



**Perception of Undergraduates on the Utilization of Quizalize App
for Formative Assessment in Online Educational Programme in
the University of Ilorin**

**Perception des étudiants de premier cycle sur l'utilisation de
l'application Quizalize pour l'évaluation formative dans un
programme éducatif en ligne à l'Université d'Ilorin**

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Abstract

This paper investigated the perception of undergraduates on the utilization of Quizalize app for formative assessment in online educational programme in the University of Ilorin. The study adopted a descriptive survey research design to evaluate the ease of use, efficiency, efficacy and challenges of using quizalize application for formative assessment in an online education. The sample for the study comprised of one hundred and fifty, 400 level students (2018/19 academic session) of educational technology department, University of Ilorin. Four research questions and four research hypotheses piloted the course of the research. The only instrument used for data collection was adapted from Bicen & Kocakoyun (2018) and Elmahdi, Al-Hattami & Fawzi (2018), and titled: "Utilization of Quizalize application for Formative Assessment Questionnaire (UQFAQ)". A reliability

coefficient of 0.76 was obtained using Cronbach's Alpha. The instrument was administered electronically and a 100% return rate was achieved. Data collected was analysed using a set mean value of 2.50 as "agreed", while t-test was employed for analysis on the hypotheses using IBM SPSS statistics 20. Findings revealed among others that quizalize were easy to use, efficient and there were no significant differences between the perception of the male and female students. Based on the findings, it was recommended that quizalize application be integrated into the online educational programme and that online lecturers should engage the use of quizalize application for formative assessment so as to the provide students and the lecturers with continuous, real time information.

Keywords: Formative Assessment, Online Learning, Quizalize Application and Students' Perception.

Résumé

Ce travail a étudié la perception des étudiants de premier cycle sur l'emploi de l'application Quizalize pour l'évaluation formative dans un programme éducatif en ligne à l'Université d'Ilorin. L'étude a adopté le plan de recherche descriptif pour évaluer la facilité d'utilisation, l'efficacité, l'efficience et les défis de l'utilisation de l'application Quizalize pour l'évaluation formative dans un programme éducatif en ligne. L'échantillon de l'étude comprenait cent cinquante, étudiants de niveau 400 (session académique 2018/19) du département de technologie éducative, Université d'Ilorin. Quatre questions de recherche et quatre hypothèses de recherche ont piloté le cours de la recherche. Le seul instrument utilisé pour la collecte de données a été adapté de Bicen & Kocakoyun (2018) et Elmahdi, Al-Hattami & Fawzi (2018), et intitulé : " Utilisation de l'application Quizalize pour le questionnaire d'évaluation formative (UQFAQ) ". Un coefficient de fiabilité de 0,76 a été obtenu en utilisant l'Alpha de Cronbach. L'instrument a été administré par voie électronique et un taux de retour de 100% a été obtenu. Les données recueillies ont été analysées en utilisant une valeur moyenne fixée à 2,50 comme "d'accord", tandis que le test t a été utilisé pour l'analyse des hypothèses à l'aide de la statistique 20 IBM SPSS. Les découvertes ont révélé entre autres que l'application quizalize était facile à utiliser, efficace et qu'il n'y avait pas de différences significatives entre la perception des étudiants et des

étudiantes. Sur la base de ces découvertes, il a été conseillé d'intégrer l'application quizalize dans le programme éducatif en ligne et de faire en sorte que les enseignants en ligne utilisent l'application quizalize pour l'évaluation formative afin de fournir aux étudiants et aux enseignants des informations continues et en temps réel.

Mots-clés: Évaluation formative, apprentissage en ligne, application Quizalize et perception des étudiants.

