

PREPAREDNESS OF COMPUTER EDUCATION LECTURERS FOR THE UTILIZATION OF ONLINE ASSESSMENT PLATFORMS IN PUBLIC TERTIARY INSTITUTIONS IN ENUGU STATE, NIGERIA.

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Abstract

ICT proliferation in all spheres of life including education and world of work has necessitated the need to assess the students' academic performances in tertiary institution using online assessment tools and platforms. Hence, this study sought to determine the Lecturers' Preparedness for the Utilization of Online Assessment Platforms in Public Tertiary Institutions in Enugu State. The study adopted a mixed research design and was carried out in four public tertiary institutions in Enugu State. The population of the study was 58 computer education lecturers, made up of 27 males and 21 females. The study was guided by four research questions. The instruments used for data collection were structured questionnaire titled Lecturers' Preparedness for the Utilization of Online Assessment Platforms in Public Tertiary Institutions in Enugu State (LePUOSPT) and interview relating to the research questions. Cronbach Alpha reliability to determine the reliability index yielded coefficient of .79, .82, .83, .89 for the four clusters respectively and the overall coefficient of .83. The data collected was analyzed using mean and standard deviation. The findings of the study revealed that among various listed online assessment platforms Google Form is mostly used by the computer education lecturers in Tertiary Institutions in Enugu State. Also, the needed infrastructures for effective utilization of online assessment platforms such as well-equipped computer laboratory, personal computers, Smart phone/tablets, uninterrupted power supply, etc. It showed that lecturers also possessed skills such as ability to log into the online platforms, grade and communicate effectively. Also, the organizational or administrative supports needed for effective utilization of online assessment platforms were revealed.

Keywords: Computer Education Lecturers, Online Assessment, Online Assessment Platforms, Preparedness, Utilization

Introduction

The rapid advancement of technology and its' use in education has created a huge transformation in teaching and learning which brings new opportunities to the educational system. Such advancements of technology have yielded positive results in the education sectors such that its platforms and resources have become essential part of the learning process with positive impacts in academic achievement (Unegbu, et. al.; 2019). Technology is the collection of techniques, skills, methods, and processes used in the production of goods or services or in the accomplishment of objectives, such as scientific investigation. Technology is also human knowledge which involves platforms, materials, and systems (Carl, 2015). It is applied in almost every aspect of daily lives; at work, for communication, transportation, learning, manufacturing, securing data, scaling businesses and so much more. With

technology, new ideas are imagined and created. Melhuish and Falloon (2016) noted that new technology is constantly making its way into the classroom in an attempt to improve the learning experience.

Consequently, technology has removed educational boundaries in a way that both students and lecturers can collaborate in real time using advanced educational technologies thereby bringing out new concepts such as online learning otherwise called e-learning, computer-based learning, Learning Management System (LMS), online assessment among others (Melhuish and Falloon, 2016). Nevertheless, according to Jatileni and Jatileni (2018), in online learning environment where students construct and make meaning of their learning experiences, the use of effective online assessments is fundamental to learning. Hence, online assessment or e-assessment is therefore considered essential in measuring and documenting the academic readiness, learning progress, skills acquired as well as educational needs of the learners involved in online learning environment.

Online assessment is the use of technology to manage and deliver assessment. Online assessment also known as “electronic assessment” or simply called “e-assessment”; “computer assisted/mediated assessment” or “computer-based assessment” is seen as the use of technological devices such as laptops, desktop computers, smartphones, iPads, Android tablets, etc. to create, deliver, store and/or report students’ assessment marks and feedback (Howarth, 2015; Crisp, 2017). Specific types of online assessment include multiple choice, online/electronic submission, computerized adaptive testing and computerized classification testing etc. Different types of online assessments contain elements of one or more of the following components, depending on the assessment's purpose: formative, diagnostic or summative. In online assessment, technology is used to digitize, make more efficient, redesign or transform assessments and tests including professional examinations, qualifications, certifications and school tests, classroom assessment and assessment for learning.

