ZIBELINE INTERNATIONAL™ PUBLISHING

ISSN: 2617-9415 (Online)
CODEN: ESSDAX

Education, Sustainability & Society (ESS)

DOI: http://doi.org/10.26480/ess.01.2022.14.20

REVIEW ARTICLE

QUIZZING ONLINE: PERSPECTIVES AND IMPACTS

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ARTICLE DETAILS

Article History:

Received 15 February 2022
Accepted 15 March 2022
Available online 30 March 2022

ABSTRACT

In a virtual learning environment enforced by the pandemic, assessments are equally administered online using the technology tools available on the different learning management systems (LMS). Assessment is pivotal in the learning process and the many benefits of online quizzes according to research, show that it inspires, motivates active learning and thinking, and enhances better performance and feedback compared to the dated pen and paper form of assessment. In the light of this, this study examines students' perspectives on Online quizzing and tries to understand the impacts of such form on their performances. A quantitative approach was employed, and it is interesting to note that of the 127 students of the University of Guyana that responded to the survey shared via Google Forms, students' perspectives towards online quizzing are generally positive and the majority prefer online quizzing to paper-based assessment. Respondents noted that online quizzing measures evaluation appropriately as most of them have recorded positive impacts on their performances. Students noted that they get assistance online which implies cheating is unavoidable. The findings also show that the Multiple choice (MC) form of quizzing online is mostly preferred by students compared to other forms. In literature, there are lots of claims against the MC questions. One such is that they evaluate low thinking capabilities and thus, all forms of assessment should be used in an online examination to achieve better learning outcomes. The findings gathered prompted lots of educational discussions juxtaposed by claims and secondary supports. Recommendations were made with the emphasis on the availability of better internet, critically prepared MC questions and other assessments, provision of sufficient time while quizzing online, and proctored online tools usage. In conclusion, the evidence in the research proves that Online quizzing is beneficial in 21st-century learning; however, more needs to be done for the betterment of educational advancement.

KEYWORDS

Assessments, Attitudes, Higher Education, Performances, Online Environment

1. INTRODUCTION

The world today has embraced the virtual platform as an alternative to face-to-face gathering due to the COVID-19 pandemic (Kruse and Strack 2020; Muscillo et al., 2020; Cai et al., 2021; Adriani and Ladley 2021; Desouza et al., 2003). The virtual environment has significantly made an inroad to almost every segment of society, particularly the education system (Peters et al., 2020; Saichaie, 2020). Similarly, the digitalisation of the global society is now also placing another set of skills on the labour market and employees. This is equally placing more demand on educational institutions forcing the adoption of digitalisation and online dimension to the curriculum or the mode of educational delivery (OECD 2019; Müller and Mildenberger, 2021).

Before the pandemic, educators have recognised the vast developments in technology and have vigorously worked to adapt its usefulness to motivate active distance learning. The recent research also indicated that the utilization of computer technology/ online platform in education and learning environment has positive effects on skills development of the 21st Century employees, improve knowledge acquisitions, encourage positive students perception and ratings (Chen et al. 2018; Smith and Hill 2019; Müller and Mildenberger 2021). However, with a pandemic, the segments of society that were not embracing this form of learning (for example in most developing countries notably) before the pandemic activated quickly into full adoption of technology, causing a sudden change in higher education pedagogy. It is needful to state that educators have made use of technology for instruction before the pandemic.

Most students and instructors have access to portable gadgets, laptops, and useful learning materials online. Several researchers noted that since the advent of the internet, technology has been effectively integrated into classrooms. The advent has also led to the creation of new terms in education such as Blended learning), Interactive Learning Environment (ILE), Information and Communication Technologies (ICT), Technology-Enabled Active Learning (TEAL), flipped classroom, and so on (Garrison and Kanuka, 2004; Chaeruman et al., 2018; Strelan et al., 2020). The COVID-19 pandemic has made many universities consider moving some or all of their classroom teachings to an online learning platform and face-to-face learning is now flexible with the integration of virtual elements (Peters et al., 2020; Saichaie, 2020; Müller and Mildenberger, 2021).

