

Examining the Views of Instructors Regarding the Utilization of Online Final Assessments in EFL Environments: Advantages and Challenges

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Abstract: *The purpose of the study is to explore the perceptions of English teachers regarding the benefits of online summative assessment in terms of practicality, authenticity, and security in a private school in Sharjah, UAE. The study also explores the main obstacles teachers encounter with regard to the implementation of online summative assessment and their perceptions of the essential considerations needed for a successful implementation of these exams at schools. In order to achieve the purpose of the study, the phenomenological qualitative research approach has been adopted. An open-ended questionnaire and semi-structured interviews have been used as data collection tools and thematic content analysis has been selected to analyse the findings qualitatively. The study's findings show that teachers are generally positive regarding implementing online summative assessments. Furthermore, the findings demonstrate some challenges teachers encounter, including technical failure, forming objective questions and teachers' readiness to implement online exams. Hence, it is recommended that school managements provide teachers with enough training and support and ensure online exam security and authenticity by providing teachers with a relevant and practical platform to conduct online assessments.*

Keywords: online summative assessment, teachers' perspectives, EFL contexts, online platforms

1. Introduction

1.1 Background of the study

Numerous educational institutions have implemented online exams over the past decades. Online exams are practical for different assessments, including formative, summative and diagnostic, allowing learners to demonstrate and show their performance in a specific course or subject of study (Laine et al., 2016). In addition, Al-Mashaqbeh and Al-Hamad (2010) state that online exams have become internationally widespread and globally recognised due to the improvement of information technology and the digital solutions provided to facilitate conducting online exams. Although many researchers used different terminologies to describe online exams (Bull & Danson, 2004; Bull & McKenna, 2004), the current study uses "online exams" and "online assessment" to refer to these assessments. Since online exams have become more common, especially at times of global crisis such as the Covid-19 pandemic, it is necessary to explore teachers' perceptions regarding the benefits and challenges of implementing these exams at the school level.

1.2 The research problem

Although education experts pinpoint the significance of online exams for improving the quality of learning for university students, there is little emphasis on the role of online summative exams in developing the learning quality for school students (Conole & Warburton, 2005; Saricoban, 2013). Moreover, most universities have plenty of digital platforms for delivering online learning and conducting online exams, such as Learning Management Systems and Blackboards. However, this is rarely the case for many

schools worldwide, which do not support digital or online exam platforms.

Most school teachers have started dealing with online platforms for exams for the first time during the COVID-19 pandemic; therefore, they encounter numerous challenges and barriers that they have to overcome to provide students with the most convenient learning throughout their educational journey. Additionally, Sambell and McDowell (1998) believe that the influence of assessment on learning is significantly affected by teachers' perceptions of assessment and its implementation in their classrooms. Although online exams have become a popular concern in most schools in the UAE due to the regular inspection visits from educational authorities, there is a scarcity of literature exploring school teachers' perceptions of online exams and their impact on enhancing students' learning (Eltanahy, 2017).

2. Significance and Rationale of the Study

The rationale for conducting the current study is that teachers' perceptions and classroom practices of summative assessments are not always aligned (Yao, 2015). Although teachers might successfully develop positive views of summative assessment, they encounter challenges in implementing effective online assessments (Ndalichako, 2015). Moreover, Danielson (2008) mentions that although teachers are sometimes experienced and trained to provide valid assessment measures, their perceptions regarding assessment may definitely influence the way they assess their students. Stiggins (2010) concurs that teachers must develop a comprehensive understanding of assessment to effectively balance the use of assessment for learning and assessment of learning.

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The continued advancement in education necessitates conducting more research about online assessment that is targeted at constructing and collecting evidence to improve the learning process further and meet students' educational needs (Mansell et al., 2009). The current study is significant since it aims at investigating teachers' perceptions of the usefulness and challenges of implementing online summative assessment for twelfth graders; thus, it paves the way to acknowledge the key considerations required to overcome the current difficulties regarding implementing this type of assessment. Moreover, the recommendations of the present study are pivotal because they will be shared with the educational reformation committee at school that works effectively to promote and improve students' learning experience and enhance the quality of learning. In addition, the recommendations will be shared with Sharjah Private Educational Authority (SPEA) to review the current private schools' policies regarding implementing online summative assessment.

