

Experiences of university students in online proctored examinations: A study

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Abstract

Objectives: Due to COVID-19 many sectors have started working online. And there was no option for the Teaching-learning process also. It became easy for all schools, colleges and universities who adopted e-learning by conducting online classes and conducting remote proctored exams. Most institutions have opted for proctored examinations. Proctored exams refer to exams that help in invigilating the behavior of a student during examination by monitoring one's computer screen, video and audio. The proctoring software's data is sent to the academic institution for review. Artificial intelligence (AI) or human proctors can be used to monitor the exam.. But there are many challenges also while implementing such examinations. And that is the purpose of this research paper.

Design: Descriptive Study

Setting and participants: Student-teachers of BED and MED programs

Methods: A survey comprising the Questionnaire was distributed through Google Form. A questionnaire was prepared and collected data was used for checking the challenge faced by student-teachers and their overall experiences with online proctored examination. Data Analysis was done in Microsoft Excel and statistical analysis done through Percentage.

Result: The study's findings shed new light on students' experiences with online exams that are proctored, including their main concerns with regard to scheduling exams frequently and consuming less time and burden. The study also identifies issues with technology compatibility, skepticism about academic integrity/reliability, and validity when implementing online proctored exams and their potential effects in the future.

Keywords: Proctored Examination, Experiences in online examination, Higher Education,

1.INTRODUCTION

Due to the pandemic almost every industry gets affected, and education is no different. For teaching most universities quickly migrated to online teaching, the biggest challenge was conducting online examinations. For online exams proctor exam is one of the options chosen by many universities. Proctored exams are timed exams that you take while proctoring software monitors the desktop, webcam video, and audio on your computer. We have an ability to monitor and facilitate online exams taken by hundreds of students across varied time zones and settings through this system.

According to a study, 73% of students cheat during online exams. Although this number can be reduced to 13% by using advanced technologies such as remote proctoring and secure browsing there's still a lot of room for improvement. Many versatile online exam software incorporates advanced remote proctoring methods to ensure objective evaluation of online tests.

There are many Challenges faced in conducting Online Examinations such as increasing Internet Connectivity, chances of cheating, vulnerability to bandwidth problems, limited IT Resources, places undue burden on students due to time constraints, evaluations etc. And there are two types of examinations: 1. Objective 2. Descriptive. Students faced different types of problems and challenges for each type of examination. For the first time of online examination many students faced problems with login and how to start examinations. For objective type examination there are not too many challenges but for descriptive there are too many challenges. Such as uploading answers, making pdfs, improperly uploading answers etc.

The goal of this study was to discover which are challenges faced by students for online proctored examination at higher education level. And we hope to make some suggestions in this paper. The researcher has completed the questionnaire analysis and reached conclusions.

1.1 LITERATURE REVIEW

Many higher education institutions have adopted online learning in recent years, and evaluating students from a distance presents difficulties, particularly when assuring academic integrity. Education professionals must develop a plan for a suitable remote assessment technique. To evaluate students' online learning, a range of remote examinations are provided. These tests can be broadly divided into two categories: (1) remotely proctored exams (with a time limit), and (2) open-ended tests.

1.1.1. Proctored exams

Y. Atoum, L. Chen, A. X. Liu, S. D. H. Hsu and X. Liu (2017), described the methods to proctor online exams as (a) no proctoring, (b) online human monitoring, and (c) semi-automated machine proctoring. Because there is no proctoring, test takers are not free to cheat. Instead, cheating is reduced in a variety of non-proctoring ways. The authors believe that by proposing eight control procedures that allow faculty to increase the difficulty and thus reduce the likelihood of cheating, they can encourage academic honesty.

Nhi Nguyen (2020) tried to explain the concept of Proctoring systems, according to her, It has the ability to monitor and facilitate online exams taken by hundreds of students in a variety of time zones and settings. Using computer surveillance software, especially during this abrupt transition to remote learning, would significantly reduce cheating, ultimately preserving academic integrity.

Teachers can facilitate remote exams and reduce academic misbehavior by using online proctoring. The method would either install software into students' laptops to regulate the use of other online sources while taking tests or use webcams to observe students' testing environments. Proctoring can also involve human involvement, such as with online proctors who are on hand to remotely monitor students' performance.

She has also mentioned the benefits of online proctored exams in a variety of areas accepted by Higher education institutions.

1. Flexibility: Online proctoring provides significantly more flexibility. On the one hand, institutions can conduct and supervise evaluations on a much larger scale, across multiple time zones. Students, on the other hand, can arrange their own preferred time slots to take the tests, freeing them from the need to travel for exams.

2. Task automation: Using a virtual surveillance system allows institutions to save time and effort on routine tasks such as printing, arranging test locations, and recruiting human invigilators.