Traditional face-to-face learning is as old as history itself and many instructors and learners are accustomed to how it operates and its forms of assessment (Chaeruman et al., 2018). Despite the trendiness of online learning these days, assessments still need to be conducted as they are considered pivotal in measuring learning outcomes. Many institutions now use Learning Management Systems (LMS), Zoom meetings, Google

Quick Response Code	Access this article online	
	Website: www.educationsustability.com	**DOI:** 10.26480/ess.01.2022.14.20

Cite The Article: Temitayo Deborah Oyedotun (2022). Quizzing Online: Perspectives and Impacts.
Education, Sustainability & Society, 5(1): 14-20.

meetings, and other platforms for assessing their students learning (Boitshwarelo et al., 2017). Online quizzes and exams are equally another mechanism for measuring learning and performance in this now embraced virtual or online classrooms and institutions (McDaniel et al., 2015). Researchers have found many benefits of online quizzes and affirmed they are highly effective for better grades, it allows the students to go the extra mile, helps to assess learners' knowledge concepts, inspire active learning and thinking, and possibly help to checkmate plagiarism (Sullivan, 2016; Desouza et al., 2003).

Quizzes and prompt feedback on assignments enhance performance and higher learning (Adesope et al., 2017; Pan and Rickard, 2018; Heitmann et al., 2021). When classrooms and learning move online, quizzes move online too. Online quizzes can be used to test all subjects (Heo and Chow 2005; Geary 2017). Access to quick and timely feedback is among the many benefits of online quizzes. In addition to the reduction in workloads of academics while marking a stack of papers, it allows them to concentrate on some other tasks (Schneider et al., 2018; Gamage et. al 2019). Apart from the benefits, some disadvantages have also been documented in the literature. One is the lack of technology or the malfunctioning of online gadgets used for quizzes, the other being the low efforts of learners that are directed only to answer quiz questions correctly without learning from the set curriculum goals, and the other being the high efforts of students in learning but not reflected in the number of questions passed in quizzes, that is successes in the quizzes (Roelle et al., 2015; Karpicke, 2017; Franktudela, 2013; Rowland, 2014; Becker-Blease and Bostwick, 2016). In all, the plethoral record of research and documented academic outputs concurred that quizzing helps in achieving learning outcomes when compared with other learning activities like restudy or mere notetaking in classes (Dunlosky et al., 2013; Rowland 2014; Adesope et al., 2017; Yang et al., 2021; Heitmann et al., 2021).

Various views and evaluations documented in the cited literature, and others not cited, are indications of the significant attention quizzes and quizzing have received in educational studies and research. However, there are substantial gaps in academic outputs or research on the learners' perceptions, views, opinions, and evaluations on this aspect of learning. These are rare areas that need to be addressed and the main purpose of this study is to contribute to this gap area, using the sample responses and case study from the University of Guyana. Learners' views and perspectives are scantly investigated. Investigating this phenomenon of quizzing could lead to a further investigation in the other educational fields of research that are well investigated: that is learner's motivation and motives for participating in quizzes, and how to tailor quizzing to learners' cognitive ability and perceptions (Greving et al., 2020; Heitmann et al., 2021; McClelland et al., 1953; Brunstein and Heckhausen, 2018; Heitmann et al., 2021). However, this present study contributes to this ongoing debate on quizzing by examining the perceptions of learners on online quizzing and documenting the impacts of this development from the learners' point of view. Higher education has shifted, and learning is developed in a way to inspire everyone. This study, therefore, presents the perspectives of students on quizzing online in comparison with paper-based assessments and examines the impacts of the online quizzes on their academic performances.

2. Methods

The current study was based on the survey conducted during the second semester of the 2020/2021 academic year of the University of Guyana. The voluntary survey included 16 questions which were set on Google Forms and took approximately 10 minutes to complete. 127 participants responded to the voluntary survey, and all of them are from the University of Guyana, Turkeyen campus. The link to the survey was administered at the beginning of the second semester and was closed off at the end of the semester, giving the students approximately three months to present their views and perspectives. This strategy resulted in the representation of students' perspectives throughout the semester. A quantitative approach method was adopted to provide a view that enables objective/accurate generalizations on students' perspectives of online quizzing. Their responses were analyzed descriptively and inferences were drawn based on the findings garnered. The University of Guyana has a total of 9 Faculties run on the two campuses of the institution. The survey link was shared principally with students at the Turkeyen campus where the researcher works. Responses were received from five faculties while some students made no specific indication of their course of study. About 35.4% of respondents were from the Faculty of Education & Humanities (FEH), 21.3% from Faculty of Agriculture & Forestry (FAF), 15% from College of Medical & Health Sciences, 0.7% from the Faculty of Earth & Environmental Sciences (FEES), 3% from Faculty of Engineering & Technology (FET), while 18% of students did not indicate their program nor faculty in the survey.

Table 1: Perspectives of Students on Online Quizzes.