3. Aims and Research Questions

The current study explores teachers' perceptions regarding the benefits of online summative assessment in the UAE regarding practicality, authenticity, and security. It also seeks to identify the main challenges to the implementation of online summative assessments based on teachers' perceptions. The present study also explores their perceptions of the main considerations and recommendations needed to successfully implement online summative assessment in a private school in Sharjah. To further fulfil these aims, the following research questions have been constructed to govern the scope of the study:

RQ1. What are the perceptions of grade 12 teachers regarding the usefulness of online summative assessments in terms of authenticity, security, and practicality?

RQ2. What are the main challenges to the implementation of online summative assessments in the UAE based on the perception of grade 12 teachers?

RQ3. What are the perceptions of grade 12 teachers regarding the main considerations needed for the successful implementation of online summative assessment in the UAE?

4. Literature Review and Theoretical Underpinning

Conceptual Framework

Online assessments

Elliott (2009) defines online assessments as those exams that are heavily dependent on and affected by the latest information and communication technology improvements. Dembitzer et al. (2018) refer to online assessment as the type of tests administered to students through computer and web technologies to give, grade and interpret online exams and results.

Summative assessment

According to Qu and Zhang (2013), summative assessment is the sort of assessment targeted at evaluating students' learning and teachers' teaching after a period of time. Additionally, Harlen (2007) states that summative assessment is an assessment of learning that is implemented to collect pieces of evidence for the purpose of judging the quality of education in terms of the learning outcomes and students' achievement and performance level.

Practicality

According to Brown and Abeywickrama (2010), the practicality of a test requires considering some basic factors such as time, financial constraints, resources, and administration issues. Moreover, Bachman and Palmer (2009) believe that assessment practicality refers to the extent to which the requirements of test specifications are met within the limitations of time and the relevant or existing resources.

Authenticity

Authentic assessment requires students to engage and enact real-life tasks to show meaningful implementation of basic knowledge and skills (Mueller, 2014). Brown (2003) states that when a tester makes a claim for test authenticity, it means that tasks within this test are to be enacted in the real world, resemble or simulate real-world tasks, contextualized rather than isolated, and are interesting for the test taker.

Security

Sabbah (2017) defines the security of online assessments as the collection of tools, methods, and procedures which help to protect assessment-related data that are stored or exchanged among various computers within a network. Moreover, Zughoul et al. (2013) define online assessment security as a system that integrates the security and reliability of exam data.

Theoretical Framework

The Technology Acceptance Model (TAM) devised by Davis (1986) constitutes the theoretical framework underpinning the present study since it focuses on the impact of using technology on the user's computer technology behaviour (Rauniar et al., 2014). According to Chuttur (2009), TAM highlights that system use is a reaction or a response that can be expected through motivation, which is, in turn, considered the direct impact of an external stimulus. Moreover, Davis (1985) states that the user's behavior can be explained in terms of three elements: the perceived ease of use, attitude towards using the system, and the perceived usefulness. Furthermore, Lederer et al. (2000) mention that perceived ease of use refers to the extent to which an individual thinks that employing technology systems would require the minimum effort possible, while perceived usefulness means the degree to which technology systems enhance and promote performance.

The choice of TAM as the guiding framework of the current study is because of its significance in identifying the users' or teachers' overall perception towards online technology use. Teo (2011) argues that the lack of user acceptance of technology would be an essential obstacle to integrating new technologies. On the contrary, an increase in technology

acceptance would definitely result in enabling educators, teachers, and students to become more effective in transferring knowledge and developing student learning outcomes (Hu et al., 2003).

The Computer Assessment Language Testing (CALT) model proposed by Chapelle and Douglas (2006) and the Computer Based Testing scenario (CBT) of Bennett (2000) are two other theoretical underpinnings of the present study. These two models are important and relevant to abundant educational assessment (Sawaki, 2012). Through CALT development, most paper-based exams have been automated and mounted on computers to administer tests more effectively and efficiently than ever (Bennett, 2000). Moreover, Stansfield (1986) mentions many advantages of implementing computer-based assessment, including the efficiency of time management, flexibility of test administration and availability of immediate feedback after completion of assessment. However, CALT and CBT have some limitations, such as the existing web security concerns while delivering online exams and the limited options of exam question types available (Roever, 2001).