Today, several online assessment platforms are in use varying from simple Multiple-Choice Questions and Answers (MCQs) platforms to complex Programming Assignments Platforms such as Web-CAT, Web-Work, Web-based Grading, and Class-Marker (Craven, 2017). Dyer (2019) outlined these digital platforms, apps, and platforms that can help lecturers and students use online assessment to elicit evidence of student learning. These platforms and apps used for online assessments give lecturers many options and opportunities for classroom success. Online assessment platforms are now gaining popularity in today’s education and one of the widely used tool for students’ online assessments is Google Forms

(Konstantinidis, et. al., 2020). Google Forms allows lecturers to create multiple-choice questions in the form of a survey and enhance it with images and videos in a few minutes. They can also add collaborators to their Google Forms and work on a survey together (Konstantinidis, et.al, 2020). Another popularly used online assessment platforms and software is Kahoot. According to Wang (2019), Kahoot platform helps lecturers build the learning process in a form of a game by creating multiple-choice questions or using already existing games. The lecturers can upload media files and images to create a unique game, or download ready-made stuff. Also, in a study by Tirlea, et. al. (2018), Socrative was identified among the assessment software that is equipped with various features that can be used by educators for different purposes. The tool allows educators to get immediate insight into their student understanding in real-time, as they can create quizzes in seconds and also share them with other lecturers.

To this end, lecturers and instructors in tertiary institutions have as a matter of importance to be engaging in the use of the different approaches when involving in online learning environment like developing online application, platforms and or tools that support online assessment (Craven, 2017). Moreover, Onyeidu (2019) opined that online learning and assessment platform as an offshoot of computer and ICT learning, should be pioneered by computer education lecturers. This is because computer education lecturers are the educators that are supposed to be handling the higher education courses that have the objectives of training students in skill acquisition in the use of computer and ICT resources to solve problems. Also, in Onyeidu (2019), it was opined that computer education brings students into contact with the computer so that they can use it, appreciate its potentials, understand how it works and learn how to apply the knowledge and skills acquired from it to solve emerging problems and this should be monitored especially by computer education lecturers. Lawal (2018) concurred to this by opining that computer education is very vital in the development of any society. As a course of study, computer education is classified as a vocational course that is taught by computer education lecturers. Therefore, for proper monitoring of how computer and other ICT/online platforms are utilized in learning and assessment by lecturers, some factors like lecturers' preparedness on the utilization of such platforms in tertiary institutions should be put into consideration. On this note, computer education lecturers' preparedness on the utilization of online assessment platforms in tertiary institutions is essential.

Preparedness is the state of being ready for something to happen, especially for war or a disaster; the state of being prepared or ready. According to Shon and Smith (2018), preparedness is the ability of an individual to anticipate and respond effectively to imminent or current events or activities. In other aspects, preparedness refers to a very concrete research-based set of actions that are taken as precautionary measures in the face of potential disasters (Camilleri & Camilleri, 2017). In the context of this study, preparedness refers to lecturers' readiness in making use of online assessment platforms in students' assessment. In discussing preparedness, issues like ability to utilize, and needed supports are essential (Onah, et. al., 2018).

To utilize means to make use of something by finding a practical and effective use for something or rather putting something into action or service for some purposes (Unegbu, et. al, 2019). Utilization also involves the act or process of using something and the method, manner and ways in which the thing is being used. Also, for something to be used, it is very crucial to provide the necessary supports that will boost its effectiveness, usefulness and the purpose for its utilization. Therefore, there is/are need(s) for organizational or administrative from supports from institutions for the use of online assessment platforms to boost the abilities of the users. Needed support refers to the necessary actions required to achieve a certain desired effects or result. Medley (2018) defines support as providing comfort, encouragement or assistance to someone or a group of people. Ezegebe (2017) stated that needed support for teaching and learning purpose involves giving lecturers extra help so they can get the most out of educational process in tertiary institutions.