Survey Questions	Responses		
	Yes/True/Positive (%)		Yes/True/Positive (%)
Do you find the online platform a good evaluation measure?	58.4%	Do you find the online platform a good evaluation measure?	58.4%
Do you find the online test duration sufficient for the test mosttimes?	39.5%	Do you find the online test duration sufficient for the test mosttimes?	39.5%
Do you feel the aura of the exam when attempting quizzes online?	73.4%	Do you feel the aura of the exam when attempting quizzes online?	73.4%
Do you findthe instruction on online quizzing precise or confusing?	86.3%	Do you find the instruction on online quizzing precise or confusing?	86.3%

The perception of the respondents on another critical aspect of quizzing online is presented in Table 1. From the bulk of student's responses, it is obvious that online, web-based forms of examination and quizzes are rated as a good measure of evaluation of course contents (58.4%), but most (44.4%) disagreed saying that insufficient time is mostly given by lecturers for the quizzes that are administered in Learning Management System, like Moodle. In addition, 73.4% indicated that while quizzing online, there is a strong sense of examination aura around them while 26.6% do not share the same feeling. In the academic year disrupted by Covid -19, quizzing online became the main form of assessment. From the experiences of students that participated in various online quizzes and tests in the year, 86.3% of the sampled students from the university surveyed for this study found the instruction on online quizzing precise and clear (Table 1).

Aside from the response received relating to timing while quizzing online, students' perception of online quizzing generally appears to be positive. Test duration seems to be a challenge. Students often complain of insufficient time which in their view belief that instructors allocate insufficient time for a sizeable no of quiz items or the lack of preparedness on the part of the student. Researchers also noted that students complain about that there is usually a disconnect between time and the underlying effort invested in their studies during examination thus having implications on their performances and by extension – their health (Orr et al., 2017). Similarly, Birkhead suggested that extended time allotment to students in an examination reduces stress with no implication on the learning outcomes (Birkhead, 2018). However, some researchers show an objection to this because some students complete an online test in lesser time achieving good grades. They believe that online test duration needs to be stringent to avoid malpractices especially when the test is not monitored. However, a group researcher noted that the "individual characteristics explain variance in student performance" and therefore, time might not necessarily impact performance while quizzing (Agarwal et al., 2008). The contrasting views however call for more research as there is yet to be a precise recommended time allotted to various forms of quizzes online. Although Acad recommended 45 seconds per question for a multiple-choice online quiz, there should be standards for all forms of online quizzes for educational purposes and development.

There are two sides to a coin and the question to understand whether an online platform measures evaluation correctly can either be a 'yes' or 'no'. The 32.8% of respondents who indicated "may be" in the survey might

probably have other personal challenges with educational tools and technology (Table 1). The 58.4% positive response is a significant number and it affirms the study whose findings show that online quizzing has the potential to contribute immensely to student learning as well as encourage active motivation and engagement (Boitshwarelo et al., 2017). This suggests that organizing quizzes using online and web-based platforms do have a positive outcome.

Students' behaviour and perception during out-of-sight invigilation at online quizzes and tests: To gain knowledge of students' behaviour while quizzing in an unmonitored examination environment, questions were asked if students receive assistance while participating in online quizzes and were equally asked to state the type of assistance secured. Out of 123 respondents, a low percentage of 18.7 attest to the fact that they get some kind of assistance while 81.3% stated that they receive no assistance. Although there is a low percentage of students getting some forms of assistance, this, however, is significant to the development of continuing education. Forms of assistance documented by the students include technical assistance in operating applications on the computer, sourcing for ideas from websites, moral assistance and support from family and friends, and occasionally, examiner's assistance is sought when clarity is needed. Regardless of the type of assistance received, these forms are indications of cheating, and it affirms the work that noted a high degree of cheating during an unproctored online examination compared to paper-based (Fontaine, 2012; Harmon et al., 2010).

They were also asked to describe in one word their feelings while writing online examinations, tests, or quizzes. A sizeable number of 116 students responded to the question about their feelings. About 91 respondents gave positive comments such as "happy", "good", "convenient", "satisfied", "refreshing", "satisfactory", "lol", "okay", "enthusiastic", "beneficial", and so on while about 25 respondents indicated negative feelings such as "being nervous", "challenging", "breath-taking", "panic", "terrified", "afraid", "overwhelmed", "incompetent", "complicated", "tensed" and "worried as a result of internet disruptions".