5. Literature Review

The usefulness of online exams in promoting students' learning

According to Jamil, Tariq and Shami (2012), online assessment tools proved significantly useful since they have reduced the burden on teachers. In addition, some researchers, such as (Brown et al., 1999), reached a similar conclusion that online exams are used effectively to enhance and promote learning through testing various skills, understanding and knowledge. Similarly, Jisc (2008) and Weaver (2003) conducted similar studies and confirmed that assessing and controlling information and improving students' various information and communication skills is possible by using online exams rather than through regular exam types. Moreover, they confirmed that implementing traditional assessment methods did not match the learning style of many students. In the same way, Bodmann and Robinson (2004) found that computers and related assessment technologies provide the required tools to meet students' learning outcomes and overcome the expected challenges in designing and administering exams using traditional paper-based methods.

Pellegrino, Chudowsky and Glaser (2001) reached similar results that were harmonious with the previous findings in which they considered online-based assessments very significant because they provided endless means to measure complicated forms of knowledge as well as the use of reasoning that was not applicable to assess through the traditional methods of assessment. In addition, there is a huge body of research highlighting the usefulness of online exams from the perspectives of teachers and students (Baleni, 2015; Cook & Jenkins, 2010; Dermo, 2009; Dreher et al., 2011; Farzin, 2016; Heinrich et al., 2009; Hodgson & Pang, 2012; James, 2016; JISC, 2010; Kuikka et al., 2014; Nicol, 2007). Online exams also improve the reliability of the results and support richer and more systematic analyses of students' scores. These results are similar to those reached by Jisc (2010), where online exams were considered

advantageous in proctoring and administering them, especially with large numbers of students.

The security of online exams is a significant issue with controversial perceptions of teachers and students. According to Farzin (2016), another potential advantage of online exams is the possibility of reducing cheating through random choice of questions from question banks. However, this contradicted the findings of (Dermo, 2009) and (Sorenson, 2013), who developed concerns about randomly choosing questions from a question bank since the fairness of such a procedure will remain doubted from the students' perception. Compared to the optimistic view of some teachers regarding online exam security, a number of studies have identified some weaknesses and obstacles regarding online exam security. Al-Saleem and Ullah (2014) stated that students can easily cheat during online exams by communicating with their peers or browsing the internet.

The challenges of implementing online exams

Cook and Jenkins (2010) mentioned many obstacles to preparing and designing questions using online assessment platforms. They also reported that it was challenging to design non-objective question types, which are significant for measuring students' deeper understanding of certain concepts. Another study by Whitelock and Brasher (2006) revealed a different barrier for teachers regarding online exams: the time needed to create them. By the same token, Crisp (2011) reached similar findings as Whitelock and Brasher (2006) in that online exams were time-demanding and financial barriers for some organizations and teachers, decreasing the possible benefits of these exams. Moreover, Betlej (2013) conducted a study to investigate students and teachers' perceptions of the impact of online assessment on students' learning and academic achievement. He concurred that online exams might negatively affect students' learning since they might be unable to extend and elaborate their answers due to technology restrictions, and they might suffer from anxiety and fear if they are inexperienced with low-level information technology.

In addition to that, some researchers noted that online exam structures are limited to certain question types, such as true or false, close-ended, and multiple-choice questions, which are not fundamental in assessing higher-level cognitive skills of Bloom's taxonomy questioning model (Cook & Jenkins, 2010; Hodgson & Pang, 2012). On the contrary, other researchers concluded that this heavily depends on the availability of resources that help structure online exams and that they can still be implemented to assess higher-order thinking skills (Jordan, 2015; Williamson, 2018).

All things considered, the review of related literature demonstrates that although plenty of studies have explored teachers' and students' perceptions of online exams, little research focuses on schoolteachers' perceptions (Bransford et al., 2000). Moreover, most previous studies addressed formative assessment with little emphasis on exploring teachers' perceptions of online summative assessment and its impact on students' learning. In addition, few studies conducted in the UAE context investigated this issue. Most studies that were carried out regarding online assessment focused on factors such as validity and reliability, but few

studies addressed issues such as security, authenticity, and practicality at the school level. Therefore, the present study will fill the proposed gap by exploring teachers' perceptions of the usefulness and challenges of implementing online summative assessments in the UAE.

6. Research Methodology

6.1 Research Approach

The present study adopts the phenomenological qualitative research approach to explore grade 12 teachers' perspectives on the benefits and challenges they encounter while conducting online exams. As Taylor et al. (2015) mention, qualitative research methods do not necessitate generating numerical data or statistics while analysing the results. Moreover, adopting the phenomenological qualitative research approach is very effective in conducting the current study since it allows the researcher to deeply understand and explore the current phenomenon in line with the participants' lived experiences (Shah & Corley, 2006).

