Education and Technology Journal* 4 (1) 4-16. ISSN 1750-497X. Retrieved June 4, 2024 from <http://www.learntechlib.org/p/109289/>.
- 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* .4(7), 121-130.
- Anyakoha, E. U. (2013). Positioning vocational and technical education on the vanguard of sustainable economic development. A keynote address presented at the maiden conference of School of Vocational Education, Federal College of Education (Technical) Asaba, Delta State, Nigeria, on Vocational and Technical Education for Sustainable Economic and National Development 14th–17th May 2013.
- Amedu, S.O. (2013). Vocational and technical education: A tool for sustainable development in Nigeria. *Journal of Education and Practice*, 4(25), 127-130.

- 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*. www.richtmann.org 10(6) ISSN 2240-0524 ISSN 2239-978X.
- Boyi, A. A. (2014). Relevance of vocational and technical education in Nigeria's Transformation. Agenda. A paper delivered at the 2014 International Interdisciplinary Conference (IIC2014) on Globalization. F.C.E. Pankshin, 23rd – 26th June 2014.
- Ejiofor, T. & Nwakile, T. C. (2016). Revitalizing technical vocational education and training for job creation and national development through agricultural education programmes in tertiary institutions in Nigeria. *Journal of Association of Vocational and Technical Educator of Nigeria (JAVTEN)*, 21(2), 102-110.
- Federal Republic of Nigeria (2004). *National policy on education: Revised Edition*. Abuja: NERDC press.
- Federal Republic of Nigeria (2014), National Policy on Education, Nigerian Educational Research and Development Council, Lagos.
- Hall, C. (2011). The responsible entrepreneur. How to make money and make a difference, career press makes a difference. Franklin, N. J. 209-210.
- Joe, A. I. (2019). How relevant are Nigerian state universities today in teaching, research and scholarship? Convocation Lecture delivered at the 13th Convocation ceremony of Delta State University, Abraka, Delta State, Nigeria. Thursday, 16 May.
- Okoroh, L. (2016). Information and communication technology. Lagos: Macmillan publishers.
- Owodiong-Idemeko, B. M., Owodiong, M. and Barikpe, L. A. (2018). Evaluation of creative utilization of new technologies by clothing entrepreneurs to improve social and economic conditions of families. *Nigerian Journal of Home Economics (Nig-JHEC)*. 6(2)170-177. ISSN: 978-37772-6-0. Daban Printers.
- Shinga, A. J., Bappah, A. and Sani, M. A. (2021). Vocational and technical education towards curbing unemployment for national development. *Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)*, (3), ISSN: 2734-2514 (Online). (Accessed: 9th April, 2024).
- Uko, L. (2024). Challenges of inadequate funding in the administration of University education in Nigeria. KUI publication.