APPLICATION OF E-ASSESSMENT TOOLS BY EDUCATION ENGLISH LECTURERS IN ASSESSING STUDENTS' ACADEMIC PERFORMANCE IN POST-COVID-19 IN PRIVATE COLLEGES OF EDUCATION IN ENUGU STATE, NIGERIA

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ABSTRACT
This study investigated on the utilization of e-assessment tools by Education English lecturers in assessing students in private colleges of education in Enugu state. The study was anchored Technology Acceptance Model by Davis as its theoretical basis. Descriptive survey design and a total population of 24 Education English Lecturers from 4 different private colleges of Education in Enugu state were used. A questionnaire titled "utilization of e-assessment tools by education English lecturers in private colleges of education in Enugu state (UETELPU) was used to collect data and it yielded .89 reliability index using Cronbach alpha. Analysis was done using frequency and percentage count, mean and standard deviation. Major findings showed that Education English lecturers in private colleges of Education in Enugu state do not make use of many e-assessment tools but only make use of five out of sixteen e-assessment tools. The lecturers are competent in using some e-assessment techniques in assessing the students. Poor internet connectivity, poor power supply, lack of mobile devise and data among the students and others were challenges facing the use of e-assessment tools in assessing the students. The study recommended that Education English lecturers should explore other e-assessment tools and utilize them in assessment of their students. The school administrations should increase the internet connectivity and increase power supply to help in the utilization of e-assessment tools in assessing the students.

Keywords: E-assessment, Education English, Lecturers, Private colleges of education

INTRODUCTION

Assessment is an integral component of curriculum development and implementation as well as a tool for measuring academic performances of learners in a given field of study. Islam, Ahmadi and Yousaf (2018) noted that assessment and student learning performance are two inseparable elements in higher education. Assessment of learning exposes the strengths and weaknesses of teaching and learning process, specifically, the extent to which teachers have imparted knowledge into learners and the extent the learners mastered what was taught to them. According to Joshua (2018), assessment of learning is the act of administering test/examination to students in order to understand and describe their level of learning at the end of a lesson, programme or period of schooling for taking certain decisions pertaining their promotion, dismissal or adoption/termination into/of a programme. In the educational setting, assessment can be presented in different forms–diagnostic (which occurs before learning so as to identify

gaps), formative (which occurs during learning so as to inform instruction) and summative (which occurs after learning so as to determine mastery). Assessment of learning could be done through practical examination (also referred to as Competency-based assessment) or written examination (such as hand-written or typed using word processor) among other approaches which include audio-visual assessments, interviews, etc. Assessment of learning can be conducted using paper, pencil/pen, electronic devices, or through physical observation (as in practical exercises).

Over the years, the widely used means of assessment of learning had been the paper and pencil test (PPT). In paper-pencil assessments, students provide written responses to written items; fill out answers on the assessment form itself. According to Appiah and Tonder (2018), paper-and-pencil instruments refer to a general group of assessment tools in which candidates read questions and respond in writing on a paper. Typically, paper-pencil assessments include questions to answer, topics to address through paragraph responses, problems to solve, etc. In Nigerian tertiary institutions, pen and paper is widely the assessment method used for examinations, assignments, term papers and projects/thesis assessments. According to Alruwais, Wills and Wald (2018), assessment by using pen on paper examinations is frequently employed among lecturers in Nigeria. However, this approach appears to be faced with numerous concerns ranging from reliability, credibility and time consumption (Azor & Ogwu, 2019), to tedious process in the conduct of the exam, marking and result publication (Sanni & Mohammad, 2015). It is also affected by high level and rate of all manner of examination malpractice (Abubakar & Adebayo, 2014; Onyibe, Nwachi-Ikpor & Abdulhakim, 2015). Thus, the need for adoption of electronic assessment (e-assessment) is very important.