6.2 Research Instruments & Data Collection

In order to answer the three research questions that guide the scope of the current study, the researcher has implemented qualitative research instruments, including an open-ended questionnaire and semi-structured interviews. The open-ended questionnaire is a well-established research tool used to collect data about the participants' perceptions, beliefs, and attitudes toward the topic under investigation (Bulmer, 2004). Accordingly, the questionnaire has been given to eleven teachers of grade 12 who teach different school subjects. Furthermore, open-ended questionnaires are considered easy to construct but more challenging to analyze (Sarantakos, 2005). The rationale behind choosing the open-ended questionnaire is that it allows spontaneity and freedom of answers, giving participants time and space to freely share their conceptions, understanding and attitudes to the topic under investigation (McGuirk & O'Neill, 2005). For this reason, the researcher implemented the open-ended questionnaire to answer the first research question that explores grade 12 teachers' perceptions of the usefulness of online summative assessment.

Additionally, semi-structured interviews are utilized to answer the second and third research questions. By doing this, the researcher aims to explore grade 12 teachers' perceptions of their challenges while conducting online exams and identify their considerations on the best methods and strategies to overcome these obstacles. During this stage, the researcher interviews four teachers who teach the core subjects and the head of assessment at the school. The choice of the semi-structured interview following the open-ended questionnaire is very important as it allows the researcher to deeply explore participants' perceptions and beliefs regarding selected themes that serve the purpose of the study (Adams, 2015). Consequently, the interview guide is effective as it helps the researcher explore in-depth the grade 12 teachers' perceptions of some emerging themes related to online exams from the questionnaire.

Prior to conducting the questionnaire and interviews, the data collection instruments were piloted by implementing them using a small group. For the questionnaire questions, some modifications have clarified key terms that are understandable and less obvious to the participants. Furthermore, some interview questions have been modified to keep the study more focused and to obtain the results that will help answer the study's main research questions.

6.3 Participants and Sampling

The current study's participants consisted of eleven teachers who teach grade 12 at a private school in Sharjah, UAE. They were given a questionnaire to answer and share their perspectives regarding online assessment benefits and its impact on improving students' learning outcomes. Moreover, the study involved four teachers who teach the core subjects for twelfth graders and the head of assessment to explore their viewpoints on the obstacles of online summative assessment and the most effective strategies to overcome such barriers. The participants are selected using convenience and purposive sampling. To elaborate further, convenience sampling was implemented since it ensures ease of access and participants' willingness to participate in the study, as Young (2015) claimed. However, purposive sampling was utilized with the head of assessment and four teachers of the core subjects since they provided important information that cannot be gained from the other participants (Maxwell, 1996).

6.4 Data analysis

The qualitative data from the questionnaire and the interviews were analysed using thematic content analysis. According to Braun and Clarke (2012), thematic analysis (TA) is a common method of analysing qualitative data due to its flexibility and accessibility. Throughout TA, the researcher identifies, organises, and offers insights into meaningful patterns or themes (Howitt & Cramer, 2008). Furthermore, the choice of TA was due to the fact that it offers a method of qualitative research that teaches the tactics of coding, interpreting, and analysing qualitative data in a systematic manner. The researcher implemented TA to identify themes and patterns relevant to answering the research questions of the present study. Using TA, the data from the interviews were recorded, transcribed, and arranged into relevant, meaningful themes to serve the purpose of the study.

6.5 Ethical Considerations

Before conducting the current study, the researcher obtained informed consent from the school principal and all participants upon informing them of its purpose and objectives. Confidentiality and anonymity have been assured to all participants, and they are told that they have the right to withdraw at any time if they wish without the need to justify it to the researcher.

7. Findings and Discussion

The study's findings are reported according to the order of the research questions that construct the scope of the study.

RQ1. What are teachers' perceptions regarding the usefulness of online summative assessments regarding authenticity, security, and practicality?

The first research question explores the perceptions of grade 12 teachers regarding the usefulness of online summative assessment in terms of practicality, security, and authenticity. To answer this question, the researcher has developed open-ended questionnaire questions that address the three variables, and they are answered by all grade twelve teachers at school (n=11). This section reports the findings of the questionnaire.