Tertiary institution or higher education is the place or stage where students are transferred to stage of producing information rather than providing education for them. Within this context, Offerdahl and Tomanek (2017) opined that higher education is the stage where there is transition from assessment of learners whom information is provided for, to learners who produce and utilize information. However, the above opinion is as well focused on lecturers to use new methods depicting integration of online resources or ICT into teaching and learning and in assessing the learning of the student as well. Within this consideration, it is important that lecturers find new methods to collect new data regarding this changing process and providing harmonization to technology assessment methods (Clark, et. al., 2012).

Also, as proposed by UNESCO (2017), for proper integration and utilization of educational technology, there are different ICT competence as skills and knowledge that individual lecturers would possess at different levels where proficiency is needed as it is in

tertiary institutions in Nigeria. Also, Oladimeji, et. al., (2017) noted that ICT skills, literacy and proficiency have been made compulsory for all computer education lecturers in Nigerian tertiary institutions since 2004/2005 academic session. Hence, this study aimed at determining the preparedness of computer education lecturers for the utilization of online assessment platforms in tertiary institutions in Enugu State. This is necessitated because workplaces are transforming more and more in the sense that what businesses, governments and society at large need from education is changing seriously and this is attributed to technology and the use of online resources (Kak, 2018). As a result, in today's world of job recruitment, most of the competitive exams or interviews are conducted online via online assessment platforms and tools. Also, as the shift to digital continues in schools and classrooms, it's easy to assume that online based assessments are the future of testing students' academic performance (Barrett & Kahl, 2019) as many companies and institutions have moved towards employing workers that have specific required online skills that match the ongoing technology trend. In view to this, Kak (2018) noted that unless tertiary institutions move quickly to transform themselves into educational institutions for technology-assisted future for both learning and assessment they will continue to face the risk of producing unemployable graduates in this era of high stake of technology and online trends.

Statement of Problem

Life in the 21st century has taken a great shift due to the emerging technology that spans all spheres including all levels of education especially tertiary institutions. This rapid advancement of technology in teaching and learning has shifted the paradigm from paper-pencil-based test to not only computer-based but also online system of examinations. As the shift to digital continues in schools and classrooms, it's easy to assume that online based assessments are the future of testing students' academic performance. This has resulted in today's world of job recruitment, most of the competitive exams or interviews are conducted online. Many companies and institutions have moved towards employing workers that have specific required online skills that match the ongoing technology trend.

However, it has been observed that the rate of unemployment in Nigeria especially among graduates of tertiary institution is alarming. This could be attributed to several factors such as lack or inadequate online skills, inadequate familiarity and competence required to meet up with the growing demand of online exams, interviews and assessment of today's employers etc. thus leading to structural unemployment. In view of this, unless tertiary institutions move quickly to transform themselves into educational institutions for technology-

assisted future for both learning and assessment they will continue to face the risk of producing unemployable graduates in this era of high stake of technology and online trends.

Therefore, because of the above awaken call, it is very important to ascertain the preparedness of lecturers who should champion this change. Nevertheless, this study determined the preparedness of computer education lecturers for the utilization of online assessment platforms in tertiary institutions in Enugu State.

Purpose of the study

The major purpose of this study was to determine the preparedness of computer education lecturers for the utilization of online assessment platforms in tertiary institutions in Enugu State.

Specifically, the study sought to:

1. determine the online assessment platforms used by computer education lecturers in tertiary institutions in Enugu State.
2. determine the infrastructures available for the utilization of online assessment platforms in tertiary institutions in Enugu state.
3. determine the ICT skills possessed by computer education lecturers in using online assessment platforms in tertiary institutions in Enugu State.
4. determine the organizational or administrative supports required for the utilization of online assessment tools in tertiary institutions in Enugu State.

Research Questions

- i. What are the online assessment platforms used by Computer Education lecturers in tertiary institutions in Enugu State?
- ii. What are the infrastructures available for the utilization of online assessment platforms in tertiary institutions in Enugu state?
- iii. What are the ICT skills possessed by computer education lecturers in utilizing online assessment platforms in tertiary institutions in Enugu State?
- iv. What are the organizational or administrative supports required for the utilization of online assessment tools in tertiary institutions in Enugu State?

