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APPRAISAL OF LECTURERS USE OF DIGITAL TECHNOLOGY IN ASSESSMENT IN FEDERAL COLLEGES OF EDUCATION IN SOUTH-SOUTH GEO-POLITICAL ZONE OF NIGERIA

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ABSTRACT
Digital assessment in federal colleges of education in south-south Geo-Political Zone of Nigeria aims to highlight lecturers' use of digital technology in assessment, by examining lecturers' digital literacy level, opportunities and challenges that are associated with digital assessment in federal colleges of education for students' improved learning. It specifically focuses on the stakeholders directly and indirectly involved in the design and implementation of effective digital assessment practices – benefits and challenges. Consequently, the study adopted non-experimental survey research type. Four research questions and two hypotheses guided the study. The population of the study consisted of six thousand, nine hundred and ninety-seven (6,997) respondents made up of six thousand nine hundred and eight-nine (6,989) lecturers in four (4) federal colleges of education in south-south geo- political zone of Nigeria and the federal ministries of education in the states these colleges of education are located. The samples were made up of 241 lecturers from 20 departments in three colleges of education in south-south Geo-Political Zone. An instrument titled "Appraisal of Lecturers' Use of Digital Technology in Assessment Questionnaire (ALUDTAQ)" was used to collate data for the study. The instruments were face and content validated by two experts from department of psychology, Alvan Ikoku Federal College of Education, Owerri, Imo State. Cronbach Alpha reliability coefficient was used to determine the instruments which yielded reliability coefficients of 0.88. Mean and standard deviation were used to answer the research questions while t-test statistics were used to test the hypotheses. The results revealed among others that most lecturers' digital literacy level were low and not experienced in the use of digital technology in assessment. The study concluded that the use digital technology in assessment is currently at its infant state due to its limited understanding and knowledge by the lecturers. Hence the policy makers (ministry of education) and the college administrators need to do more in the training and retraining of the lecturers on the proper use of digital technology in assessment.

Keynote: **Assessment, Digital Technology, Formative, Summative, Colleges of Education**

INTRODUCTION
The Covid-19 pandemic that hit the whole world had necessitated every educational institution to undertake significant efforts to improve its facilities and quality of its digital learning and assessment. The pandemic had also led to global disruption of the entire educational system which necessitated an urgent response by lecturers to work online (Elzainy, Sadik & Al Abdulmonem, 2020).As a result of covid 19 pandemic, digital learning and assessments came into the spotlight as colleges of education expected their lecturers to continue teaching and assessing their students even under the difficult circumstances posed by the pandemic. Federal, state and private colleges of education adopted technology-based online media systems such as Zoom, Google, or Blackboard Collaborate, at their various campuses to teach, assess and examine their students. Thus, the use of Information communication Technology (ICT) was introduced in public and privately-owned colleges of education in the country. For example, ICT apps/media like WhatsApp, Zoom, Google Meet, Webinar, and Telegram, were introduced as digital tools used for academic purposes on campuses. By this introduction, Nigerian colleges of education swiftly adopted e-learning, as students were integrated into hitch-free academic culture that ensures that the COVID-19 pandemic did not disrupt the academic activities on campuses (Ibrahim, 2022).

Digitalization is the ability to transform various aspects and processes of education into digital form. The process of digitalization will have diverse impact on education worldwide, especially in

organizations and transformative leadership (Bejinaru, 2019). Digitalization is believed to be one of the predictable and suitable answers to improve education in the future. Digitalizing learning has given birth to different e-learning assessment strategies which are ways of assessing students online in colleges of education. According to Adarkwah (2020), assessment should respond to more modern Information Communication and Technology (ICT) developments like on-screen assessment designs, e-marking, e-banking of examination questions for use, e-shuffling and reshuffling of examination questions for producing different sets of the same examination. Digital technology is used by lecturers to analyze data stored to plan teaching and learning activities and to ensure the success of students in their learning.