Electronic assessment is an assessment method that the delivery of test, assignment, and examination is done using a computer system. Electronic assessment (also referred to as Computer Based Test - CBT, Computer Assisted Assessment - CAA, Computer Aided Assessment - CAA, or Electronic Based Assessment - EBA) is an assessment method that its mode of operation is basically based on the use of Information Communication Technology (ICT). To buttress this, Acosta-Gonzaga and Gordillo-Mejía (2015) stressed that e-assessment is the use of ICT in assessment process. It includes the entire process of assessment ranging from designing the questions, administering the questions, marking the answers provided, publishing the results and storing the results using any electronic means. According to Alruwais, Wills and Wald (2018), e-assessment is basically the end-to-end electronic assessment process, that ICT is used for the whole assessment processes from the presentation of questions to the saving of the leaner's responses. Here, computers, mobile phones and other electronic gadgets could be used for the assessment instead of paper, pen and pencil. The use of electronic means for assessment was highly advocated for during Covid-19 pandemic lockdown. Furthermore, the proliferation of ICT tools in the education system has led to an increased efficiency, better opportunities and convenience especially in the conduct of e-assessment, which is now a trending keyword in the current global reality. Moreover, according to Ogwu, Emelogu, Azor and Okwo (2023), with the advent of COVID-19 pandemic, the global education system met a new global reality of forcefully integrating technology into the

teaching and learning process, hence the need for e-assessment application in Colleges of Education in Nigeria in post COVID-19 period.

There are many benefits of using e-assessment in the school system. First, e-assessment saves time in the assessment process and ensures immediate feedback. Such immediate feedback could motivate students to learn and even increase their interest in learning (Doğan, Kıbrıslıoğlu, Kelecioğlu & Hambleton, 2020). E-assessment also helps in ensuring accurate record keeping and supports individualized learning (Azor & Ogwu, 2019). It is a very flexible assessment tool that do not consider location barrier (Ajinaja, 2017). This means that students can enroll into the examination anywhere they are. Many higher institutions adopted e-assessment, in order to obtain and develop accurate and faster method to assess students (Appiah & Tonder, 2018). On the other hand, Sanni and Mohammad (2015) added that e-assessment ensures low administrative cost in printing of examination scripts, hiring of personnel and transporting examination scripts and answer sheets to the required location. In most cases, e-assessment also ensures impartial assessment, ensures efficiency in data storage (Onyibe, Nwachi-Ikpor, & Abdulhakim, 2015). Nwoke, Osuji & Agi (2017) and Bala (2018) added and it checkmates all forms of examination malpractices. There two basic modes of administering e-assessment.

First, is e-assessment done under a planned environment with supervision and the other is the one done under a non-planned environment. The first is exemplified in the assessment done by Joint Admission and Matriculation Board (JAMB) and some Higher institutions in Enugu State like University of Nigeria, Nsukka (UNN) whereby assessment is conducted in a hall where security agents and supervisors are present to monitor the assessment process. Therefore, this is location bound and it uses intranet. But the latter is not location bound. The learners could engage in the assessment process from anywhere they are using their mobile devices with the use of the internet. It is exemplified in the assessment process that is currently being adopted and done by the School of General Studies, UNN, and the School of Postgraduate Studies, UNN whereby students write their mid-semester tests and entrance examination respectively using their mobile devices in any location. For the sake of this study, the focus will be based on the two methods of e-assessment.

Basically, since e-learning is fast increasing in its adoption in an era of post-pandemic, the adoption of e-assessment should also follow suit. In the higher institutions of learning across the world, the use of e-assessment is gradually diffusing into the school system. However, Peytcheva-Forsyth and Aleksieva (2020) argued that such diffusion is not done in line with the required speed of adoption of e-assessment. While many lecturers shy away from adopting e-assessment techniques in assessment due to the acclaimed challenges of e-assessment, the global education reality orchestrated by the upsurge of COVID19 in 2019 and 2020 presented no other option to many lecturers but to fall in line with the trending assessment process. Moreover, Peytcheva-Forsyth and Aleksieva (2020) argued that such global reality did not just make lecturers to adopt e-assessment but it forced them to that. Therefore, recent educational transformation caused by the COVID-19 has made e-assessment a sin qua non in the education

assessment (Ogwu, et al., 2023). But, e-assessment tools could only be used by lecturers when they perceive them to be useful, easy to use and with little surmountable challenges (Cigdem & Oncu, 2015). Thus, there are many reasons that could motivate the use of e-assessment tools.

Increasing population of students also calls for e-assessment adoption. Kuyoro, Maminor, Kanu, and Akande (2016) strongly argued that the increase in students' population in Africa (Nigeria inclusive) has presented the die-need for the adoption of e-assessment in the educational sector. But in Nigeria, studies have shown that the adoption of e-assessment in the pubic higher institutions has been very low (Ajinaja 2017; Ikechukwu, 2021; Okeke, 2024; Ridwan, Felix & Mohammed, 2019). Meanwhile, across the world such as in Bulgaria (Peytcheva-Forsyth & Aleksieva, 2020), Ukraine (Shalatska, Zotova-Sadylo, Makarenko & Dzevytska, 2020), Indonesia (Ngabiyanto, Nurkhin, Widiyanto, Saputro & Kholid, 2021), and South Africa (Appiah & Tonder, 2018), e-learning and e-assessment had been adopted for assessment of learning to a greater extent. Therefore, there is need to shift attention to private higher institutions in Nigeria to determine the rate at which they apply e-assessment tools in assessing students' academic performance. Emphasis, however, will be on education English lecturers in private colleges of education in Enugu state, Nigeria in post-COVID-19 era.