Introduction

Quizalize is a gamified formative assessment application that provides a fun and engaging way for teachers to collect real time data on student progress and easily personalize learning. Quizalize is easy to set up and mostly free way to assign quizzes and check for understanding with option for progress. Quizalize is a very good formative assessment tool for the conduct of formative assessment in online learning environment. The tool allows teachers to create fun usable and efficient classroom exams or homework. It allows the teacher see the results live and easily spot students' strengths and weaknesses. Students respond differently to new digital applications especially for education in an online environment. The study thus provides a platform to survey students' opinion and perception on the use of Quizalize for formative assessment tool.

Objectives of the Study

The objectives of the study are to:

- i. determine students' perception of the ease of use of quizalize application as technology formative assessment tool in online education;
- ii. find out students' perception on the efficiency of quizalize application as technology formative assessment tool in online education;
- iii. investigate the efficacy of quizalize application as technology formative assessment tool in online education as perceived by the students;

- iv. examine the challenges encountered by the students in the use of quizalize application as a technology formative assessment tool in online education; and
- v. determine the differences in the students' perceptions based on their gender.

Research Questions

1. What is the students' perception of the ease of use of quizalize application as technology formative assessment tool in an online educational programme?
2. What is the students' perception of the efficiency of quizalize application as technology formative assessment tool in an online educational programme?
3. What is the efficacy of quizalize application as a technology assessment tool in an online educational programme as perceived by the students?
4. What are the challenges encountered in the use of quizalize application as technology formative assessment tool in an online educational programme as perceived by the students?

Statement of the Problem

Information and Communication Technology (ICT) is an Indispensable Part of the contemporary world. In fact, culture and society have to be adjusted to meet the challenges of the knowledge age (Onasanya, 2012). One of the most important and interesting uses of modern digital formative assessment systems is to enhance students' learning. Irving (2015) asserts that modern formative assessment tools “assist in the formative assessment process by supporting teaching and learning that allow students and teachers to assess learning and providing mechanisms to present information about students' learning during instructional sequences.” CETIN (2018) asserts that digital assessment tools provide teachers with instant feedback and allows independent study or group assessments done in a more lively and competitive environment. It is against these backdrops that this study is designed to examine students' perception on the ease of use and efficiency among

others, of quizalize application as a digital formative assessment tool in an online education programme.

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

Ho₁: There is no significant difference between the mean responses of male and female students on the ease of use of quizalize application as technology formative assessment tool in an online educational programme.

Ho₂: There is no significant difference between the mean responses of the students on the efficiency of quizalize application as technology formative assessment tool in an online educational programme based on gender.

Ho₃: There is no significant difference between the mean responses of male and female students on the efficacy of quizalize as technology formative assessment tool in an online educational programme.

Ho₄: There is no significant difference between the mean responses of the students based on the gender on the challenges encountered in the use of quizalize application as technology formative assessment tool in an online educational programme.

Literature Review

Online learning is the type of educational programme that holds outside the conventional classroom, it is a mode of learning created for people of different ages, races, gender and so on, to have opportunities for learning which was strictly limited or restricted to the four walls of the classroom. There is an increase in in the online educational programme today, thereby bridging the gap hitherto created. Nowadays, students move around any part of the world yet are able to achieve their academic aspirations through online learning programmes. UNESCO (2001) as cited in Katkukah and Okoyefi (2018) define online learning as educational process in which all or most of the teaching is conducted by someone removed in space/or time from the learners, to the effect that all or most of the communication between the teacher and the learners is through artificial medium, either electronic or print materials.

Online learning has created opportunities for learning to be learner-centred, learners-paced and is conducted through networking to afford open interaction between the lecturer and the students synchronous, that is, without necessarily meeting face to face in a classroom situation. Michelle (2011) opines that learning is transmitted to the learners via mail, internet (online or asynchronous), telephone, television, satellite, microwave, radio, mobile etc. According to Yusuf (2006) as cited in Katkukah and Okoyefi (2018) sees the student-centeredness of online education as dealing with the use of print and electronic technologies to present individual learners at a distance with education. Teaching and learning cannot be said to have taken place whether in the class or online without assessment.