The usefulness of online assessment regarding practicality

The open-ended questionnaire explores the participants' perception of online assessment regarding practicality through the financial limitations, time constraints, exam administration, scoring and analysis of exam results.

Financial limitations

All participants (n=11) concurred that the online exam platform adopted at school is within the school's financial limitations and is not expensive. However, most of them (n=7) believed it lacks many features to conduct more practical, secure, and reliable exams. One participant says, *"The school uses a free online assessment platform (Google Forms), but it has plenty of limitations in terms of varying question types and creating more objective questions."*

Time constraints

Most participants (n=7) reported that preparation for online exams does not consume a lot of time due to the easiness of the exam platform they use. Some participants (n=4) agreed that they spend a lot of time preparing and creating online exam questions as they have a low level of computer literacy and require more training in creating exam questions with less effort. One participant mentioned, *"I have difficulty creating exam questions using the online platform as I am not used to it, and it requires me more practice and effort to save time while preparing online exam questions for grade 12 students."*

Administering online exams

Most participants (n=6) contended that online exams are easily administered and monitored using the online platform, particularly for classes with few students. However, a few participants (n=3) felt that it is not easy to administer online exams, especially with classes with large numbers of students, since they require more than one person to proctor these exams. Two participants (n=2) said that it is very challenging and demanding to administer online exams regarding running live sessions, following up with students who have technical issues, and monitoring students while conducting these exams. One participant says, *"I think online exams are easily administered if few students are doing it, but it requires more than one proctor if there are many students at a time."*

Scoring and analysis of exam results

Most participants (n=8) shared that online exams ensure easy scoring since most question types are auto-graded, such as MCQ, true or false and matching questions. However, a few participants (n=3) thought it is disadvantageous to grade constructed responses and long answer questions that are a major part of subjects such as English, biology, and business. They felt it is more convenient to be implemented with formative assessments than with summative assessments. Additionally, all participants (n=11) concurred that the online exam platform is practical for interpreting and analysing the results as they are auto-corrected question types. However, this is not possible with constructed responses and long answer questions.

The usefulness of online assessment regarding security

The vast majority of participants (n=9) reported that the online assessment platform they are implementing at the school is not sufficiently secure since students can easily browse the internet, search for information, and communicate with their peers while undertaking the assessment. Furthermore, some participants mentioned that cheating and plagiarism are expected as exams are conducted online with no practical lockdown system preventing students from browsing other tabs or navigating while conducting exams. Nevertheless, two participants (n=2) felt it is secure enough to match the school budget, but they insisted that the school is in a transitional phase that demands purchasing a more effective and secure online platform for conducting exams. One participant commented, *"We definitely need more secure technology to curb plagiarism and cheating."*

The usefulness of online assessment regarding authenticity

The majority of participants (n=7) stated that the online platform they use for conducting online exams does not support the creation of authentic and real-life tasks. A few participants (n=3) agreed that, to some extent, they try creating authentic tasks for online exams by using natural language and appropriate context. Notwithstanding, one participant (n=1) mentioned that the online exam platform is challenging for creating authentic exam questions and tasks since it lacks the required tools to add chemical equations and formulas. Therefore, she prefers the physical lab to conduct this part of the summative assessment. One participant mentions, *"We do not reach the mentioned level regarding truly using authentic materials. We must work more to balance the academic and the real-life requirements."*

RQ2. What are the main challenges to the implementation of online summative assessments in a private school in the UAE based on the perception of grade 12 teachers?

The second research question explores the perceptions of grade 12 teachers regarding the challenges of implementing online summative assessments at school. To answer this question, the researcher conducted semi-structured interviews with four teachers (n=4) who teach the core subjects and the head of assessment at school (n=1). This section reports the findings of the interviews.

Technical failures and errors

All participants (n=5) contended that the most challenging problem of implementing online exams is unexpected technical failure or internet disconnection. Most participants (n=3) have experienced this difficulty with at least one online exam, and they have had to prepare a backup version for some students. One participant claims, *“The most prominent challenge is the possibility of getting disconnected for the teacher and the student. This is frustrating as I have to prepare other exam versions continuously.”*

Creating objective question types

Most participants (n=3) stated that the available platform uses limited question types, including true or false, MCQ, matching and gap filling. Therefore, they have difficulty creating high – quality and objective exam questions that focus on higher thinking skills and assess students’ cognitive skills and academic performance. Some participants (n=2) think the online platform does not support some main characters and symbols; thus, there are critical obstacles to constructing objective question types. One participant says, *“The first challenge is the limited questions type available. Secondly, the mathematical characters are not supported. Moreover, it is hard for students to write or answer procedural questions.”*