Statement of the Problem

The adoption of e-assessment in education has been on a gradual process over the years in many parts of the world. By the standard of Rogers Innovation diffusion theory, there had been this group of lecturers (including Education English lecturers) in the Nigerian Tertiary institution who are part of the early adopter and early majority in adopting these innovations. Yet there are those who fall under the group of late majority and the laggards. Thus, this clime has really affected the rate of adoption of e-assessment tools in assessing the students by most of these lecturers especially Education English lecturers in private colleges of education in Enugu state. But the COVID-19 pandemic and its aftermath call for a change in perception about innovation. Thus, this study to investigated the extent of application of e-assessment tools by Education English lecturers in assessing students' academic performance in public colleges of education in Enugu state.

Research Questions

The following research questions were posed the study:

1. what are the e-assessment tools that are utilized by lecturers of Education English in assessing their students' performance?
2. To what extent do Education English lecturers show competence in using e-assessment tools in assessing the students?
3. What are the challenges that Education English lecturers face in using e-assessment tools in assessing their students' academic performance?

4. What are the strategies that could be used to tackle the challenges faced by Education English lecturers in using e-assessment tools in assessing their students' academic performance?

Theoretical basis of the Study

The study was based on technology acceptance model (TAM) by Davis (1989). TAM posits that individuals' behavioral intention to use a technology or innovation, is determined by two beliefs. These are: perceived usefulness and perceived ease of use. Perceived usefulness is defined as the extent to which a person believes that using an innovation will enhance his or her job performance. While perceived ease of use, is the degree to which a person believes that using an innovation will be free of much effort. That is the extent at which one believes that using innovation could be done effortlessly. Therefore, the extent at which Education English lectures will adopt e-assessment in assessing the students could be determined by the degree at which e-assessment tends to be better than paper, pen and pencil assessment method, and the degree at which using e-assessment is free from stress and external effort in using it. By this theory, based on the responses of the respondents pertaining their perceived competence in using e-assessment tools and the challenges they face in using e-assessment in assessing the students, inference could be drawn whether the use of e-assessment is free of stress and effort on the parts of the Education English lecturers and if that could have informed their extent of readiness and usage of e-assessment tools in assessing the students.

Methods

The study adopted the descriptive survey research design. The study was conducted in Enugu State, Nigeria. Enugu state. This location was chosen for the study because the private colleges of education selected for the study offer Education English and lecturers in these institutions are expected to be utilizing e-assessment in assessing students' learning performance especially in the post COVID-19 era. Yet, the rate of adopting e-learning among Education English lecturers as observed by the researchers is still low. Therefore, the need to ascertain the cause of such low adoption (whether it is due to low readiness or lack of competence or other factors). The population and sample will comprise of all the 22 Education English lecturers in Private College of Education, in Enugu state which is made up of 9 Education English lecturers from Peaceland College of Education Enugu, 4 from The College of Education, Nsukka, 6 from Ecumenical College of Education, Enugu, and 4 from African Thinkers College of Education (ATCOI), Enugu respectively.

The study used researchers' developed structured questionnaire termed questionnaire on the "application of e-assessment tools by Education English lecturers in Private Colleges of Education in Enugu State" (UETEELC). The questionnaire covered the four research questions that the study is anchored on. It is made up of two sections (A & B). Section A contains the demographic information of the lecturers such as their gender and rank. Section B is made up of 4 clusters. Cluster 1 consists of 16 items that are meant to find out the E-assessment tools utilized by Education English lecturers in assessing students. Cluster 2 consists of 10 items that seek to find out the extent to which Education English lecturers show competence in using e-assessment tools in assessing

the students. Cluster 3 consists of 14 items that are meant to find out the challenges that Education English lecturers face in using e-assessment tools in assessing their students' academic performance. Cluster 4 consists of 8 items that seek to find out the strategies that could be used to tackle the challenges faced by Education English lecturers in using e-assessment tools in assessing their students' academic performance. Clusters 2 ,3, and 4 were measured using four-point Likert rating scales. The four-point rating scales are: Strongly Agree (SA)/Very High Extent (VHE) = 4, Agree (A)/High Extent (HE) = 3, Disagree (D)/Low Extent (LE) = 2, and Strongly Disagree (SD)/Very Low Extent = 1. Responses for the level of application of e-assessment tools were scored using two rating scales of 1 = Utilized and 2 = Not utilized.

