

Perceptions of Digitalization and Versatility in Digital Instruction among Lecturers in Federal Colleges of Education in the North-West Geo-Political Zone, Nigeria

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ABSTRACT

Digitalization Technological break-through are relevant in improving teaching learning instructional activities. Colleges of Education are in dear needs of improving its strategic methods of instructions. The study therefore investigates; Digitalization Perception and Versatility Level of Digital Instruction among lecturers in Federal Colleges of Education, North-West Geo-Political Zone, Nigeria. The study raised (3) research questions. The research adopted a descriptive survey method from the population of 840, in the (5) five Federal Colleges of Education in the Zone. A sample of 420 lecturers from departments School of General Education from the Colleges were purposely used for the study. The instrument used was structured questionnaire, titled: "Assessment of Lecturers Perception and Versatility Level of Digital Instruction (ALPVLDI) which was validated by experts and the reliability index was determining using Kuder Richardson, formula (K-R), the significant correlation co-efficient of the instrument was 0.87. The research questions were answered using tabulation and simple percentages. Findings showed that greater percentage of the lecturers have negative perception towards digital instructional delivery, lecturer's exhibits poor versatility level of digital instruction. The study concluded that Colleges have poor implementation of digital instructions delivery which required urgent attention. It was recommended that there is the need to orient and equip the lecturers with the knowledge of digital learning as well as the practical digital versatility skills acquisition needed for an improve implementation process of digitalization in Colleges of Education in Nigeria.

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INTRODUCTION

Perception is directly linked with the mind to viewed actions and take control of behaviour, while digitalisation involved the interplay of technological devices and other specially designed online resources to perform a task. Digitalisation perception direct the stretched of an individual understanding to utilization of technological devices to promote teaching and learning. The usage of digital tools for instructional process in educational activities has presented a laudable breakthrough innovative strategies such as digital leaning. It enhanced students-centred approach and reduces teacher-centred method (Elimaifi, 2014). In the same vein, Olurundare (2021) clearly viewed that digital tools is a major

components for advancing educational activities and research in developing countries most especially in the Informational and Communication Technology (ICT) Era.

The well-known traditional classroom instruction environment is known to be teacher-centred where teacher dominates the affairs of the class through the use of conventional learning approaches (Chalk and Talk) with little or no instructional aids (Nuhu, 2013). These types of classes instruction involves note learning where students depend largely on memorization without a complete understanding of what is being taught. Consequently, instruction is counter-productive to producing healthy, well-educated adult learners most especially in 21st century. In tertiary institutions

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were digital utilization is unequipped the lecturers find it difficult to manage and deal appropriately with large crowded students weakness in the learning process (Osakwe, 2010).

National Information Technology Development Agency NITDA (2010) lays out the inputs required to strengthen all productive sectors and ultimately transform Nigeria into a knowledge based and globally competitive country in alignment with national visions 2020 objectives. For the successful implementation of ICT policies in Nigeria Educational System. Over the years, government has continue to develop policies and programmes towards educational development to digital instructional delivery in Nigerian schools. Many question could be rise particularly lecturer's readiness to incorporate and manipulate digital tool components for instructional purpose.

Digital knowledge and skills formed a major influence characteristic to help lecturers existing attributes through extensive training on educational technology facilitate digital instruction in schools (Smarkola, 2017). In the same view factors such as support funding, training and facilities influence lecturer's adoption and integration of digitalization into their classroom activities. Lecturer's professional development is a key factors to successful digital classroom instruction. ICT related training programs develop lecturer's competences in digital tools usage (Keengive, 2017) and assisting lecturers reorganize the task of knowledge dissemination using new technology tools that are significant in students-lecture production.

In Colleges of Education leadership is a strong predictor of lecturer's digitalization usage in teaching (Smarkola, 2017) believes that a leaders who implements technology plans and also shares a common vision with the lecturers stimulates them to use digital tools in their lesson plan. The infrastructure support is impetrating mechanism to college technology leadership for lecturers to perceived use of digitalization in teaching (Nuhu 2013).