Method

This study adopted mixed research design, as both qualitative (interview) and quantitative (questionnaire) data were used. Using both methods allows the researcher to collect complementary data as questionnaire provides structured, quantifiable information, while an interview offers deeper, detailed insights into participants' thoughts and experiences. The use

of mixed research design was to increase the validity and reliability of findings, since the questionnaire gives a broad overview and the interview explains the reasons behind the responses. The study was carried out in Enugu State of Nigeria. The population for the study was 58 Computer Education Lecturers drawn from four public tertiary institutions in Enugu State that offer Computer Education. The spread of the population is as follows: 22 Computer Education Lecturers (14 males and 8 females) from the University of Nigeria, Nsukka, 12 Computer Education Lecturers (8 males and 6 females) from Enugu State University of Science and Technology, 11 Computer Education Lecturers (7 males and 4 females) from Enugu State College of Education Technical, Enugu, and 13 Computer Education Lecturers (9 males and 4 females) from Eha Amufu Federal College of Education. There was no sampling since the population of the respondents is manageable. An adapted structured questionnaire and interview were used for data collection. To ascertain the suitability of the items in achieving the aims of the study, a face validation of the instrument was carried out by three experts in Computer Education and Measurement and Evaluation. To determine the internal consistency of the items in the instrument, Cronbach Alpha was used and the overall reliability coefficient was 0.83. The questionnaire has four clusters and each cluster has 10 items. The questionnaire was administered by the researcher and the interview was also personally carried out by the researcher. Meanwhile, 8 Computer Education Lecturers (2 lecturers each from the 4 tertiary institutions) out of the 58 Computer Education Lecturers were interviewed. Collected data were analyzed using the mean and standard deviation. Hence, the interviews were analyzed thematically.

Results

The findings of the study were presented according to the research questions.

Research Question 1: What are the online assessment platforms used by Computer Education Lecturers in tertiary institutions in Enugu State?

Table 1: Mean and Standard Deviation of Responses of Computer Education Lecturers on the Online Assessment Platforms they have used

| Lecturers | | \bar{X} | SD | DEC |
|-----------|---------------------|-----------|------|-----|
| S/N | Questionnaire items | | | |
| 1 | Google Form | 3.85 | 0.44 | U |
| 2 | Survey Monkey | 0.02 | 0.27 | NU |
| 3 | Kahoot | 0.04 | 0.48 | NU |
| 4 | Socrative | 0.01 | 0.25 | NU |
| 5 | Formative | 0.03 | 0.34 | NU |

| | | | | |
|----|------------|------------------------|------|----|
| 6 | Quizziz | 0.04 | 1.29 | NU |
| 7 | LimeSurvey | 0.03 | 0.20 | NU |
| 8 | QuizStar | 0.02 | 0.28 | NU |
| 9 | Plickers | 0.02 | 0.29 | NU |
| 10 | Animto | 0.04 | 0.28 | NU |
| | | Grand Mean 0.10 | | |

Keys: \bar{X} =Mean, SD= Standard Deviation, Dec=Decision, U=Used, NU = Not Used

Table 1 shows the mean and standard deviation of responses of male and female computer education lecturers on the online assessment platforms used. From the results, it is evident that lecturers have not used most of the items in the cluster, except item 1. Their mean responses for items 2 – 10 ranges from 0.01 to 0.04, which clearly is below the benchmark of 2.50, except item 1 which is 3.85. The grand mean for the entire cluster is 0.10. The Table therefore indicates that apart from Google Form online assessment platforms, computer education lecturers have not made use of other assessment platforms identified in the table above for online assessment.

Interview Question 1: Have you used any online assessment platform? If “yes”, what are the ones you have used among Google Form, Survey Monkey, Kahoot, Socrative, Formative, Quizziz, LimeSurvey, QuizStar and Plickers? Apart from the ones mentioned, have you used any other one?