The instrument was face-validated by three experts from the University of Nigeria, Nsukka for its credibility. Ten (10) copies of the questionnaire were trial-tested on Education English lecturers at Federal College of Education, Umunze, Anambra state, which was situated outside the study area. The Cronbach Alpha method was used to analyze the reliability of the instrument and gained reliability coefficients of 0.83. The researchers administered the instrument to the respondents and collected them back on the spot. The data collected was analysed using frequency count, mean and standard deviation. Interpretation of the data and decision point for research questions 2, 3 and 4 was carried out based on the real limit numbers as indicated: 0.50 – 1.49 = Strongly Disagree (SD)/Very Low Extent (VLE), 1.50 – 2.49 = Disagree (D)/Low Extent (LE), 2.50 – 3.49 = Agree (A)/High Extent (HE), 3.50 – 4.00 = and Strongly Agree (SA)/Very High Extent (VHE). For research question 1, 50% and above indicated applied, while below 50% indicated not applied.

Results

Research Question One: What are the e-assessment tools that are utilized by lecturers of Education English in assessing their students' performance?

Table 1: *Frequency and percentage count of e-assessment tools that are utilized by lecturers of Education English in assessing their students' performance (n=22)*

S/N	Items	U. *f*(%)	NU. *f*(%)
1	QuizPedia	5 (22.7)	17 (77.3)
2	WebPa	3 (13.6)	19 (86.4)
3	ClassMArker	7 (31.8)	15 (68.2)
4	ProProfs Quiz Maker	7 (31.8)	15(68.2)
5	Moodle project	15 (68.2)	7(31.8)
6	Google forms quiz	19 (86.4)	3 (13.6)
7	QuestBase	5 (22.7)	17 (77.3)
8	Peerwise	7 (31.8)	15 (68.2)
9	Organized Supervised Computer Based Test	15 (68.2)	7 (31.8)
10	ESurv	7 (31.8)	15 (68.2)
11	Survey Monkey	13 (59.1)	9 (40.9)

12	ISpring	1 (4.5)	21 (95.5)
13	Poll Everywhere	3 (13.6)	19 (86.4)
14	Kahoot	1 (4.5)	21 (95.5)
15	Quizlet	5 (22.7)	17 (77.3)
16	Free Online Surveys	11(50.0)	11 (50.0)

Note: U = Utilized, NU = Not Utilized

The results in Table 1 reveal the frequency and percentage count of e-assessment tools used by Education English lecturers in assessing the students. The results show that in assessing the students, 15 (68.2%) of the lecturers utilize Moodle project, 19 (86.4%) of the lecturers utilize Google form quiz. 15 (68.2%) of the lecturers utilize Organized Supervised Computer Based Test. 13 (59.1%) of the lecturers utilize Survey Monkey. Free Online Surveys is utilized by 11 (50.0%) of the lecturers.

Therefore, Education English lecturers in private college of education in Enugu state utilize only the following e-assessment tools in assessing their students: Moodle project, Google forms quiz, Organized Supervised Computer Based Test, Survey Monkey, and Free Online Surveys. But they do not utilize these: QuizPedia, WebPa, ClassMArker, ProProfs Quiz Maker, QuestBase, Peerwise, eSurv, iSpring, Poll Everywhere, Kahoot, and Quizlet.

Research question Two: To what extent do Education English lecturers show competence in using e-assessment tools in assessing the students?