Assessment. Assessment is what is used by the lecturer to measure the level of understanding and students' comprehension of what has been taught in either a traditional classroom setting or in an online setting. According to Kaya (2003) in CETIN, (2018), the process of teaching-learning is always a cycle with planning, implementation and assessment. Assessment must be conducted to ascertain the level of attainment on the part of the lecturer and the students in line with set objectives for the teaching and learning exercise as spelt out in the curriculum of study. Assessment can be formative or summative assessment. Summative assessment refers to the assessment that is conducted at the end of a course or a programme of learning to determine students'/learners' achievements final achievement in the course or programme.

Formative Assessment. Formative assessment, on the other hand, is the assessment that is conducted along-side teaching and learning so as to enable the teachers to determine who and where there is need for corrections, this often results from the feedback which digital assessment tools like Kahoot!, socrative, plickers and quizalize applications to mention but few, have the feature to achieve. The effect of formative assessment in this circumstance leads to assessment for learning. Yilmaz (2017) as cited in CENTIN (2018) submits that digital assessment tools provide teachers with instant feedback.

The main purpose of assessment and evaluation is to inform teaching,

promote, and encourage learning and to promote optimal individual development. In order to provide information that is vital to the teachers, assessment and evaluation must be an on-going process and important part of teaching and learning process. It is one continuous cycle of collecting, interpreting, reporting information and making application to teaching (Lawton, Vye, Bransford, Bransford, Sanders, Richey, M. & Stephens, 2012).

Feedback is the essential role of formative assessment; it typically encompasses an attention on the detailed content of what is being studied, rather than simply a test score or other extent of how far a student is not measuring to the expected standard. There are some ideologies of good feedback practice which include: clarity of what good performance is, objectives, criteria, expected standard, facilitation of the development of self-assessment in learning, good quality of information to students about their learning; boost to teachers and peer dialogue around learning, positive motivational beliefs and self-esteem, opportunities to close the gap between current and desired performance information to teachers. All these can be used to help shape teaching.

Quizalize Application. The quizalize application is a digital formative assessment tool and gamification app designed for the conduct of formative assessment to enable lecturers to determine the students' performance and areas of need of each student by the lecturer as teaching and learning progresses. The quizalize application is similar to the Kahoot! which is also a free app and requires limited instruction on the part of the lecturer and the students (Plump & Larosa, 2017). Quizalize application can also be used by the lecturer to disseminate course materials to the students by importing materials into the platform. Quizalize application can be accessed via smartphone and personal computer like the Kahoot!. Wichadee & Pattanapichet (2018) submit that Kahoot! can be accessed via smartphones or personal computers.

Quizalize application has the ability to score and grade each students' performance and showing the correct answers to the questions that were not gotten correctly by the students, Quizalize application has the ability to compute each student's performance on the platform immediately the students' responses are completed. This process enhances students'

learning through improved students' grades and general performances. Elmahdi, Al-Hattami & Fawzi (2018) report that plickers as a formative assessment tool had a positive impact resulting in the improvement of students' learning.

In operating digital formative assessment tool, challenges such as internet connection problems, having difficulty reading the board, difficulty in selecting the options and disconnection due to connection timeout are common sights in Nigeria because of the poor nature of internet services and electricity outage. CETIN (2018) found and reported in a study on the opinion of the students/respondents on the challenges faced while using Kahoot that, the students'/respondents' opinion was that there were no serious challenges.

Online Platforms/Internet. Online platforms/internet is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communicable protocol. Online platforms are means of connecting a computer to any other computer anywhere in the world via devoted routers and servers, which enables two or more computers connected over the internet to send and receive all kinds of information such as text, graphics, voice, video and other computer applications (Business dictionary, 2016). Correspondingly, e-learning is the utilization of electronic technologies to access educational materials outside of a traditional classroom. In most cases, it refers to a course, a programme of study delivered completely online. Miller, Nwaekete and Akiti (2016) define e-learning as courses that are specifically delivered via the internet to somewhere other than the physical classroom where the lecturer is teaching. It is not a course delivered via DVD, CD-Rom, and videotape or over television channels. Thus, e-learning is meant to be interactive in nature. Communication with your lecturers and other students in your class can take place in the processes of learning.