Study literature report such as Ogundale (2023) finding on the effect of digital teaching in basic schools in Nigeria stressed on significance of good leadership to access and utilize digital resources. He identified three factors that were essential to be present in

schools if digital resources were to be utilized property for instructional purposes. These factors were digital resources, digital leadership and infrastructure.

The study revealed that leadership promotion of collaboration and teacher dedication to students-centred learning influenced effective digital transformation. Yuen and Wong (2003) study with 80 teacher's educators in school was discovered, that digital leadership with qualities of identifying and articulating a vision, promoting acceptance of group goals, providing individualized support offering intellectual stimulation, providing appropriate model, creating high performance expectations, and strengthening school culture could influence the integration of digital resources. Similarly, Keengive (2017) distributed questionnaire to 30 heads of second-cycle institutions in Tehran. Their result revealed a relationship between the heads level of computer competence and transformational leadership practices.

The study concluded that transformational leadership could help improve the integration of digitalization into-teaching and learning processes. Further Yuen, Law and Chan (2003) conducted case study of 18 school in Hong. They found that in catalytic integration model schools. The school principal is the key change agent, exhausting visionary leadership. Also studies have shown various level of leadership such as principal's, administration leadership and technology leadership influence successful use of digital resources in schools (Anderson and Dexter 2005). This aspect of leadership will help the principal to share tasks with subordinates while focusing on the adoption and integration of technology in the school. Institution exemplified by executive involvement and decision-making, strengthened by plan digitalization of classroom instruction effectively adopt digital resources usage.

It has not been well ascertained if considerable number of the colleges' lecturers are competent to carry on with this great task of digitalization of classroom instructional delivery. There are few trend of record of digital instruction in teaching and learning processes in teacher training institutions.

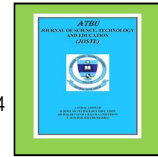
This has been the subject of major concern to educational planners, administrators, stakeholders in colleges and

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lecturers themselves. In support of these assertion, Yusuf and Ogunkola (2023) revealed that there was wide gap between policy development and implementation in the Nigerian institutions as regards digitalization concept. Osakwe (2010) worked on the influence of Information and Communication Technology on teacher digitalization and plan lesson presentation which could be due to lack of ICT literacy in school teacher in Anambra state and concluded that inadequacy of digitalization infrastructure posed a major challenge for teacher's non-use of digital resources in classroom. Previous research in related studies pointed out many factors that account for non-use of digital tools in schools. Some of these researchers concentrated on the basic schools, secondary schools and university (Osakwe, 2010, Nwana 2018) expressed concern that studies related to digital application are concentrated mostly on foreign countries institutions. The researchers find it worthy to study Digitalization and Versatility Level of Digital Instruction among Lecturers in Federal Colleges of Education, North-West Geo-Political Zone, Nigeria. Where teacher are produced and there is high expectation from the communities in their services delivery. This gap in knowledge should not be allowed to remain un-investigated if the colleges are to be transform into technological base institutions to compete favourable with the global trend of digitalization era.

Despite slow take-up digitalization process in classroom activities in some institutions has continued to dominate teaching and learning in universities which cannot be ignored by colleges of education system. Therefore, this research aim to:

1. Determine the lecturer's perception of the Digital Instructional Classroom Delivery.
2. To assess the Lecturer's Digital Versatility in Instructional Classroom Delivery in Colleges of Education in North West Geo-Political Zone, Nigeria.
3. To ascertain level of effectiveness of the implementation of Digital Instructional

Classroom Delivery in Colleges of Education in North West Geo-Political Zone, Nigeria.

For the purpose of this research work, the following questions are raised:

- a. What is the Lecturer's Perception of the Digital Instructional Classroom Delivery?
- b. What is the Level of Lecturers Versatility of Digital Instructional Classroom Delivery?
- c. How effective is the implementation of the Digital Instructional Classroom Delivery in Colleges of Education in North West Geo-Political Zone, Nigeria?