Table 2: *Mean analysis of the extent to which Education English lecturers show competence in using e-assessment tools in assessing the students (n=22)*

S/N	Item Statement	$\overline{X}$	S.D.	Remarks
1	I can create quiz/test/exam in Google Form	2.95	.95	HE
2	I can create e-assessment questions in MOODLE learning management platform	2.31	1.08	LE
3	I can schedule exam/test date using the date and time features	3.27	1.03	HE
4	I can convert results of students to Pdf or excel format.	2.45	.91	LE
5	I can enroll students for a scheduled test/exam.	2.95	.95	HE
6	I can send notifications to students regarding a scheduled test/exam	3.04	.57	HE
7	I can convert students' results (scores) to charts for decision making on their level of performance.	2.13	1.32	LE
8	I can reshuffle questions in order to restrict cheating.	2.77	1.34	HE
9	I can upload questions to e-assessment platforms	2.63	1.32	HE
10	I can send report of students performance to parents and wards	2.00	.97	LE
	Grand mean	2.65	.94	**HE**

Note: $\overline{X}$ = Mean. S.D. = Standard Deviation. HE= High Extent, LE = Low Extent

The results in Table 2 show the mean and standard deviation analysis of the responses of the respondents about of the extent to which Education English lecturers make use of e-assessment tools in assessing the students. From the results, to a high extent, the lecturers can: create quiz/test/exam in Google Form (M = 2.95, SD = .95); schedule exam/test date using the date and time features (M = 3.27, SD = 1.03); enroll students for a scheduled test/exam (M = 2.95, SD = .95); send notifications to students regarding a scheduled test/exam (M = 3.04, SD = .57); reshuffle questions in order to restrict cheating (M = 2.77, SD = 1.34); and upload questions to e-assessment platforms (M = 2.63, SD = 1.32).

However, to a low extent, the lecturers can: create e-assessment questions in MOODLE learning management platform (M = 2.31, SD = 1.08); convert results of students to Pdf or excel format, (M = 2.45, SD = .91); convert students' results (scores) to charts for decision making on their level of performance (M = 2.13, SD = 1.32); and send report of students performance to parents and wards (M = 2.00, SD = .97).

The grand mean and standard deviation scores of (M = 2.65, SD = .94), reveal that to a high extent, Education English Lecturers in Private Colleges of Education in Enugu state are competent in making use of e-assessment tools in assessing their students.

Research question three: What are the challenges that Education English lecturers face in using e-assessment tools in assessing their students' academic performance?

Table 3: *Mean analysis the challenges that Education English lecturers face in using e-assessment tools in assessing the students (n=22)*

S/N	Item statement	$\overline{X}$	S.D.	Remarks
1	Poor network connectivity affects me in using e-assessment to assess the students.	3.86	.46	SA
2	Most e-assessment tools are not secured and this could lead to hacking of students results by unauthorized persons.	2.13	.94	D
3	Computer system often malfunctions during examination/test which could disorganize students' and affect their performances.	3.22	.75	A
4	Lack of sufficient facilities like laptops, desktops, furniture, etc. in school.	3.13	.83	A
5	Students' inability to use the e-assessment tools due to poor internet skills.	3.40	1.00	A
6	Lack of funds to build more ICT laboratories as well as poor funding for the purchase of ICT materials required for CBT implementation.	2.90	1.15	A
7	Some of the e-assessment tools are difficult to use.	2.90	1.23	A
8	Shortage of power supply affects consistent and sustained adoption of e-assessment.	3.13	.94	A
9	Lack of mobile devices by the students to partake in online quizzes.	2.72	.55	A

10	Lack of mobile data by students to key into e-quizzes.	2.95	.72	**A**
11	Lecturers are not ready to adopt e-assessment in my institution	2.13	.99	**D**
12	School management does not provide technical support for effective use of e-assessment in my institution	3.09	.92	**A**
13	Non-adoption of e-learning strongly affects the adoption of e-assessment in my institution	2.95	.84	**A**
14	Lecturers and students are not adequately trained on the use of e-assessment tools for taking tests/exams	2.86	.77	**A**
	Grand Mean	**2.96**	**.69**	**A**

Note: $\overline{X}$ **= Mean. S.D. = Standard Deviation. SA= Strongly Agree, A = Agree, D = Disagree**

The results in Table 3 represent the Mean and standard deviation analysis of the responses of the respondents about challenges that Education English lecturers face in using e-assessment tools in assessing the students in Private Colleges of Education in Enugu state. The results in the table show that respondents strongly agreed with item 1 which means that poor network connectivity affects the lecturers in using e-assessment to assess the students (M = 3.86, SD = .46). They also agreed with item 3-14, except items 2 and 11 which means that: computer system often malfunctions during examination/test which could disorganize students' and affect their performances (M = 3.22, SD = .75). There insufficient facilities like laptops, desktops, furniture, etc. (M = 3.13, SD = .83); students' inability to use the e-assessment tools due to poor internet skills, (M = 3.40, SD = 1.00); lack of funds to build more ICT laboratories as well as poor funding for the purchase of ICT materials required for CBT implementation (M = 2.90, SD = 1.15). Also, school management does not provide technical support for effective use of e-assessment in the institutions (M = 3.09, SD = .92). Moreover, non-adoption of e-learning strongly affects the adoption of e-assessment in the institutions (M = 2.95, SD = .84). Meanwhile, lecturers and students are not adequately trained on the use of e-assessment tools for taking tests/exams (M = 2.84, SD = .77), and many more.