Students' perception. Students' perception refers to the way students see, view or their opinion about a phenomenon. Whether positive or negative in the way they perceive quizalize resulting from its use by the students. The students' perception would be analyzed from the gender aspect to see if both male and female would perceive the application the same way. Onasanya, Shehu, Oduwaiye & Shehu (2010), Kehinde &

Salami (2018), Utoware & Agbonaye (2018), Ebele, Onokpaunu & Ikonmwan (2018) Olayinka & Joshua (2018) in their individual studies found and reported that male and female students' perception had no significant difference while Usman, Orji & Sule (2018) in their study found and reported that there was a significant difference between male and female students in their perception. Similarly, Samuel, Onasanya & Olumorin (2018) report that university lecturers had positive perception on the usefulness, ease of use, and adequacy of mobile technologies by Nigerian university lecturers.

Materials/Method

The study adopted a descriptive survey research design to evaluate the utilization of equalize application as a digital formative assessment tool in an online education programme. The population for the study is all the 400 level educational technology students of the University of Ilorin, Ilorin (2018/19) academic session. The sample for the study comprised 80 males and 74 females of 400 level students of the department purposely selected for this study, having participated in the experimental study on the use of equalize application for the conduct of formative assessment, thus:

The students who had not heard of or use the equalize application before were explicitly introduced to the platform by the lecturer/researcher and the students were introduced to the Quizalize application platform. The class was created by the teacher/researcher and titled “400 Level Educational Technology” via www.quizalize.com, select the option of a teacher, enter email address and password and a code was automatically generated for the class (dhw7745) which was sent to the students to enable them to have access to join the class

The students accessed and joined the class via www.quizalize.com selected the option of “I am a student”, entered the class code (dhw7745), join the class automatically, the students individually become members of the class and have access to any material or test that is assigned or to the class. In this study, the teacher made use of the preloaded questions and assigned it to the class which the students responded to.

The only instrument used for data collection was adapted from Bicen & Kocakoyun (2018) and Elmahdi, Al-Hattami & Fawzi (2018), was modified by the researcher and titled: “Utilization of Quizalize for Formative Assessment Questionnaire (UQFAQ)”. The instrument was

face validated by three (3) PhD Students of the Department of Educational Technology, University of Ilorin and their contributions and observations were used to enrich the instrument. A reliability coefficient of .76 was obtained using Cronbach Alpha. The instrument was designed following four Likert rating scale of Strongly Agreed (SA) – 4 points; Agree (A) – 3 points; Disagree (D) – 2 points and Strongly Disagreed (SD) – 1 point. The instrument was administered on the students electronically via the equalize application platform. All the students responded to the questionnaire which yielded a 100% rate of return and was found usable. Data collected was analyzed using a set mean value of 2.50 and t-test was used to analyse the hypotheses in the study with the use of IBM SPSS version 20 was employed for the analysis.

Demographic Information of Respondents

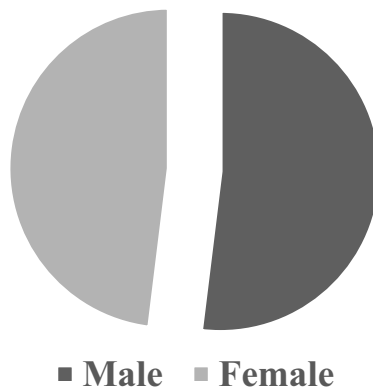


Figure 1: The Demographic Information of the Respondents

Results

1. What is the students' perception of the ease of use of quizalize application as technology formative assessment tool in an online educational programme?