The observation in these responses boils down to the learners' hopes and motives, and what is considered as achievements (McClelland et al., 1953; Brunstein and Heckhause, 2018). What this suggests is that the learners with extremely low fear of failure and high hope of success would evaluate quizzing in a positive way than the learners with extremely high fear of

failure and low hope of success, respectively (Heitmann et al., 2021). Differences in perception of fears and hopes could significantly contribute to the preparedness of learners for quizzes and their achievements (Brunstein and Heckhause, 2018). There are many benefits of quizzing that are already documented in the literature, especially on quizzes whereby learners are given prompt feedback (Kang et al., 2007; Butler et al., 2013; Lipko-Speed et al., 2014; Adesope et al., 2017). However, the learners' fears and perceptions about the motives for quizzing may make them miss out on these benefits. To significantly ameliorate the negative perceptions or reduce the numbers of students who have wrong achievements motives, different approaches could be considered in setting questions for quizzes in terms of styles, arrangements, and importantly in terms of frequencies. for more pieces of suggestions on approaches that could be considered for quizzing) (See Roediger et al., 2011; Agarwal, 2019; Bae et al., 2019; Rummer et al., 2019 for more pieces of suggestions on approaches that could be considered for quizzing).

3.2 Web-based assessment vs paper-based assessment

In an attempt to understand students' preferred forms of assessment, survey options of online quizzing and paper-based type were provided for students to indicate their preference. 86 students of the 125 respondents preferred quizzing online while 39 respondents consider the paper-based type as their preferred option. Reasons for students' choice of their preferred exam type vary. Excerpts of the reasons provided are presented below.

I believe paper base truly tests your knowledge. Online gives too much freedom. On the other hand. You do learn a little in the online quizzes

Not everyone has internet access and the necessary devices to get the task done at the relative ease at which paper-based assessment has once provided

It (Online) is more relaxing there is no timer to distract you from the test online Results are given in a timely manner with online quizzing Saving paper(online)

So missing assessment is reduced. The online form of assessment allows for timely feed with results.

I have the paper in front of me. I have adequate time to read and re-read. I can skip a question and return later to answer it without panicking.

With the online quizzing, it would be much better for both students and teachers in terms of planning and implementing

Online is more convenient where you can access the course anywhere.

There's not this nervousness of physically seeing everyone, and reduces anxiety

I prefer quizzing online because I get to utilize the resources around me.

Its more convenient, the disadvantage is that Guyana's infrastructure is not quite ready to provide efficient online education. (power outages, poor internet)

For me, I don't have a problem with either but when it comes to paper-based quizzing, the flow of writing just has a different feeling and I think more information comes to mind when you are writing instead of typing

On the feedback received from students after quizzing online, 39.2% of 125 respondents indicated that they receive test feedback promptly while 56.8% informed that grades are occasionally released promptly. The remaining 4% indicated an outright "no" that they do not get quick feedback. When the question was asked on the mode of online quizzing that students consider as appropriate for evaluation, out of the 124 responses, 63.7% preferred multiple-choice type, 20.2% indicates their preference for essay-type questions. For both true/false question type as well as an essay type, 8% of students responded in affirmative for each of the two types of test models respectively. The excerpts of some of the reasons students provided for the mode they consider as the best form of online evaluation are presented below.

Multiple choice is more complex either right or wrong

Essay-type questions allow the student to express himself or herself fully.

I think one can have more self-expression, and not be limited to just a few answers which there is a possibility you choose the wrong answer.

Multiple choice provides immediate results in most cases since the technology marks the test. In addition, the multiple-choice questions are less confusing to understand.

Each student expresses themselves differently. Although they may understand the concept they may use various methods of expression

Easier to just select an answer (MC option)

I favor multiple-choice questions over the other methods because it gives an individual precise idea about what the lecturer is looking for when a question is asked

With the limited time given I think multiple choice is the best for online evaluation

I think True or False is easier to manage online.

I find when given a short answer, the computer would sometimes mark the correct answer wrong because of different words used by a student.

I prefer multiple choice online because you are marked for a fixed answer. However, with essays and short answers, you may be correct but the system only marks for the answers the lecturer would have put in the system.

Multiple choice questions allow for no subjectivity, and they can be used to test knowledge, comprehension, and structured application questions. It allows the students to get faster feedback on their performances.

short answers provide the opportunity for me to recall and fill in my desired answer.

Typing answers take time

I had difficulty in illustrating a diagram on an essay-type quiz but with the multiple-choice, it's just clicking.