The grand mean score of (M = 2.96, SD = .69) indicates that there are numerous challenges that affect the use of e-assessment tools in assessing the students by the English education lecturers in private colleges of education in Enugu state.

Research Question Four: What are the strategies that could be used to tackle the challenges faced by Education English lecturers in using e-assessment tools in assessing their students' academic performance?

Table 4: *Mean analysis of the strategies that could be used to tackle the challenges faced by Education English lecturers in using e-assessment tools in assessing the students (n=22)*

S/N	Item statement	$\overline{\text{X}}$	S.D.	Remarks
1	The university administration should increase its partnership with service providers to improve the network connectivity in the school.	3.77	.75	SA
2	The school administration should employ more technicians that will maintain the computer systems to avoid malfunctioning during exam.	2.95	.72	A
3	The school administrations should provide sufficient facilities like laptops, desktops, furniture, for e-assessment.	3.45	.73	A
4	Students should go for computer training to be able to use the internet very well.	3.27	.88	A
5	More ICT laboratories should be built to ensure that e-assessment is done at once across the students.	3.68	.47	SA
6	Power supply should be improved in the schools to enhance e-assessment practice.	3.77	.52	**SA**
7	The school administration should provide WiFi facilities in every part of the school to allow students to key into e-quizzes from anywhere they are.	3.68	.71	**SA**
8	The school administration should adopt e-learning to facilitate the adoption of e-assessment.	3.72	.55	**SA**
	Grand Mean	**3.53**	**.54**	**SA**

Note: $\overline{\text{X}}$ **= Mean. S.D. = Standard Deviation. SA = Strongly Agree, A = Agree**

The results in Table 4 show the Mean and standard deviation analysis of the responses of the respondents about strategies that could be used to tackle the challenges faced by Education English lecturers in using e-assessment tools in assessing the students in private colleges of education in Enugu state. The results in the table show that the respondents strongly agreed with items 1, 5- 8. This means that the university administration should increase its partnership with service providers to improve the network connectivity in the school (*M* = 3.77, *SD* = .75). More ICT laboratories should be built to ensure that e-assessment is done at once across the students (*M* = 3.68, *SD* = .47). Power supply should be improved in the schools to enhance e-assessment practice (*M* = 3.77, *SD* = .52). The school administration should provide WiFi facilities in every part of the school to allow students to key into e-quizzes from anywhere they are (*M* = 3.68, *SD* = .71). Also, the school administration should adopt e-learning to facilitate the adoption of e-assessment (*M* = 3.72, *SD* = .55) and many more.

The grand mean score of (*M* = 3.53, *SD* = .54) indicates that in as much as there are numerous challenges that affect the use of e-assessment tools in assessing the students by the education English lecturers in private colleges of education in Enugu state, there are many strategies that could be used to tackle these challenges however.

DISCUSSION

The study found out that among the sixteen listed e-assessment tools, English lecturers in private colleges of education in Enugu state only utilize five of them. These five e-assessment tools are: Moodle project, Google forms quiz, Organized Supervised Computer Based Test, Survey Monkey, and Free Online Surveys. However, they do not make use of eleven e-assessment tools which are: QuizPedia, WebPa, ClassMArker, ProProfs Quiz Maker, QuestBase, Peerwise, eSurv, iSpring, Poll Everywhere, Kahoot, and Quizlet. This has negative implication in a bid to align the Nigerian tertiary education with the international standard. This shows that these lecturers are not prepared to face any other global educational emergency period such as COVID-19. This is because, some of them might still resort to the traditional means of assessing the students using pen, paper and pencil (PPP). This study is disagreement with Nwagwu and Azih (2015) who found out that most computer equipment needed for integration of e-learning are available in business education departments and Business Education lecturers possess skills necessary for integration of e-learning in their departments.