Digitization in the assessment of learning can contribute to better and more structured documentation of evidence. Some of the contributions of digital technology in the assessment of learning that are outlined by Pellegrino & Quellmalz (2010) and Winkley (2010) are: it provides immediate feedback as shown by students and lecturers by identifying students' problems thereby reducing misunderstandings. It provides more opportunities to act on feedback from multiple parties (lecturers, students, or large communities through blogs or websites). It leads to the dynamics of learning in the form of dialogue between lecturers and students, improves assessment experience and increases student engagement. Digital technology potentially enhances student-centered learning that is supportive to self response in a task and in turn facilitates self-assessment and controlled learning through a variety of evidence, immediate formative feedback, better tracking of progress to learning outcomes. It provides opportunity for a more comprehensive implementation of peer assessment. Students are able to carry out activities and knowledge sharing through digital technology and subsequently perform assessment together with each other. This situation enhances social interaction between students. It provides genuine information. Students can present challenging problems and ways to assess complex skills such as problem-solving skills, decision making, and hypothesis testing. These situations provide clear and genuine information about students' mastery of skills and are able to predict future achievements and subsequent educational needs. It increases efficiency and reduces lecturers' workload. It improves students' performance. It integrates formative and summative assessment. According to Whitelock et al., 2006&Bennett (2012), summative assessments tend to be retrospective, as these assessments test previously acquired knowledge in learning without leaving opportunities for continuous learning. This is because summative assessment is implemented at the end of the semester or school term. Additionally, it can provide an increase in scoring reliability and a robust data set for more in-depth analysis. The use of digital technology in implementing both types of assessments has the potential to support change in assessment innovation and development, particularly in addressing the risks and complexities of various changes based on specific objectives (Winkley, 2010). The use of digital technology in summative assessment is somewhat difficult due to changes towards standardized assessment and some other constraints.

Digital technology has brought different challenges in that a plausible threat that existed relates to the use of digital apps and media for conducting students' assessments amidst the pandemic, especially where there is a tendency to perpetuate examination malpractices as well as other academic frauds by undergraduates online. There are serious privacy concerns over the use of algorithms by Google, Facebook, and Zoom in invigilating exams and conducting continuous assessment, hence the need to explore and discover new innovative online assessment strategies and how to manage academic integrity in the online learning world instead of traditional invigilated examinations (Ibrahim & Iliyasu, 2021).To the institutions of higher learning, most students from poor backgrounds lacked access to the internet due to poor finance and network coverage (Jappie, 2020).Further, students also feel a loss of support from peers in the learning process. For students who are still in early adulthood, the influence of peers is important to encourage them to work harder in seeking knowledge. The absence of the element of human touch makes students to struggle while going against the current of new norms in seeking knowledge. Sometimes lecturer's questions in online learning assessment sessions are often followed by a momentary silence; to wait for students to turn on their videos as well as audio functions before answering the questions posed by the teacher. Through digital learning, the spontaneous inquiry element in the classroom has been replaced with a screen display of student profile pictures. To instruct students to turn on their videos and audio functions is also quite difficult as the learning sessions will be delayed especially for

students that experience weak internet network. Consequently, the lecturers will go on with the teaching session without really knowing what is going on behind the computer screen.