The varied responses from the survey attest to the differing views and opinions of learners, some of which could be classified as positive evaluations of online quizzes and some as not fully positive. These kinds of responses also honed the debates in the literature about the comparison of web-based (on-internet based) assessment versus the traditional paper-based forms of assessment, especially from the students' performance and learners' satisfaction perceptions (Macedo-Rouet et al., 2009). With the integration of web-based and internet-based applications in instructional and curriculum delivery as well as in online assessment, the earlier comparative study of this integration suggested that learners

with a web-based assessment performed better in their final examinations that were administered online (Huon et al., 2007).

However, caution was called for and decorum was highlighted that one form of assessment should not be placed as advantageous over the others (Paek, 2005). As similar to the responses from the survey reported in this study, a number of mixed findings were observed by earlier researchers in different studies that published and reported their findings. For example, findings rated paper-based tests more than the web-based test, and the strong pillar of argument was that web-based tests were observed to be more difficult and associated with more possible mental calculation errors (Johnson and Green, 2006). Other earlier works whose findings placed a premium on paper-based quizzes observed that students with the bulk of web-based tutoring and quizzes have higher rates of dropping out of studies than those whose bulk of assessments are paper-based (Maki et al., 2000).

A group of researchers noted that learners considered texts more difficult to study and less interesting when they are placed on the screen (Murphy et al., 2003). In the other studies, web-placed tests and online quizzes were rated higher above paper-based tests for assessments that are numeracy types and open-ended questions; all are of tremendous benefits to learners who are high achievers (Threlfall et al., 2007; Russell and Haney, 1997; Clariana and Wallace, 2002). Others reported mixed results and indifference without placing a premium on one over the other (Paek, 2005; Gu et al., 2006). Details of the examination of the documented differences and views between paper-based and web-based forms of assessment, tutoring, preference for course materials, teaching modes, etc. are well documented (Macedo-Rouet et al., 2009).

Another notable but interesting idea gathered from the survey is the students' preferred choice of exam type while quizzing online. There are diverse views, but most students consider Multiple choice a bit manageable online because it is convenient and the choice of answers provided assists in the recall process. Many students think that typing an essay-type answer is a difficult task and their answers are sometimes adjudged to be wrong because of the wrong word usage other than the recognized answers configured in the system. The reasons why there seems to be a positive attitude of students to MC questions affirms the documentation of Donnelly, 2014; Baleni, 2015. Students also noted that the MC examination is dicey and one can either fail or pass. Regardless of the cons noted about the MC question form, it is still generally acceptable among students because they believe feedback/review is provided promptly.

With the MC type being the most preferred in an online examination, the literature reviewed finds the structure a bit weak as it has been recorded to assess low cognition levels (McAllister and Guidice, 2012). Some researchers noted also that it majorly helps the student to recall, comprehend, and apply where possible (Douglas et al., 2012). In 21st century learning, online tools remain relevant in higher education pedagogy as noted in my paper and some literature cited earlier. A group researcher summarily exclaimed that the effectiveness of achieving learning outcomes in higher education comprises of both the combination of other assessment types as well as creatively designed MC questions (Boitshwarelo et al., 2017; Douglas et al., 2012; Nicol et al., 2003).

3.3 Feedbacks

When students were asked to provide suggestions that could help improve quizzing online, most of the respondents proposed that students should be given more time to process their thoughts and extra time should be given to accommodate several itches and disruptions from internet/power providers.

Other views as suggested by students are presented below:

Everyone that is taking the online quizzes should be monitored. more time in some areas and a second attempt (sic)

Compulsive use of a camera by students just to ensure honesty is prevailing.

Split up the exams instead of 20 plus questions for an hour. It's draining to sit in a family environment and not be disturbed for an hour

For all examinations, students must be able to get reviews from the exams so they can know where they went wrong and areas for improvement.

The program for online quizzing should be updated and highly advanced. Because sometimes while taking the test on Moodle, the net trips, and there`s no built-in mechanism for Moodle to take you back to that page (most of the time) to continue where you left off after being interrupted. Then you`ll have to email the lecturer, go through several long processes to have another date set for the exam that was interrupted.

I would suggest that more appropriate answers be considered when setting a quiz, especially for essay and short answer questions.

It will be great if all lecturers allow students to view the feedback on the quiz.

Until we have solvecoCo internet connectivity in Guyana my improvement suggestions are invalid(sic)

Lecturers going through the quiz answers in the next class

That students use the computer to complete online quizzes instead of phones or tablets.