From the interview conducted, the lecturers confirmed the dominance of Google Form online assessment platforms over other platforms, as can be seen from their responses such as:

R1: *“I know there are many online assessment platforms but I have only made use of Google Form”*

R2: *“I have used Google Form*

R3: *“I have used Google Form and Survey Monkey but I can say that I use Google Form more often and more efficiently”.*

R4: *“I use Google Form more because it is a free online assessment tool, easy to use and also provide friendly interface”.*

R5: *“I have made use of Google Form because it is user friendly and provides easy interaction between the lecturer and the students. It also has easy interface”.*

R6: *“I have made use of only one online assessment platforms which is Google Form. Although, I have come across Survey monkey but it is only Google Form that I can comfortably and effectively use”.*

R7: “Obviously, I know Google Form and I have as well used it both in survey and assessment”.

R8: “I have the knowledge of various online assessment platforms and have used some as well but I am more conversant with Google Form”.

From this result, it is evident that both male and female computer education lecturers expressed great satisfaction in the use of Google Form for assessment against other assessment platforms. Thus, this result clearly shows that the lecturers agree that they have been making use of online assessment platforms, most especially Google form for online assessment, which aligns with responses in Table 1.

Research Question 2: What are the infrastructures needed for the utilization of online assessment platforms in tertiary institutions in Enugu state?

Table 2: Mean and Standard Deviation of Responses of Computer Education Lecturers on the Infrastructures available for the Utilization of Online Assessment Platforms in Tertiary Institutions

| Lecturers | | | | | |
|-----------|--|------------------------|------|-----|--|
| S/N | Questionnaire items | \bar{X} | SD | DEC | |
| 1 | Well-equipped computer laboratories | 3.30 | 0.91 | A | |
| 2 | Personal computers | 3.55 | 1.01 | A | |
| 3 | Smart phones or tablets | 3.27 | 0.98 | A | |
| 4 | Internet services | 3.30 | 0.93 | A | |
| 5 | Well-equipped library | 1.24 | 0.09 | D | |
| 6 | Uninterrupted power supply | 2.95 | 1.84 | A | |
| 7 | Digital cameras | 2.52 | 0.67 | A | |
| 8 | Projectors | 1.50 | 0.64 | SD | |
| 9 | Smartboard | 1.25 | 0.13 | D | |
| 10 | Physical infrastructure like buildings | 2.90 | 1.49 | A | |
| | | Grand mean 2.57 | | | |

Keys: \bar{X} =Mean, SD= Standard Deviation, Dec=Decision, A= Agreed, D= Disagreed, SD= Strongly Disagreed

Table 2 shows the mean and standard deviation of responses of lecturers on the infrastructures needed for the utilization of online assessment platforms in tertiary institutions. The Table shows that all the items have high mean scores which range from 2.52 to 3.55, except items 5, 8 and 9 which have mean scores of 1.24, 1.50 and 1.25. The standard deviation range of 0.09 to 1.84 also shows that their responses are close to each other and are not also far from the mean. The grand mean of 2.57 indicates that the identified infrastructures are needed for the utilization of online assessment platforms in tertiary institutions.

Interview Question 2: What infrastructures do you think are necessary in the effective utilization of online assessment platforms in tertiary institutions in Enugu state?

The interview responses from lecturers show that some of the infrastructures needed for online assessment are enormous, as indicated in their views such as:

R1: *“Infrastructures like laptops, android or smartphone are needed. Also, electricity is highly needed for effective use of those online assessment platforms and there must be internet connection because it is the presence of internet that makes it online based”*

R2: *“The most important infrastructures needed are laptops or smartphones”*

R3: *“Some of the infrastructures that are needed for the use of online assessment platforms are laptop, smartphone or android phones, internet connection, sufficient power supply etc.”*

R4: *“Online assessment requires a well-equipped computer laboratory, personal computer, a good internet service, uninterrupted power supply, digital camera for monitoring of students’ activities etc.”*,

R5: *“Before one can make use of online assessment platforms, there must be good or portable smartphone, laptop, power supply (electricity), network connectivity etc.”*

R6: *“What I see as a major infrastructure needed is a well-equipped computer laboratory otherwise called virtual laboratory. Other ones are internet connectivity, uninterrupted power supply etc.”*

R7: *“Of course there are key tools and infrastructures that are needed for effective utilization of online assessment platforms of which one cannot access those platforms without them. Let me mention something like laptops or PCs, internet connection, electricity among others”*.