Findings of past studies showed that digital assessment facilitate e-feedback and as such can improve student performance quickly and encourage better student engagement (Whitelock and Watt, 2008; Angus and Watson, 2009). Conducting digital assessments has been difficult both for lecturers and students and has negatively affected the quality and integrity of assessments. Lecturers experienced higher queries as students had challenges completing their digital assignments due to questions taking longer time to load, electricity disruptions, and poor network connectivity (Majola, & Mudau, 2022).The researchers also witnessed a growing demand for technical and methodological support for both lecturers and students due to poor performance in online examinations. Lecturers were forced to dedicate more time to supporting learners in understanding the required competencies, which can improve their grades. Learners require above-average connectivity with their lecturers but they end up experiencing poor digital platform connectivity (Schroder, Shogren, & Terras, 2020).Ibrahim and Iliyasu (2021) examined the perceived conduct of e-assessment of undergraduate courses in Nigerian universities and compared access to e-assessment among undergraduate students in universities in the country. The results showed that there existed a significant difference in students' perception of the conduct of e-assessment in Nigerian universities. Also, there was a significant difference in access to e-assessment among undergraduate students in the universities. Further, a significant relationship existed between e-assessment-based accountability and test fairness in the conduct of e-assessment in Nigerian universities. The study concluded that improper conduct of e-assessment forms a major threat to the fairness and validity of online assessment of students. Likewise, Oladele et al. (2021) studied the prospect of online instructional delivery amongst undergraduates of University of Ilorin, Nigeria. The results showed that a Google Classroom held prospects for innovative instructional approach for university undergraduates' learning. Specifically, the findings showed a statistically significant challenge of using Google Classroom as an innovative learning approach such as undergraduate students' need for assistance in commencing Google Classroom, in turning in assignments, ease of Google Classroom, slow network connection, high cost of Internet, erratic power supply, and difficulty in connecting to the Internet and cost of devices. Similarly, Ibrahim and Yakasai (2021) investigated whether undergraduate students' use of academic social media networking sites influence their perceived creative and innovative capacity. They also examined if undergraduate students' use of academic social media networking sites had an influence on their perceived cognitive playfulness and creativity-enhancing practices. The results revealed that there was a significant influence of undergraduate students' use of academic social media networking sites on their perceived cognitive playfulness and creativity-enhancing practices amongst undergraduate students.

Smith, Cekiso & Sisulu (2023) in their studies on digital assessment, enumerated the following challenges - Poor network coverage, high data prices by the network service providers, lack of control in the examination process by lecturers and the lack of digital devices were identified as limiting factors in the implementation of digital assessment. Research participants also pointed out to the possibility of students cheating during the examination as students can share answers through telephone, conduct assessments in one area so they can discuss and compare answers, and also have a possibility of false identification as someone can write the examination for another person. Even with digital invigilation, it becomes impossible for the lecturer to confirm that the person taking the examination is actually the person they claim to be. Digital assessment has changed from conventional assessment practices to digital assessments that support21st-century competencies like digital literacy. Ekpenyong, Ogbeide & Robinson (2012) identified shortage of trained personnel as a limiting factor to the implementation of digital assessment. Teacher characteristics like gender, age, and computer literacy level also factors to consider. Cavas et al. (2019) concluded that lecturers' attitudes toward using technology such as digital assessment varied with age and computer literacy, though not gender. Interestingly, science teachers specifically tend to have a more positive view of ICT (Özden et al., 2014). Lecturer experience seems to be a key factor in online assessments. Özden et al. (2014) found that experience itself does not necessarily impact lecturer growth, suggesting that proper introduction and practice with the proper format might be crucial.

However, despite the benefits derivable from application of digital technology in assessment, there are still challenges facing lecturers on the use of digital technology in assessment. These challenges tend to discourage lecturers and becloud their vision from seeing the benefits that they can derive from the use of digital technology in assessment. The study therefore appraised lecturers' use of digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria

Statement of Problem

At present, technological advances have permeated many aspects of our lives through a number of digitally patterned needs. The digital world offers tremendous benefits to all. It provides a platform that allows humans to connect, interact and meet needs. In addition, it provides opportunities to gain new and important insights, as well as useful innovations in meeting current needs. However, based on what the researchers observed from different studies, it seemed that many lecturers are not conversant with the use of these digital facilities and so are not optimally utilising them in the assessment of their students. This observation motivated the researchers to appraise the level of lecturers' literacy in digital technology, their application of digital technology in assessment, benefits and the challenges. This study therefore appraised lecturers' use of digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria

Objectives of the Study

The general purpose of the study is to assess lecturers' use of digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria.
Specifically, the study sought to;

1. Ascertain lecturers' digital literacy level in colleges of education in south-south geo-political zone of Nigeria.
2. ascertain the extent lecturers use digital technology in assessment in colleges of education
3. Discuss the benefits of digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria.
4. Examine the challenges of digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria.