At the same time, she has explained the concerns about proctored exams like for exam authentication and verification, the proctoring system requires students to provide their name and identity numbers. As a result, many people are wondering how their data is stored and processed. Secondly, aside from privacy and anxiety concerns, academic inclusiveness is the main concern; criticism of proctoring focuses on its failure to address students' differences in terms of race, physical disabilities, social and financial status. Thirdly, complaints have been lodged about the technical setup of online proctored exams, which range from complicated software installation and internet drop-out to long wait times. Teachers and students both complain about how long it takes to install software on computers, or how the internet goes down in the middle of an exam.

1.1.2. Proctored exams: Drawbacks

Guangul, F.M., Suhail, A.H., Khalit, M.I. (2020), highlighted the concept of proctored exams along with its drawbacks.

The proctored examination is often given in classrooms and is timed and proctored. Exams that need to be proctored can also be taken remotely utilising a variety of LMSs, including Canvas and Sakai. Additionally, Proctor Track software can be utilised for remote assessment by monitoring student behaviour during exam time using webcams. This will help the instructor anytime the students engage in suspicious behaviour. However, it might be challenging to switch from in-person training to online instruction. He also has focused on the below drawbacks.

1. Students experience higher stress when taking proctored examinations remotely than in-person, which will negatively impact their performance.

2. Both the instructor's and the student's infrastructure, software, and hardware must be well-established for remote proctored exams. Furthermore, application software like ProctorTrack could produce "false positive" alerts that mislead the teacher.

3. A software, hardware, or internet connection failure during a remote proctored exam is possible. Therefore, a backup plan should be created before the exam ever begins.

4. Students might not want to continue being watched by cameras for personal or cultural reasons.

5. Supporting a student and resolving a technical issue remotely if they have system issues during an exam will not be simple (Rutgers, 2020).

Some things to be wary of when selecting a remote assessment technique. Every new strategy must be accurately explained to the students, particularly when it comes to evaluation. But let's not overlook the fact that we can also include the pupils directly. They can brainstorm with us about alternative assessment methods based on learning objectives and achievement goals. Keeping the quality criteria in mind is also matters.

1.1.3. E-proctoring tools

Kharbat, F.F., Abu Daabes, A.S. (2021) have investigated many studies on e-proctoring tools from various perspectives, which are illustrated below. "(Milone et al. 2017) The effect of using e-proctoring systems on the educational experience of pharmacy students in a non-pandemic situation was investigated. Based on their research, their college decided to discontinue online proctoring, despite discovering some benefits when dealing with large groups of students. According to the researchers, the need for extreme technological requirements, the presence of technical difficulties, and the additional cost associated with each exam were the primary factors that outweighed the benefits of the e-proctoring system. The most important aspect covered by the online learning literature is privacy, which has been identified as the primary concern with eLearning (Majeed et al. 2016). As a result, when considering the adoption of e-proctoring technology, the

level of trust in the privacy of these eLearning systems was discovered to be the most decisive factor (González-González et al. 2020).

Mohammed Juned Hussein, Javed Yusuf, Arpana Sandhya Deb, Letila Fong & Som Naidu (2020) reviewed various literature related to proctor exam, "King et al. (2009) The majority of students polled believed that cheating was easier in an online environment than in a traditional face-to-face classroom. Similarly, Berkey and Halfond (2015) found that 84% of the students polled in their study agreed that student dishonesty in online test-taking was a serious problem. Watson and Sottile (2010) found that students were more than four times more likely to cheat in an online class in a study of 635 students. Several other studies found higher rates of cheating online (Lanier, 2006; Harmon & Lambrinos, 2008; Grijalva et al., 2006) and a higher prevalence of cheating online compared to in-person (Etter et al., 2006; Watson & Sottile, 2010).

2.Objectives and Research Questions

2.1 Research Questions

1. What kinds of experiences do students have during online exams?
2. How do they attempt to mitigate their difficulties?
3. How do they deal with difficulties?

2.2 Objectives of the Study:

1. To identify technical issues encountered by students during online exams.
2. To investigate various issues raised by students about violations during online exams.
3. To identify problems with subjective exams and the uploading of course answer papers
4. To analyze and make recommendations on a variety of exam-related issues.

3.Materials and Methods

The research focuses on the difficulties that BED and MED student-teachers face when administering online proctored exams. A descriptive study was conducted to better understand the difficulties encountered by BED and MED student-teachers during online proctored examinations. The objectives were determined, and research questions that needed to be addressed in light of the study's title were formulated. The Data Collection Instrument was created to collect the necessary data to answer research questions. The proctored exam served as the basis for the questions' construction. After that, data was gathered by giving the students access to a Google form. The collected data was later examined to look for errors. The collected data was analyzed using the appropriate statistical methods. Finally, after analyzing the data in light of the study's goals and open questions, meaningful conclusions were drawn from the data.