R8: *“There are many needed infrastructures for online assessment platforms to be effectively used but the major ones are light, well equipped computer laboratory with access to the internet, laptops etc.”*

From the analysis, it is evident that the lecturers expressed great concern on the need for laptops, computer laboratory, internet services, steady supply of electricity and web cameras, which is also in agreement with their opinions in Table 2.

Research question 3: What are the ICT skills possessed by computer education lecturers for using online assessment platforms in tertiary institutions in Enugu State?

Table 3: Mean and Standard Deviation of Responses of Computer Education Lecturers on ICT skill possessed for the Utilization of Online Assessment Platforms in Tertiary Institutions

| Lecturers | | \bar{X} | SD | DEC |
|-----------|---|------------------------|------|-----|
| S/N | Questionnaire items | | | |
| 1 | I possessed the typing skill needed in using online assessment platforms | 3.32 | 1.02 | A |
| 2 | I have the ability to log in with my email account to use online assessment platforms. | 3.57 | 0.78 | A |
| 3 | I possess the technical skill required in using online assessment platforms. | 3.07 | 1.20 | A |
| 4 | I can comfortably forward students' performance to them using online assessment platforms. | 2.60 | 1.35 | A |
| 5 | I have the ability of grading my students using online assessment platforms. | 2.75 | 1.31 | A |
| 6 | I can create quizzes, tests and/or exams using online assessment platforms. | 3.05 | 0.93 | A |
| 7 | I can distribute quizzes, tests and /or exams to my students using online assessment platforms. | 3.07 | 0.91 | A |
| 8 | I can make use of interactive features found in online assessment platforms to assess the ability of the students in oral assessment. | 2.60 | 1.06 | A |
| 9 | I know how to manage time allotted when using online assessment platforms | 3.00 | 1.21 | A |
| 10 | I possessed the communication skill required for assessing my students online. | 2.62 | 1.19 | A |
| | | Grand mean 3.05 | | |

Keys: \bar{X} =Mean, SD= Standard Deviation, Dec=Decision, A=Agree, D=Disagree

Table 3 shows the mean and standard deviation of responses of lecturers on the ICT skills possessed for the utilization of online assessment platforms in tertiary institutions. The Table shows that all the items have high mean scores which range from 2.62 to 3.75. The standard deviation range of 0.78 to 1.35 also shows that their responses are close to each other and are not also far from the mean. The grand mean of 3.05 indicates that the identified the lecturers possessed all the necessary ICT skills needed for the utilization of online assessment platforms in tertiary institutions in Enugu State.

Interview Question 3: What are the ICT skills possessed by computer education lecturers for using online assessment platforms in tertiary institutions in Enugu State?

The interview responses from lecturers show ICT skills possessed by computer education lecturers needed for online assessment are enormous, as indicated in their views such as:

R1: *“It is very important to note that effective utilization of online assessment platforms required that every lecturer must possess a good quality of ICT skills such as typing skill, ability to log in in the web sites, ability to grade students and forward their performance to them among others. As a computer education lecturer, I possess these qualities for my academic work and in readiness for the utilization of online assessment platforms.”*

R2: *“Of course, I possess good ICT skill necessary for distributing quizzes, tests and examinations to my students using online assessment platforms”*

R3: *“Using online assessment platforms for effective assessment of students cannot be properly achieved if the necessary ICT skills are not possessed. However, I possess ICT skills for engaging my students effectively during online assessment. Also, I know how to effectively manage allotted time when using online assessment platforms.”*

R4: *“I possess ICT skills like typing skills, grading skills, communication skill and other ICT skills necessary for the utilization of online assessment platforms”,*

R5: *“Before one can make use of online assessment platforms, there must be good possession of ICT skills.” Some of these ICT skills include typing skill, grading and reporting skills and also technical skill which borders on how to effectively handle some hardware devices that are used.*