Research Questions

The paper addressed the following research questions:

1. What is lecturers' digital literacy level in colleges of education in south-south geo-political zone of Nigeria?
2. To what extent do lecturers use digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?
3. What are the benefits of using digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?
4. What arethe challenges of using digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?

Hypotheses

The following null hypotheses were formulated to guide the research at 0.05 level of significance;

H01: There is no significant difference between male and female lecturers' digital literacy level in colleges of education in south-south geo-political zone of Nigeria.
H02: There is no significant difference between male and female lecturers' use of digital Technology in assessment in colleges of education in south-south geo-political zone of Nigeria

METHODOLOGY

The study adopted non-experimental design of survey research type. According to Ezechukwu, Ihiegbulem, Nwaji, Ejimaji, Ojedapo & Ukofia (2020), survey research design requires a collection of a wide variety and large volume of data that are quantifiable or quantitative (not qualitative) and that can be analysed using different types of complex statistics to arrive at dependable answers to the research questions and testing of the tenability of the postulated hypotheses. Consequently, this

design is considered appropriate for the study by the researchers. Four research questions and two hypotheses were formulated to guide the study.

The study was carried out in South-South Geo-Political Zone of Nigeria. South-South Geo-Political Zone is one of the six geo-political zones in the country and consists of Akwa-Ibom State, Bayelsa State, Cross River State, Delta State, Edo State and Rivers State.
The population of the study consisted of six thousand, nine hundred and ninety-seven (6,997) respondents made up of six thousand nine hundred and eight-nine (6,989) lecturers in four (4) federal colleges of education in south-south geo- political zone of Nigeria and the federal ministries of education in the states these colleges of education are located.
Multi stage sampling procedure was adopted in the selection of the samples for the study. In the first stage, three out of the four federal colleges of education and three out of the four states the colleges are located were selected using simple random sampling (balloting) technique. Since each of these federal colleges of education has many departments, in the second stage, 20 departments were selected using purposive sampling technique. At the third stage, 241 lecturers comprising 120 male and 121 female lecturers were drawn through proportionate stratified random sampling technique. The samples were made up of 241 lecturers from 20 departments in three colleges of education located in three host states in south-south Geo-Political Zone.

An instrument titled "Appraisal of Lecturers' Use of Digital Technology in Assessment Questionnaire (ALUDTAQ)" was used to collate data for the study. The instrument was developed by the researchers with information gotten from reviewed literatures. The instrument was divided into four sections; section A was for the demographic information about the Lecturers. It contained five items seeking information about the respondents. Section B contained fifteen questions that measured lecturers' digital literacy level in colleges of education, section C dealt with lecturers' use of digital technology in classroom assessment, section D measured ten benefits of digital assessment in colleges of education and section E contained ten challenges of digital assessment. The instrument was analysed using a four point Likert type of response scale ranging from Very High level (4), High Level (3), Low Level(2) and Very Low Level(1) to answer research questions 1,Very High Extent = 4, High Extent =3, Low Extent = 2, and Very Low Extent = 1 were used to analyse research question 2 while Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1 were used to analyse research question 3and 4. In taking decision, a mean value of 2.50 – 4.0 was accepted and 2.49 - 0.49 was rejected.
The instrument was given to three experts in the department of measurement and evaluation. They were required to examine the instrument to ensure that the content and language of the instrument relate well to the purpose of the study, research questions and hypothesis. After critical scrutiny of the items of the instrument, their comments and corrections helped in the final development of the instrument.
To ensure the reliability of the instrument, 60 copies of the questionnaire were administered to 60 lecturers from Alvan Ikoku Federal Colleges of Education, Owerri in South-East Geo-political Zone of Nigeria. The subject used in the pilot study was outside the study area and therefore was not included in the study. In getting the questionnaire across to the respondents, the researchers employed face to face method. The researchers and three research assistants that were trained and briefed visited the sampled schools and ministries to administer the questionnaires to the stakeholders.
The data collated was analysed using descriptive and inferential statistical tools (mean and standard deviation) to provide answers for the research questions while t-test was used to test the hypotheses.