METHODOLOGY

The research work used a descriptive survey design to determine the Digitalization Perception and Versatility Level of Digital Instruction among lecturers in Federal Colleges of Education, North-West Geo-Political Zone, Nigeria. The population of the study consists of all the lecturers in School of General Education in Federal Colleges in the Zone Eight Hundred and Forty (840) lecturers from various departments of the colleges. A purposely sampled techniques was applied, in which Four Hundred and Twenty (420) lecturers were considered as research respondents, this was to ensure that only lecturers who teach educational courses were used for the study. The instrument for data collection was 10 item structured questionnaire on a four-point scale and validated by three experts from Faculty of Education ABU, Zaria and their inputs were reflected in the final instrument. The reliability of the instrument was established using Kuder Richardson Formula (K-R). The correlation coefficient of the instrument was 0.87. The research questions were answered using tabulation and simple percentages.

RESULTS

Research Question 1: What is the lecturer's perception of the digital instructional classroom delivery in Colleges of Education in North-West Geo-Political Zone in Nigeria?

Table 1: Summary of the Responses of Lecturers Perception in Digital Instructional Classroom Delivery

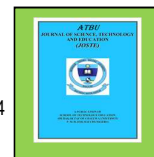
Types of perception	No of Lecturers	Percentages
Positive	146	35%
Negative	274	65%
Total	420	100%

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The result showed that 146 or 35% of the lecturers had a positive perception while 274 or 65% showed a negative perception of using digital instruction to foster effective instructional delivery in the Colleges of Education.

Research Question 2: What is the level of Lecturers Versatility of Digital Instructional Classroom Delivery?

Table 2: Summary of the Responses of the Lecturers Versatility of Digital Instructional Delivery

Versatility level	No of Lecturers	Percentages
Effective level	124	30%
Low effective level	296	70%
Total	420	100%

The result showed that 124 or 30% of the lecturers had effective versatility level while 296 or 70% showed low effective of digital instructional delivery in Colleges of Education.

Research question 3: How Effective is the provisions and implementation of the Digital Instructional Classroom Delivery in Colleges of Education in North West Geo-Political Zone in Nigeria?

Table 3: Summary of the Responses of the Lecturers Implementation of Digital Instruction

Implementation of digital instruction	No of Lecturers	Percentages
Satisfactory	104	25%
Not satisfactory	316	75%
Total	420	100%

Table 3: Summary of the responses of the lecturers on the implementation of digital instructional delivery. They showed that 104 or 25% of the lecturers expressed satisfactory implementation, while 316 or 75% of the lecture expressed not satisfactory implementation of digital instructional delivery in Colleges of Education the study region.

are not equipped enough to utilize digital resources for instructional purposes.

The third question finding revealed that, 104 or 25% of the respondents indicates satisfactory in the level of implementation of digital instruction while 316 or 75% indicates not satisfactory with level of implementation of digital instruction in the college. The implication shown that, the colleges are left behind in the integrating digitalization in instructional activities.

DISCUSSION OF FINDINGS

The findings in the study in question one revealed majority of the lecturers' 274 or 65% response negative Perception in Digital Instructional Classroom Delivery. The implication is that since the majority have negative taught. This is an indication that lecturers have develop poor attitude to acquired digital skills towards utilization of the digital tools in instructional activities. Their responses also illustrated some lecturers shy away from digital usage.

The second question findings. The responses from the lecturers shown that 124 or 30% of the lecturer's response that, there is versatility level of digital instructional delivery. While 296 or 70% responses indicates low effective versatility level of digital instructional usage. The implication implies that the lecturers

CONCLUSION

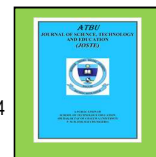
The study concluded that Colleges of Education are seriously lacking behaved to fit into technological break-through of digitalising teaching and learning activities. Consequently, teaching and learning still remain in a traditional format. Majority of the lecturers have poor attitudinal character towards digitalization and their perception about digital instructional activities is negative. They are not adequately stall full to manipulate digital components for instructional purposes. There is the need to equip lecturers with the knowledge about the relevance of digital instructional activities in this technology era through workshop, seminars and digital training. The institutions should

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endeavours to promote technical skills for the lecturers' versatility through institutional staff development programme. College should allocate enough financial resources for digital infrastructure, facilities and purchase of digital tools to meet up with digitalization teaching and learning demands.

DECLARATION

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