R6: *“I cannot say that I am well grounded in using online assessment platforms, but as a computer education lecturer, I possess many ICT skills such as typing skill, communication skill, networking skill, emailing skill, browsing skill among others.”*

R7: *“As we all know that in this era, any lecturer especially computer lecturer that does not possess a good number of ICT skill is as good as obsolete and can be replaced in no distant time. However, I make sure I get myself equipped with necessary skills that are required in this ICT era not only for the use of online assessment platforms”.*

R8: *“I possess a good number of ICT skills that enable me engage my students in online assessment and as well do other things like research, typing, emailing etc.”*

Research Question 4: What are the organizational or administrative supports required for the utilization of online assessment platforms in tertiary institutions in Enugu State?

Table 4: Mean and Standard Deviation of Responses of Computer Education Lecturers on the Organizational or Administrative Supports Required for the effective Utilization of Online assessment platforms in Tertiary Institutions in Enugu State

| Lecturers | | \bar{X} | SD | DEC |
|-----------|---------------------|-----------|----|-----|
| S/N | Questionnaire items | | | |

| | | | |
|---|------------------------|------|---|
| 1. Technology enabling environment | 3.32 | 1.02 | A |
| 2. Individual coaching of lecturers | 3.57 | 0.78 | A |
| 3. Organizing teamwork and collaborative training | 3.07 | 1.20 | A |
| 4. Provision of personalized online assessment platforms like PC | 2.60 | 1.35 | A |
| 5. Sustainability of online-enabling communities. | 2.75 | 1.31 | A |
| 6. Financial support | 3.05 | 0.93 | A |
| 7. Provision of assessment dashboard | 3.07 | 0.91 | A |
| 8. Technical support | 2.60 | 1.06 | A |
| 9. Organizing of seminars relating to the used of online assessment | 3.00 | 1.21 | A |
| 10. Moral support | 2.62 | 1.19 | A |
| | Grand mean 2.93 | | |

Keys: \bar{X} =Mean, SD= Standard Deviation, Dec=Decision, A=Agreed

Table 4 shows the mean and standard deviation of responses of computer education lecturers on the organizational or administrative supports required for the utilization of online assessment platforms in tertiary institutions in Enugu State. With the mean range of 2.62 to 3.57 which are all above the cut-off point of 2.5 on a four-point scale, the results in the Table show that lecturers agreed to all the items in the table. The standard deviation range of 0.78 to 1.31, the result of the study shows that their responses are closely related to each other and are not also far from the mean. The grand mean for the cluster which is 2.93, also shows that all the identified points are the organizational or administrative supports required for the utilization of online assessment platforms in tertiary institutions in Enugu State.

Interview question 4: What are the organizational or administrative supports you think are required for effective utilization of online assessment platforms in tertiary institutions in Enugu State?

From the interview responses, the computer education lecturers noted that in order to properly make use of the online assessment platforms, some organizational or administrative supports are required as indicated from their responses, such as

R1: *“I think both the government and the institutions’ administration should be involved by providing those infrastructures that are required such as a well a well-equipped computer laboratory, online enabling environment etc.”*

R2: *“The school administration and the government should support in the provision of networks, provision of trainings and workshops for lecturers on the use of online assessment platforms and in developing the curriculum that should be in line with the trend”*

R3: *“The administrative and organizational supports needed are: Funding and organizing of training for staff, lecturers and students to help them become abreast with the use of online assessment platforms”*

R4: *“The school administration should provide a technology enabling environment such as equipping the computer laboratory and provision of internet services. They should also be involved in the training or coaching of lecturers and provision of financial support to ensure effective implementation”*

R5: *“I am of the opinion that there is need for in-service training of lecturers, seminars and workshops to get the lecturers prepared on how to use the online assessment platforms”*

R6: *“Of course, there are many supports needed such as provision of enough facilities, training of technical staff, Organizing of seminars for lecturers, as well as motivation of lecturers through financial supports. Also, collaboration among lecturers should be encouraged so that those that are grounded in the use of online assessment platforms can coach others”.*