Teachers’ readiness to implement online exams

The majority of participants (n=3) reported that teachers’ readiness to deal with and construct effective and practical online exams is considered an essential barrier for them. Furthermore, they elucidated that they have experienced the online exam platform for the first time since they are used to adopting the traditional paper-based methods of constructing summative assessments. One participant (n=1) mentioned that *“teachers require extensive training on how to truly implement, administer and control online exams to measure students’ academic performance.”* However, another participant (n=1) explained that *“some teachers are unwilling to change to online assessment methods, and they resist change due to different factors, including their anxiety and fear of dealing with new assessment habits.”*

RQ3. What are the perceptions of grade 12 teachers regarding the main considerations needed for the successful implementation of online summative assessment in a private school in Sharjah?

The third research question explores the perceptions of grade 12 teachers regarding the main considerations needed for the successful implementation of online summative assessment at the school. To answer this question, the researcher conducts semi-structured interviews with four teachers (n=4) who teach the core subjects and the head of assessment at school (n=1). This section reports the findings of the interviews.

Teachers’ training and support

All participants (n=5) believed that extensive teacher training and support from the school management is required to ensure the successful implementation of the online summative assessment of grade 12. They stated that there is a crucial need for the management to promote the effective

use of online exams and to provide sufficient support and guidance for teachers on the technical and pedagogical levels. One participant reports, *“The whole process of online exams has to be effectively planned and implemented regarding teachers’ pedagogical and technical readiness and awareness. Therefore, the school management and assessment team must give as much training as possible until teachers feel comfortable and relaxed to implement online exams successfully.”*

Integrating other exam features and tools

Most participants (n=3) concurred that adding other exam features and tools would help teachers construct more objective exams rather than limit them to certain question types is necessary. The head of assessment says, *“The current online exam platform does not assist teachers of many subjects such as math, chemistry, AP calculus, and biology to construct objective and authentic exam questions. This is really significant to help the school management and teachers identify students’ true academic level.”* Nevertheless, two participants (n=2) mention that the exam layout is the same for all subjects, and there is no possibility of creating or adopting their own exam style per the subject requirement.

Ensuring online exam security

All participants (n=5) reported a need to change the currently adopted online exam platform with other more secure and practical platforms. One participant says, *“The school management has to purchase another valid, reliable and practical exam platform that would prevent students from browsing the net or sharing the exam content with others.”* In addition, most participants (n=2) reported that a backup exam should be given to students who have technical issues or are absent for a reason. This ensures fairness for all students who are doing the exam. Another participant (n=1) says, *“In order to ensure the highest level of exam security, the online exams for summative assessment should be implemented at school with the convenient number of invigilators to proctor exams.”*

8. Discussion of the Findings

In large part, the findings of the study demonstrate that teachers regard online assessment as useful, although there are some main challenges that are significant to overcome. The study's findings also reveal that teachers are positive regarding the usefulness of online exams regarding financial limitations, time-saving, scoring and analysis of the results. This is harmonious with the findings of other researchers (e. g., Baleni, 2014; Cook & Jenkins, 2010; Farzin, 2016; James, 2016; Jisc, 2010; Nicol, 2007).

The findings also show that teachers are concerned about security hazards while online exams are implemented. This contradicts the findings reached by Dermo (2009), who states that exam management systems such as LMS and Moodle integrate effective exam management tools to protect exam data and ensure a high level of security by saving and tracking login, exam access, and logout tools. Moreover, the study's findings demonstrate teachers' difficulty in dealing with cheating and plagiarism. Shraim (2018) reaches similar findings where she states that the

technology implemented in online exams is not enough to prevent students from cheating or plagiarism due to the widespread of technological tools such as wireless, Bluetooth, networking, and mobile phones.

Unlike the findings reached by some other researchers (e. g., Chua et al., 2013; Kuikka et al., 2014) who confirmed teachers' positive attitudes towards the use of online exams in enhancing exam authenticity by including videos, audio, and simulations, the findings of the present study demonstrate teachers' negative perception of using the online exam platform to create authentic exam tasks and questions since it lacks the appropriate tools. This is in harmony with the results of Jisc (2010) in that online assessment platforms ensure the creation of more authentic and valid assessments; thus, they are more engaging and interesting for students. Additionally, the present study's findings recommend providing teachers with sufficient support and training on how to implement, create, and administer online exams. This is similar to the results reached by Jordan (2013), who highlights the significant need for educational institutions to pay more attention to training teachers and the academic team on the best methods and strategies for using online exam platforms prior to starting it.