Table 1: Students' Perception of the ease of use of Quizalize application for formative assessment tools in an online educational programme

S/N	Items	Mean	StD	Remarks
1	Accessing Quizalize application environment was easy	3.48	.50	Agreed
2	Accessing Quizalize application using a mobile device was easy	3.48	.50	Agreed
3	Quizalize application was easy to use	3.42	.49	Agreed
4	I did not need assistance to use Quizalize application	3.47	.50	Agreed
5	I found the various functions in the Quizalize application well integrated	3.43	.50	Agreed
6	I did not need assistance before I could get going with Quizalize application	3.51	.50	Agreed

The data presented in Table 1 shows that all the six items in respect of ease of use of quizalize application as a formative assessment tool for online learning had their mean between 3.42 and 3.51 which indicates that most of the students agreed to the ease of use of the tool. The standard deviation ranged between .49 and .50, this also shows that the students were not far from one another in their perception as shown in their mean responses

2. What is the students' perception of the efficiency of equalize application as technology formative assessment tool in an online educational programme?

Table 2: Students' Perception of the Efficiency of Quizalize application for formative assessment tools in an online education programme

S/N	Items	Mean	StD	Remarks
7	I felt very confident using Quizalize application	3.40	.49	Agreed
8	I would imagine that students online would use Quizalize application	3.31	.47	Agreed
9	The time display of the activities in Quizalize application facilitates time management	3.38	.49	Agreed
10	I had fun while using the Quizalize application	3.55	.50	Agreed
11	Timely question in quizalize application activities increases students interest	3.38	.54	Agreed
12	The quizalize application helps students to correct misinformation	3.35	.51	Agreed
13	I have more possibilities to show what I have learnt through Quizalize application	3.19	.54	Agreed
14	The scoring system of Quizalize application increases students ambition	3.32	.57	Agreed
15	Quizalize application improves the rapid-thinking abilities of students	3.47	.53	Agreed
16	Quizalize application provides an active and relaxing environment by helping students to improve their performance	3.42	.59	Agreed
17	The quizalize application helps me answer questions better than in the classroom	3.47	.50	Agreed

Table 2 shows that all the eleven items with regard to the efficiency of equalize application as a formative assessment tool were perceived by the respondents to be effective. The obtained mean is between 3.19 and 3.55 indicating that most of the respondents agreed to the application's efficiency. The standard deviation ranged between .49 and .59, the implication is that the respondents were not far from one another in their perception on the efficiency.

3. What is the efficacy of quizalize application as a technology assessment tool in an online educational programme as perceived by the students?

Table 3: Efficacy of Quizalize application for formative assessment tools in online education programme as perceived by the students

S/N	Items	Mean	StD	Remarks
18	Quizalize application is educational and informative	3.49	.50	Agree
19	Quizalize application scores answers instantly	3.62	.51	Agree
20	Quizalize application displays students' scores instantly	3.58	.57	Agree
21	I have been able to self-evaluate my learning process using Quizalize application	3.48	.53	Agree
22	Quizalize application gives me the opportunity to see the questions I got wrong with the correct answers	3.60	.52	Agree
23	I can now invite a friend to the equalize application platform	3.43	.50	Agree
24	Quizalize application enables me to access assessment anywhere.	3.51	.50	Agree
25	Quizalize application enables error free scoring	3.34	.55	Agree

The result in Table 3 shows that all the eight items had their mean between 3.34 and 3.62 and standard deviation between .50 and .57. The implication is that the respondents were not far from one another in their perception about the efficacy of quizalize as a formative assessment tool.

4. What are the challenges encountered in the use of quizalize application as technology formative assessment tool in an online educational programme as perceived by the students?