Results

Research Question One: What is lecturers' digital literacy level in colleges of education in south-south geo-political zone of Nigeria?

Table 1: Lecturer's Digital Literacy Level in Colleges of education

S/N	**Item Statement**	$\sum fX$	$\bar{X}$	$StdDev$	$Remark$
1.	I have time for digital literacy	441	1.83	0.74	LL
2.	I have effective training opportunities for using digital technology in assessment.	487	2.02	0.78	LL
3.	I lack competency in using digital technology in assessment.	682	2.83	0.84	HL
4.	I have sufficient in-service training to use digital technology.	407	1.69	0.77	LL
5.	I am qualified enough to use digital technology.	384	1.59	0.71	LL
6.	I have access to resources that prevent me from using digital technology in assessment.	460	1.91	0.78	LL
7..	I lack pedagogic and didactic training on how to use digital technology in assessment.	577	2.39	1.12	LL
8.	I am well trained in the use of digital technology in assessment.	400	1.66	0.76	LL
9.	I lack knowledge and skills to use digital technology in assessment.	723	3	0.85	HL
	Overall Mean		**18.92**	**7.35**	

The mean scores for items assessing lecturers' digital literacy range from 1.59 to 3.00.Items 3 ("I lack competency in using digital technology in assessment") and 9 ("I lack knowledge and skills to use digital technology in assessment") have high means of 2.83 and 3.00, respectively, indicating higher literacy. The other items have means below 2.50, suggesting lower digital literacy levels for those specific aspects. The overall mean is 18.92.Compared to the criterion mean of 22.50, the overall mean is significantly lower, suggesting that the digital literacy level of lecturers is generally below the expected standard. The standard deviations range from 0.71 to 1.12, indicating varying levels of agreement among respondents. Lecturers' digital literacy in the colleges of education in the south-south geopolitical zone of Nigeria is generally low, as indicated by both item-by-item analysis and the overall mean.

Hypothesis One: The mean rating of lecturers' digital literacy level in colleges of education in south-south geo-political zone of Nigeria is not significantly greater than the expected mean of 22.50.

Table 2: Summary t-test Statistics for Testing Hypothesis One

n	$\bar{X}$	μ	df	t_{Cal}	t_{Crit}	$\alpha - level$	$Decision$
241	18.92	22.50	240	-7.546	1.646	0.05	Accept H_{01}

The calculated t-value (t_{Cal}) is -7.546, while the critical t-value (t_{Crit}) is 1.646. Since the calculated t-value is less than the critical t-value, we accept H_{01} (null hypothesis).Therefore, there is no significant difference between the lecturers' digital literacy level and the expected mean of 22.50. The lecturers' digital literacy is significantly lower than the expected level.

Research Question Two: To what extent do lecturers use digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?

Table 3: The Extent Lecturers Use Digital Technology in Assessment in Colleges of Education

S/N	**Item Statement**	$\sum fX$	$\bar{X}$	$StdDev$	$Remark$
1.	Lecturers use digital assessments to assess and improve teaching and learning.	496	2.06	0.54	LE
2.	Lecturers use technology-based media such as Zoom, Google, or Blackboard Collaborate to teach, assess and examine my students.	482	2	0.45	LE
3.	Lecturers' use of Information communication Technology (ICT) has become a tradition in	482	2	0.4	LE

	public and privately-owned colleges of education.				
4.	Lecturers use ICT apps/media like WhatsApp, Zoom, Google Meet, Webinar, and Telegram, for academic purposes on campus.	493	2.05	0.38	LE
5.	Lecturers use digital technology to analyze data stored to plan teaching and learning activities and to ensure the success of students in their learning.	483	2	0.44	LE
6.	Digital technology in assessment makes it easier for lecturers to keep organize records.	496	2.06	0.51	LE
7.	Lecturers in colleges of education have adopted e-learning.	494	2.05	0.46	LE
8.	Lecturers use digital technology to track the validity of assessments.	469	1.95	0.41	LE
	Overall Mean		**16.17**	**3.59**	

The mean scores for items assessing the use of digital technology in assessment range from 1.95 to 2.06.All items fall below the criterion mean of 2.50, indicating that the extent of use is generally low. The overall mean is 16.17.This is significantly lower than the expected mean of 20.00, reinforcing the low extent of digital technology use in assessment. The standard deviations range from 0.38 to 0.54, showing consistency in the responses. Lecturers' use of digital technology in assessment is limited in the colleges of education in the south-south geopolitical zone of Nigeria.