The platform should be open for at least 12 hrs

Do not have the test begin counting down as soon as it is available because sometimes the wifi connections are very weak and persons have their screens loading for about 5 minutes before they get into the test and the time would have already been counting down.

In addition to the data gathered, students noted that research, laboratory exercise, portfolios, projects, debates, presentations, practical case studies, group assignments, webinars, worksheets, reflective journals, seminars, interactive discussions are other forms of assessments that are mostly used in their programmed which equally provided them with the opportunity of attaining good learning outcomes/performance in their course of study other than online quizzes. Students believe all the forms of assessment contribute positively to learning because they assess different areas of skills and purposes; therefore, all other aspects of assessments should be taken into consideration while setting quizzes online. Also, proper feedback for any of the assessments should be promptly made available to learners in order to ensure that the progress of learning is continuous and seamless, whether it is web-based or paper-based. Findings reported in the literature over the decades have supported that providing feedbacks (whether right or wrong) consistently supports higher and better performance in the follow-up quizzes and the final assessment as long as they are done promptly (Travers et al., 1964; Sassenrath and Garverick, 1965; Roper, 1977; Birenbaum and Tatsuoka, 1987; Pashler, et al., 2005; Hattie and Timperley, 2007; Fazio et al., 2010; Butler et al., 2013; McDaniel and Little, 2019; Anderson and McDaniel, 2021). Therefore, if the students' success or learners' progress are the goals of educators, attention should be provided for prompt feedback and be part of a package of quizzes and assessments; and this should be continuous for the period of the course delivery.

4. Limitations and Recommendation

This study had some limitations. For example, the results and findings presented here focused on a small sample of respondents from thousands that are exposed to similar situations. The study's questions strongly focused on a single form of assessment (that is, quizzing) without delving into other educational components. Similarly, the perceptions of instructors were not considered in this study. Therefore, the findings presented here should be interpreted narrowly.

However, the points expressed here call for some points for recommendations:

- Although the millennials and the 21st Generation learners would prefer web-based assessment to paper-based type because of its convenience, online quizzes type should be creatively designed to test all levels of cognition in other to achieve genuine learning outcomes (Nicol, 2006).

- Although students prefer the MC type of assessment while quizzing online, short answers together with other forms of assessments online confer additional benefits for good performance (McDaniel et al., 2012).

- Students value immediate and prompt feedback regardless of the form of the online examination. If denied, it could have a negative implication, false information can be retained, and active learning can become jeopardised (Fazio et al., 2010). It is recommended that instructors ensure a timely release of feedback to students.

- Instructions and advice should be well placed to constantly remind students/learners to save their works online regularly as an interruption in internet or power do cause some learners to lose out in online quizzing and thereby perceiving the new norm as being

negative, disregarding the advantages of this norm that has become generally accepted.

- Consideration should be given to students' preferred use of papers and pen for mathematics and questions involving diagrams questions. Students noted that these forms are quite difficult and create pressure during a timed online examination. Facilities should therefore be provided for students to do these forms of assessment in safe and practical ways.

- Conversations and consultations with students and learners should be factored into forms of quizzing so that what may be as a disadvantage could be recognized promptly, and the form of quizzings that could provide a level playground technologically, medically, psychologically, and cognitively are considered before any sweeping overhaul of forms of assessment is considered.

- All forms of assistance and cheating can be significantly reduced when there is proctored vigilance (Harmon et al., 2010). It is therefore recommended that institutions approve the use of proctored facilities on their learning management systems so that online exams can be supervised online.

5. Conclusion

The findings from this study and references to other earlier studies have shown that quizzing is very vital in assessing learners, whether this is web-based or paper-based, with varying preferences by and perceptions of the respondents. It has also been demonstrated in this study that quizzing when backed with prompt feedback is powerful in fostering learning. As the increasing number of higher educations and institutions are embracing online learning environment by providing fully online, hybrid, and/blended formats of instructions, the aspects of online quizzing would be part of instructors' means of evaluations, and students' different perspectives on the mode of quizzing may change year by year based on the differences in students personalities or special situations. This suggests that this topic would continue to be of consideration as the institutions embrace online learning. Apart from feedback that should continuously be part of quizzing, engagements, and evaluations of students' perspectives of what forms of quizzing and modalities should also be sought by the instructors. Traditional education is not in isolation, the online learning should not restrict student-teacher engagement rather, it should foster effective communication for educational purposes.

Acknowledgement

The author acknowledges and appreciates the University of Guyana for the leave (ESL) period granted to work on this study.

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