R7: *“As matter of fact, online assessment platforms are not adequately used by lecturers to assess students because of lack or inadequate supports from institutions or school administrations. Therefore there are needs for supports like provision of the needed infrastructures, training of lecturers etc.”*

R8: *“In my own opinion, school administrators should endeavor to train lecturers through seminars and workshops and as well provide necessary equipment needed by both lecturers and students to enable effective use of online assessment platforms”.*

The opinions of the lecturers confirm that there are many organizational or administrative supports that are required for the use of online assessment. While some of these supports are adequate provision of necessary infrastructures, constant training and retraining of the lecturers, organizing of seminars and workshops for lecturers where issues concerning the use of online assessment platforms are to be discussed, adequate funding by the government and the various institutions etc.

Discussion of Findings

The data from Table 1 shows that Computer Education Lecturers admitted that they are using Google Form for the assessment of students. Among all the online assessment platforms listed, majority of the Computer Education Lecturers were more familiar with Google Form as an online assessment platform that helps students to collaborate. These responses were in line with the observation of Konstantinidis et al. (2020) which indicated that many educators are using Google Forms online assessment platform in their assessment.

The findings from Table 2 revealed the responses of Computer Education Lecturers on infrastructures available for the utilization of online assessment platforms such as well-

equipped computer laboratories, personal computer (PC), Smart phones or tablets, Internet Services, uninterrupted power supply, among others that are available for the utilization of the online assessment platforms. Their responses disagree with items 5, 7 and 8 on the table as not needed for the utilization of online assessment platforms as also indicated in Crisp, (2017).

In Table 3, the findings revealed the necessary online skills required by Computer Education Lecturers for effective utilization of online assessment platforms and the skills include; typing skill, ability to log in with one's email account, online grading skill, time management skill, communication skill etc. This is in line with the assertion of Oladimeji et al. (2017) that noted that ICT/online skills are possessed by many lecturers for effective use of online facilities.

The findings in Table 4 highlighted administrative supports that are needed for effective use of online assessment platforms. The findings show that technology enabling environment, provision of personalized online assessment platforms like Personal Computer, online enabling environment, coaching of lecturers, teamwork and collaborative training should be made available for lecturers for effective utilization of online assessment platforms and the findings was in line with the needed supports as observed in Medley (2018).

Conclusion and Recommendation

With the level of technological impact in today's world of education and employment, the use of online resources in the achievement of educational objectives like assessment of students learning outcome is no longer optional but obligatory. Therefore, the need to shift from pen-paper method of assessment to the use of online assessment platforms in educational sector especially in tertiary institutions cannot be over emphasized. However, among numerous online assessment platforms that exist, Google Form was identified to be mostly used by computer education lecturers in Tertiary Institutions in Enugu State although some mentioned Survey Monkey. Also, the findings revealed the important infrastructures needed as well as skills possessed by Computer Education Lecturers in readiness of the use of online assessment platforms in tertiary institutions in Enugu State. More so, some administrative supports are needed for effective utilization of online assessment platforms.

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

1. Conferences, seminars and workshops on how to use online assessment platforms for academic purposes should be organized periodically for lecturers and students. This will help them learn better ways of integrating ICT in the classroom and hence help them to prepare their students better for online examination.

2. Lecturers should strive to incorporate the use of online assessment platforms and its strategies into the continuous assessment processes and in their modes of lecture delivery. That way, the students will be better prepared for the online assessment both while in school and after graduation.
3. There should be a period set aside for students to receive trainings in online testing centers. That way, students will be better prepared on how to use a particular online assessment platforms recommended during their examinations.
4. Effort should also be made by institutions to ensure steady power supply and network during online based exams. This can be done by increasing the number of standby generators as well as network cables used during in the examinations.
5. National University Commission needs to incorporate the use of online assessment platforms in carrying out various types of assessment like diagnostic, formative and summative assessment in the curriculum so that lecturers will see it as a compulsory thing thereby make efforts in getting themselves abreast with the skills needed.

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