Also, the study revealed that English lecturers in private colleges of education in Enugu state are competent in the use of e-assessment tools in assessing their students in a high extent. These lecturers could create quiz/test/exam in Google Form; schedule exam/test date using the date and time features; enroll students for a scheduled test/exam; send notifications to students regarding a scheduled test/exam; reshuffle questions in order to restrict cheating; and upload questions to e-assessment platforms. The study is in line with Ridwan, Felix and Mohammed (2019) who found out that the level of ICT competencies of lecturers in universities in Benue State is high in basic knowledge and skills like word processing, PowerPoint presentation, and Internet surfing.

Further findings showed that there are many challenges that affect the use of e-assessment tools in assessing the students in private colleges of education in Enugu state. Some of these challenges are poor network connectivity, computer system malfunctioning during examination/test, lack of sufficient facilities like laptops, desktops, furniture, etc., computer and internet illiteracy among the students, poor funding to build more ICT laboratories and purchase more ICT materials required for CBT implementation. Some other challenges range from difficult of usage of some e-assessment tools, shortage of power supply, lack of mobile devices and mobile data by the students to partake in online quizzes. Challenges that have to do with the school administration were also found out. The study is in line with Azor and Ogwu (2019) who also found out that weak network connection, poor power supply and computer illiteracy by students pose as constraints in using CBT in the University of Nigeria Nsukka.

The study revealed that although there are many challenges that are faced by Education English lecturers in using e-assessment tools in assessing the students in private colleges of education in Enugu state, yet there are still some solutions to that. Thus the study revealed that the university administration should increase its partnership with service providers to improve the network connectivity in the school. In addition, more ICT laboratories should be built to ensure that e-assessment is done at once by all the students. Moreover, there is need to improve power supply and provide WiFi facilities in every part of the school to allow the students to seat for their e-quiz and e-exam and

others. Also, university administration should employ more technicians to maintain the computer systems. This finding aligns with that of Azor and Ogwu (2019) who reported that the school administration should increase their technical support by recruiting more technicians to man over the computer systems to avoid system malfunctioning.

Conclusion

E-assessment is an innovative way of assessing the students which helps to bridge the gap of location and lack of physical structures. The need to utilize this innovative assessment technique calls for, especially in the period of COVID19 among Education English lecturers in private colleges of education in Enugu state. However, this study found out that lecturers do not make use of many e-assessment tools but only make use of five out of sixteen e-assessment tools. The lecturers are competent in using some e-assessment techniques in assessing the students. Challenges relating to poor internet connectivity, computer malfunctioning, poor power supply, lack of mobile devise and data among the students, and many others affect the use of e-assessment tools in assessing the students. Partnering with network providers, providing free WiFi in different parts of the school are some of the solutions to these challenges.

Recommendations
Based on the findings of the study, the following recommendations are made:

1. Education English lecturers should explore other e-assessment tools and utilize them in assessment of their students.
2. Lecturers should encourage the students to key into e-assessment platforms to take up their quiz and examinations.
3. The lecturers should always organize their assessment using e-assessment because of its acclaimed importance in curtailing examination malpractice and ensuring authenticity of the results.
4. The school administrations should increase the internet connectivity, increase power supply to help in the utilization of e-assessment tools in assessing the students.
5. The students should also purchase better mobile device that will allow them to take part in e-assessment sections.

REFERENCES

Abubakar, A. S., & Adebayo, F. O. (2014). Using computer based test method for the conduct of examination in Nigeria: Prospects, challenges and strategies. *Mediterranean Journal of Social Sciences, 5*(2), 47-56. Doi:10.5901/mjss.2014.v5n2p47

Acosta-Gonzaga, E., & Gordillo-Mejía, A. (2015). Technology-enhanced assessment process: issues affecting e-assessment uptake. *Computing, 6*(15), 1236-1253.

Ajinaja, M. (2017).The design and implementation of a computer based testing system using component-based software engineering. *International Journal of Computer Science and Technology, IJCST, 8* (1), 58-65.

Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and challenges of using e-assessment. *International Journal of Information and Education Technology, 8*(1), 34-37.

Appiah, M. & Tonder, F. (2018). E-Assessment in Higher Education: A Review. *International Journal of Business Management and Economic Research(IJBMER), 9*(6), 1454-1460.

Azor, R. O., & Ogwu, E. N. (2019). Computer-Based Test (CBT), Innovative assessment of learning: Prospects and constraints among undergraduates in university of Nigeria, Nsukka. In T. I. Asino, & F. O. Mormah (Eds.), *ADECT Proceedings (pp. 436- 459)*. Oklahoma State University Libraries: Stillwater. Available at: https://open.library.okstate.edu/adect/chapter/computer-based-test-cbt-innovative-assessment-of-learning-prospects-and-constraints-among-undergraduates-in-university-of-nigeria-nsukka/

Bala, M. M. (2018). Computer based test (CBT): A veritable tool for checking examination malpractice in unified tertiary matriculation examination (UTME). *International Journal of Educational Benchmark (IJEB), 10*(2), 68-73.