Table 4: Mean responses of the students on the challenges encountered in the use of Quizalize application for formative assessment tools in an online education programme

S/N	Items	Mean	StD	Remarks
26	Operating Quizalize application was difficult to use	2.03	.52	Disagree
27	Internet connection problem affected my accessing the Quizalize application environment	2.06	.54	Disagree
28	There was difficulty in selecting the options in Quizalize application	2.16	.69	Disagree
29	It was difficult reading from the dashboard of the Quizalize application	2.12	.72	Disagree
30	Quizalize application is not user-friendly	1.97	.63	Disagree

Table 4 revealed mean score value between 1.97 and 2.16 indicating that the respondents disagree with all the five items which means that most of the respondents did not perceive the challenges as major. The standard deviation is between .52 to .72 which implies that the respondents were close in their perception.

H₀₁: There is no significant difference between the mean responses of male and female students on the ease of use of quizalize application as technology formative assessment tool in an online educational programme.

Table 5: t-test Analysis of Male and Female Students' Perception of the Ease of Use of Quizalize Application as a formative tool in online Education Programme

Gender	N	Mean	StD	Df	t-cal	P-value (2-tailed)	Decision
Male	80	20.16	2.13	152	-3.80	.000	Not
Female	74	21.46	2.10				Accepted

The result in Table 5 showed the calculated value of t(-3.80) at df=152 and P-value of .000. Since the P-value is less than 0.05, the implication is that the null hypothesis is not retained. Therefore, there is significant difference between the male and female students' perception of the ease of use of quizalize application as a formative tool in an online education programme.

H₀₂: There is no significant difference between the mean responses of the students on the efficiency of quizalize application as technology formative assessment tool in an online educational programme.

Table 6: t-test Analysis of Male and Female Students' Perception of the Efficiency of Quizalize Application as a Formative Tool in Online Education Programme

Gender	N	Mean	StD	Df	t-cal	P-value (2-tailed)	Decision
Male	80	36.25	3.32	152	-3.76	.000	Not accepted
Female	74	38.30	3.43				

Table 6 showed calculated value of $t(-3.76)$ at $df=152$ and P-value of 0.000. Since the P-value is less than 0.05, the implication is that the null hypothesis is not accepted. Therefore, there is significant difference between the male and female students' perception on the efficiency of quizalize application as a formative tool in an online education programme.

H₀₃: There is no significant difference between the mean responses of male and female students on the efficacy of quizalize as technology formative assessment tool in an online educational programme.

Table 7: t-test Analysis of Male and Female Students' Perception of the Efficacy of Quizalize Application as a formative tool in online Education Programme

Gender	N	Mean	StD	Df	t-cal	P-value (2-tailed)	Decision
Male	80	27.55	2.86	152	-2.99	.003	Not accepted
Female	74	28.87	2.57				

Analysis in Table 7 shows that $t(-2.99)$ at $df=152$ and P-value .003. Since P-value is less than 0.05, the implication is that the null hypothesis is not retained. Therefore, there is significant difference between the perception of male and female students on the efficacy of quizalize application as a formative assessment tool in the online education programme.

H₀₄: There is no significant difference between the mean responses of the students on the challenges encountered in the use of quizalize application as technology formative assessment tool in an online educational programme.

Table 8: t-test Analysis of Male and Female Students' Perception of the challenges of Quizalize Application as a formative tool in online Education Programme

Gender	N	Mean	StD	Df	t-cal	P-value (2-tailed)	Decision
Male	80	12.35	2.17	152	-2.45	0.15	Accepted
Female	74	13.16	1.92				

Table 8 shows that $t(-2.45)$ at $df=152$ and P-value .015. Since P-value is greater than 0.05, the implication is that the null hypothesis is accepted. Therefore, there is no significant difference between the perception of male and female students on the challenges of encountered in the use of quizalize application as a formative assessment tool in the online education programme.