Hypothesis Two: The mean rating of extent do lecturers use digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria is not significantly greater than the expected mean of 20.00.

Table 4: Summary t-test Statistics for Testing Hypothesis Two

n	$\bar{X}$	μ	df	t_{Cal}	t_{Crit}	$\alpha - level$	$Decision$
241	16.17	20.00	240	-16.53	1.646	0.05	Accept H_{02}

The calculated t-value (t_{Cal}) is -16.53, while the critical t-value (t_{Crit}) is 1.646. Since the calculated t-value is less than the critical t-value, we accept H02 (null hypothesis).The extent of digital technology use in assessment is significantly lower than the expected level, as indicated by the t-test results.

Research Question Three: What are the benefits of using digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?

Table 5: Benefits of Using Digital Technology in Assessment in Colleges of Education

S/N	**Item Statement**	$\sum fX$	$\bar{X}$	$StdDev$	$Remark$
1.	Digitalizing learning tools has made possible different e-learning assessment strategies.	496	2.06	0.46	DA
2.	Digital technology provides immediate feedback as shown by lecturers to identify student problems.	483	2	0.43	DA
3.	It provides more opportunities to act on feedback from lecturers through blogs or websites.	495	2.05	0.53	DA
4.	Digital technology lead to the dynamics of learning in the form of dialogue between lecturers and students	488	2.02	0.48	DA
5.	Digital technology enhances student-centered learning that supports self response to a task.	507	2.1	0.47	DA

6.	It facilitates self-assessment and controlled learning through tracking of progress to learning outcomes.	507	2.1	0.46	DA
7.	Digital technology provides an opportunity for a more comprehensive peer assessment.	511	2.12	0.45	DA
8.	It increases efficiency and reduce lecturer workload.	494	2.05	0.54	DA
9.	It improves lecturers' performance.	497	2.06	0.58	DA
10.	It integrates formative and summative assessment.	526	2.18	0.56	DA
11.	Digital technology monitors how lecturers solve problems using computers.	530	2.2	0.7	DA

The mean scores for items assessing the benefits of using digital technology in assessment range from 2.00 to 2.20.All items have means above the criterion mean of 2.50, indicating that lecturers perceive significant benefits from using digital technology in assessment. Items such as "Digitalizing learning tools has made possible different e-learning assessment strategies" (mean = 2.06) and "Digital technology enhances student-centered learning that supports self-response to a task" (mean = 2.10) indicate perceived benefits, but not to a high degree. The standard deviations range from 0.43 to 0.70, indicating moderate agreement among respondents about the benefits. Lecturers in the colleges of education in the south-south geopolitical zone of Nigeria perceive the benefits of using digital technology in assessment as low. Despite the various potential benefits listed, such as improving feedback, enhancing learning dynamics, supporting self-assessment, and increasing efficiency, the actual perception among lecturers does not meet the criterion mean of 2.50.

Research Question Four: What are the challenges of using digital technology in assessment in colleges of education in south-south geo-political zone of Nigeria?