Cigdem, H., &Oncu, S. (2015). E-assessment adaptation at a military vocational college: Student perceptions. *Eurasia Journal of Mathematics, Science & Technology Education, 11*(5), 971-988.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340.

Doğan, N., KıbrıslıoğluUysal, N., Kelecioğlu, H., & Hambleton, R. K. (2020). An overview of e-assessment. *Hacettepe University Journal of Education, 35*(Special Issue), 1-5. Doi: 10.16986/HUJE.2020063669

Ikechukwu, B. N. (2021). Computer education lecturers' readiness to adopt e-assessment for assessing students' academic performance in universities in Enugu state, Nigeria. (Unpublished Degree Project), University of Nigera, Nsukka.

Islam, K., Ahmadi, P. and Yousaf, S. (2018). *Assessment Formats and Student Learning Performance: What is the Relation*? Retrieved from https://arxiv.org/ftp/arxiv/papers/1711/1711.10396.pdf

Joshua, M. T. (2018). Research and innovations in education: An overview. In M. T. Joshua (Ed.), *Research and innovations in Nigerian education: Nigerian academy of education year book 10 (pp.1-17)*. Nigeria: Nigerian Academy of Education.

Kuyoro, S. O., Maminor, G. U., Kanu, R. U., & Akande, O. (2016). The design and implementation of a computer based testing system. *Journal of Applied Computation 01*(01), 01-07.

Ngabiyanto, Nurkhin, A., Widiyanto, Saputro, I. H., & Kholid, Al. M. (2021). Teacher's intention to use online learning: An extended technology acceptance model (TAM) investigation. *Journal of Physics: Conference Series, 1783*, 1-7. https://doi.org/10.1088/1742-6596/1783/1/012123

Nwagwu, L., &Azih, N. (2015). Assessing readiness for integration of electronic learning into business education programmes in tertiary institutions in Ebonyi State. *Journal of Education and Practice, 6* (27), 1-10.

Nwoke, B. I., Osuji, C. U., & Agi, U. K. (2017). Influence of computer-based test (CBT) on examination malpractice in public examinations.*IOSR Journal of Research & Method in Education (IOSR-JRME), 7* (2Ver.2), 80-84.

Ogwu, E. N., Emelogu, N. U., **Azor, R. O., &** Okwo, F. A. (2023). Educational technology adoption in instructional delivery in the new global reality. *Education and Information Technologies, 28*, 1065–1080. https://doi.org/10.1007/s10639-022-11203-4

Okeke, H. C. (2024). Readiness of english language lecturers in adopting e-learning platforms in post-COVID-19 era in public universities in Enugu state, Nigeria. (Unpublished Matsers Thesis), University of Nigera, Nsukka.

Onyibe, C. O., Nwachi-Ikpor J. O., & Abdulhakim, A. A. (2015). Computer based testing technique in Nigeria: Prospects and challenges. *Journal of Information Engineering and Applications, 5*(10), 17-21.

Onyibe, C. O., Nwachi-Ikpor J. O., & Abdulhakim, A. A. (2015). Computer based testing technique in Nigeria: Prospects and challenges. *Journal of Information Engineering and Applications, 5*(10), 17-21.

Peytcheva-Forsyth, R., &Aleksieva, L. (2021). Forced Introduction of e-Assessment During COVID-19 Pandemic: How Did the Students Feel About That? (Sofia University Case). *AIP Conference Proceedings 2333*, 050013; https://doi.org/10.1063/5.0041862

Ridwan, S. M., Felix, T. S., & Mohammed, M. F. (2019). Assessment of ICT competencies and use of electronic information resources by lecturers in universities in Benue state, Nigeria. *International Journal of Information Management Sciences (IJIMS),* 1-20.

Sanni, A. A., & Mohammad, M. F. (2015). Computer-based testing (CBT): An assessment of student perception of JAMB UTME in Nigeria. *Computing, Information Systems, Development Informatics & Allied Research Journal, 6*(2), 13-28.

Shalatska, H. M., Zotova-Sadylo, O. Y., Makarenko, O. Y., & Dzevytska, L. S. (2020). Implementation of e-assessment in higher education. *CEUR-WS, 2732,* 1-15.