9. Conclusions and Recommendations

9.1 Summary of the paper and key findings

The current study explores grade 12 teachers' perceptions of the usefulness of online summative exams regarding authenticity, practicality, and security. It also explores teachers' perceptions of the main challenges they encounter with online exams and their perceptions of the essential considerations implemented to conduct online exams successfully. The significance of the study stems from the vital need to find practical and reliable means of modifying and developing online summative assessments at school. The qualitative research approach is implemented to serve the purpose of the study and reach an in-depth understanding of teachers' perceptions of the studied topic. An open-ended questionnaire and semi-structured interviews have been developed to collect data and answer the research questions. Based on the study's findings, teachers have positive perceptions regarding online summative assessment as it is costly effective, time efficient, easy to use, auto-graded, and easy to analyse its results. Moreover, the study's findings demonstrate that teachers have concerns regarding the security hazards and authenticity of exam tasks due to the lack of relevant tools within the online platform they use at school. Furthermore, the study's findings show that teachers encounter some barriers with online summative assessment, such as administering and proctoring large classes, fully ensuring exam security, constructing objective exam tasks, experiencing technical difficulties, and having insufficient readiness and awareness to implement online exams.

9.2 Limitations

The present study has a number of limitations. One limitation is that the study is conducted on a few participants; therefore, the results are not generalizable.

Another limitation is the use of the qualitative research approach alone. If the researcher uses the mixed-methods approach, the qualitative data will be validated and more reliable. A third limitation of the study is the manual analysis of the qualitative data using thematic content analysis. If the researcher uses relevant computer software for analysis, such as NVivo, the results will be more reliable and valid since errors are less frequent with automated analysis software.

9.3 Recommendations

One recommendation of the study is that the school management has to ensure online exam security and authenticity by providing teachers with a relevant and practical platform to conduct online assessments. Another recommendation is for schools to provide teachers and academics with sufficient training and support to raise their awareness regarding conducting online exams and constructing various objective question types that will generate reliable exam results. A third recommendation is for teachers to integrate more authentic tasks while conducting online assessments using other available resources as per their subject. This will make students feel more interested in conducting exams online, and they will not feel isolated from the real-world context.

9.4 Implications for future research

Based on the study's findings, further research is needed to explore teachers' and students' perceptions regarding its impact on improving students' learning and performance using the mixed methods approach. This will ensure the generalizability of the results, provided that it includes a larger population. A key feature of future research will be to investigate the correlation between students' and teachers' perceptions of online assessment and focus on other variables, such as the pedagogy and validity of online exams.

Conflict of interest

There is no conflict of interest to disclose.

About Author

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Appendices

Appendix A:

Sample questions from teachers' Open-ended questionnaire

1. Based on your expertise as a teacher, what do you think are the positives of conducting online exams as summative assessment?
2. How do you evaluate online exam platforms regarding constructing authentic tasks and objective question types for the summative assessment?
3. Based on your experience as a teacher of grade 12, Which do you think are more effective and practical; paper-based exams or online exams? Why is this?
4. What are your perceptions regarding the use of online exam platforms to ensure security of online exams? Are they secure enough? How?
5. What are the main advantages of conducting online exams regarding exam administration, easiness and accessibility, time limit, budget limitations and exam marking?
6. What is your opinion of effectiveness of the online exam platform used at school in terms of promoting students' learning and improving their academic skills?

Appendix B:

Sample questions from teachers' semi-structured interviews

1. What are the main barriers that you encounter while implementing online exams for summative assessment? Why do you think this is the case?
2. What do you think are the main limitations and restrictions that you face while constructing questions for online exams?
3. Are there any security hazards that are associated with implementing online exams for twelfth graders? What are they?
4. What is the impact of using the school online assessment platform for the summative assessment on improving grade 12 students' performance and skills?
5. Is the newly used technology sufficient in dealing with cheating and plagiarism while conducting online exams? Why is this the case?
6. What do you think are the main challenges that teachers face while creating, and administrating online exams using Google Meet platform?
7. How do you think teachers can overcome the challenges arising from conducting online exams? Why?