Table 6: Challenges of Using Digital Technology in Assessment in Colleges of Education

S/N	**Item Statement**	$\rangle fX$	$\bar{X}$	$StdDev$	$Remark$
1.	Poor network coverage.	764	3.17	0.89	A
2.	High data prices by the network service providers.	735	3.05	0.84	A
3.	Lack of control in examination process by lecturers.	750	3.11	0.68	A
4.	Lack of digital devices.	779	3.23	0.72	A
5.	Students cheat during the examination as they can share answers through telephone.	763	3.17	0.7	A
6.	False identification as someone can write the examination for another person.	708	2.94	0.85	A
7.	Impersonation during digital assessment.	724	3	0.78	A
8.	High cost of Internet.	671	2.78	0.88	A
9.	Erratic power supply.	748	3.1	0.73	A
10.	Difficulty in connecting to the Internet.	730	3.03	0.82	A

The mean scores for items assessing the challenges of using digital technology in assessment range from 2.78 to 3.23.All items have means above the criterion mean of 2.50, indicating that lecturers face significant challenges in using digital technology for assessment. Items such as "Poor network coverage" (mean = 3.17) and "High data prices by the network service providers" (mean = 3.05) indicate significant challenges. The standard deviations range from 0.68 to 0.89, indicating some variability in the respondents' experiences with the challenges. Lecturers in the colleges of education in the south-south geopolitical zone of Nigeria face significant challenges when using digital technology in assessment. These challenges include poor network coverage, high data prices, lack of control during examinations, lack of digital devices, and issues with impersonation and power supply.

DISCUSSIONS

The findings indicate that lecturers in the colleges of education in the south-south geopolitical zone of Nigeria generally perceive their digital literacy to be low. This is evidenced by both individual item analysis and the overall mean. The low scores in areas such as having time for digital literacy and being qualified to use digital technology suggest that there are significant barriers to improving digital literacy, including inadequate training opportunities and insufficient qualifications. The hypothesis testing results support the descriptive findings that lecturers' digital literacy levels are significantly lower than the expected standard. This statistical evidence strengthens the conclusion that there is a substantial gap in digital literacy among lecturers, which could impact their effectiveness in using digital technologies in education.

The findings reveal that lecturers in the south-south geopolitical zone of Nigeria use digital technology in assessment to a limited extent. Despite the availability of various digital tools and platforms, their utilization in assessment practices is low. This could be due to several factors, including lack of training, inadequate access to resources, and possible resistance to adopting new technologies. The hypothesis testing results corroborate the descriptive findings, showing that the extent of digital technology use in assessment is significantly below the expected level. This highlights the need for interventions to promote the use of digital technology in educational assessments, such as enhanced training programs and better access to digital resources.

The finding of the study revealed that despite the various potential benefits listed, the actual perception among lecturers does not meet the criterion mean of 2.50. This shows that although lecturers recognize some benefits of using digital technology in assessment, such as enhanced feedback and student-centered learning, these benefits are not perceived as highly significant. The mean scores being below the criterion mean indicate that while there are acknowledged benefits, their impact is limited. This could be due to the challenges faced in implementing digital technology effectively, which might overshadow the perceived benefits.

The findings highlight significant challenges faced by lecturers in using digital technology for assessment. High data costs, poor network coverage, lack of control during examinations, and issues with digital devices are major obstacles. These challenges need to be addressed to improve the integration and effectiveness of digital technology in educational assessments. Solutions could include improving infrastructure, providing affordable data plans, and offering training and support to lecturers.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made.

1. Since lecturers' digital literacy levels are generally low, with mean scores for individual items and the overall mean being below the expected standard, colleges of education should implement comprehensive digital literacy training programs tailored to the needs of lecturers. These programs should focus on building basic and advanced digital skills, ensuring lecturers are competent and confident in using digital technologies effectively.
2. Institutions should enhance access to digital resources and tools by investing in the necessary infrastructure. Providing lecturers with reliable internet access, adequate digital devices, and relevant software can facilitate more extensive use of digital technology in assessments.
3. Institutions should promote awareness of the benefits of digital technology in assessments through workshops, seminars, and success stories. Demonstrating practical examples and case studies where digital technology has enhanced assessment and learning outcomes can help increase lecturers' appreciation and adoption of these tools.
4. Institutions should address the infrastructure challenges by improving network coverage and providing affordable data plans in collaboration with service providers. Additionally, investing in reliable power supply solutions and ensuring adequate digital devices for both lecturers and students can mitigate many of the identified obstacles.

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