Discussion

The result of the analysis in Table 1 showed that majority of the students agreed in their perception to the ease of use of quizalize application as a technology formative assessment tool in distance/online education programme. This finding agrees with the report of CETIN (2018) in a study on Implementation of the Digital Assessment Tool 'Kahoot!' in Elementary School in Mugla, Turkey, the students agreed that the technology was easy to use.

Table 2 revealed that most of the students agreed to the efficiency of quizalize application as a technology formative assessment tool in an online education programme. The finding is in line with the findings of Elmahdi, Al-Hattami, Fawzi, (2018) where it was discovered that technology use has a positive impact on learning, the participants noted that the use of plickers in the classroom creates fun and excitement which eventually, aid the learning process.

The result of the analysis in Table 3 showed that the majority of the students perceived quizalize application as efficacious as a technology formative assessment tool in an online education programme. This finding confirms that of Pede (2017) where it was observed that the Kahoot! application increased the vocabulary of assessment scores, focus and task behaviour of all students and Ren & Wagner (2016) that Kahoot! provides an active and relaxing environment by helping students to improve their performances.

Table 4 revealed that most of the students did not perceive the challenges as serious in using quizalize application as a technology formative assessment tool in an online education programme. This finding is in agreement with the report of CETIN (2018) where students opinion on the challenges faced while using Kahoot!, showed that there no serious challenges.

The results of hypotheses 1, 2 and 3 tested at 0.05 level of significance using independent t-test as shown in Tables 5, 6, and 7 revealed that the male and female students had significant differences in their perception about the ease of use, efficiency and efficacy of quizalize application for formative assessment in online educational programme. These findings are in agreement with the report of the findings by Usman, Orji & Sule (2018) that there was a significant difference in the perception of male and female students in their study. However, this finding is not in harmony with the earlier reports of Onasanya, Shehu, Oduwaiye & Shehu (2010), Kehinde & Salami (2018), Utoware & Agbonaye (2018), Ebele, Onokpaunu & Ikononwan (2018) Olyinka & Joshua (2018) and Samuel, Onasanya & Olumorin (2018) who in their individual studies found that there were no significant differences in the perception of male and female students.

The analysis of hypothesis 4 shown in Table 8 revealed that there is a significant difference in the perception of male and female students on the challenges encountered in the utilization of quizalize for formative assessment. This finding is in line with the reports of Onasanya, Shehu, Oduwaiye & Shehu (2010), Kehinde & Salami (2018), Utoware & Agbonaye (2018), Ebele, Onokpaunu & Ikononwan (2018), Olayinka & Joshua (2018), and Samuel, Onasanya & Olumorin (2018) who in their individual studies found no significant differences between the male and female students' perceptions. However, this finding is not in agreement with the finding reported by Usman, Orji & Sule (2018) that there was a significant difference in the perception of male and female students.

Conclusion

Quizalize application is an online formative assessment tool like the Kahoot! that assists lecturers to create an active competitive, engaging fun environment and relaxing atmosphere leading to improve students' performances as well. The main purpose of this study was to determine the usability of quizalize application as a digital formative assessment tool as perceived by students in an online educational programme. The findings from this study showed the potentials that are inherent in equalize application as an online formative assessment tool. The participants' responses showed that equalize application is easy to use, is efficient, efficacious and had no serious challenges except for the gender difference in their perceptions.

Recommendations

Based on the findings of this study, the following recommendation was made:

1. Authorities of the various tertiary institutions organizing online educational programmes should consider the use of the quizalize application as a digital formative assessment tool for conducting the formative assessment.
2. Organizers of an online educational programme should consider the integration of quizalize application for formative assessment in the online educational programme.
3. That online lecturer should engage the use of quizalize application for formative assessment so as to provide the students and the lecturers with continuous, real-time information on the level of the students' performance.
4. Since quizalize application is gender friendly, its use should be considered as it will enhance the academic performance of the students.
5. Lecturers in online educational programmes should get familiarise with Quizalize application and its operations.

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