3.1 Research site & Population

One of the nation's private universities was the sole site for this study. The decision to attend this particular university was made because it came up with the use of online proctoring for graduate and postgraduate final exams. Additionally, because this university uses an online proctoring platform to administer final exams for undergraduate and graduate students with backgrounds in science and the humanities, it offers a variety of data and information for the study.

3.2 Demographic of the Participant

The respondents selected were undergraduate and graduate students at the university. These students have backgrounds in both science and humanities. They already have graduates in both their specialized field and education. A small number of PG students have also pursued master's degrees in their fields of study. The sample was made up of BED and MED students from one of the renowned education departments. have participated in the current study. Samples were chosen, after which she emailed the recipients to share the Google form link and collect the responses while maintaining contact.

3.3 Procedure of data collection

For quantitative analysis, the researcher created a questionnaire to investigate challenges faced by students during online proctored examinations. To obtain comprehensive information from them, a questionnaire was created. And it was shared through Google Form. Data was analyzed using descriptive statistics for quantitative data gathered from diverse sources.

3.4 Data analysis & interpretation

After data collection, we read the data to familiarize ourselves with the information we had discovered because interpretive inquiry demands that the researcher fully immerse themselves in the data in order to understand the significance of their experiences that participants had described. After that, Data was analyzed using descriptive statistics for quantitative data gathered from diverse sources.

4.Results

4.1 Technical problems in online examination.

It has been noted that most students do not experience technical difficulties when taking exams online. They encounter issues with the login process and improper laptop browser use. Before starting their exam, students are having trouble with these issues. For some students, the issue with the exam's beginning is not enough data storage. The main difficulty

in taking an online exam is students' poor Internet connectivity, background noise, and interruptions in the electricity supply. which poses a challenge for online exams. During the exam process, students don't experience issues like their personal computers freezing and crashing at the most inconvenient times.

4.2 Violations during online examination

During the online exam, students encounter issues related to violations. When they use full screen mode or minimize the browser, they run into issues. One of the main issues students encounter during online exams is the camera and microphone not working. Students claim that the crucial exam movement is also recorded as cheating and captured on camera. Students are concerned that having their private information stored by an unreliable organization could seriously jeopardize their safety and privacy.

4.3 Issues while uploading papers.

Some of the students had issues with the time-consuming and challenging process of uploading answer sheets for subjective exams. In terms of the test, uploading scanned answer sheets is essential. Students emphasized that the time allotted for submitting the subjective answer sheet is incredibly brief. The process of converting handwritten answer sheets to PDF is challenging for students.

4.4 Analyze several exam-related issues & recommendations.

During proctored exams, students encounter difficulties. Significant issues have been highlighted, including, inescapable ambient noise, Online exams made people anxious because they warned them not to be in front of the camera even though they were in front of it, and they would receive warnings with the message "keep quiet" while typing, clicking, or moving the cursor. Uploading handwritten documents that have been scanned is so difficult, It takes less time to upload and convert answer script to PDF. Finding it challenging to scan and upload all the sheets due to the lengthy question paper How to upload the answer sheet into a PDF and send it is the issue. The subjective papers have a very short time limit. Time management, poor internet connectivity, and network issues are the only factors contributing to the issue. Hanging devices, sudden network issues, occasionally erroneous audio-video interruptions, the device occasionally hangs during the examination process. My ability to perform to the best of my ability is reduced as a result of the screen freezing, and my home and workplace environments make it difficult for me to maintain the decorum of the examination room due to an unsuitable setting. At home, it's annoying, there is less time available for typing, and according to the mark, several warnings actually increase tension during exams. This is very different from how it feels in a classroom. Online exams require a different approach to preparation and execution—devices must be fully charged.

The possible recommendations may ease the online examination. Software be changed to better meet the needs of students since so many students are having problems with it. More time should have been given to students taking exams of the descriptive variety to upload their papers. There should be a technological expert who can quickly address problems with students. It's crucial to solve technical problems quickly because only then will students stop freaking out. A manual on how to take exams should be available to students. A backup system should be ready before starting any examination. It is crucial to provide a tutorial on the exam process and go over any potential problems students might run into. Any infractions that might be noticed during an exam must be made clear to the students. At orientation, students should receive information. There must be some kind of practice test or exam set up for the students prior to exams. There should be adequate internet access for students. Additionally, it should be made clear during orientation what kinds of tools students can use for these tasks. The setting should be appropriate when giving an exam. It is important that everyone in our immediate area understands the examination. Students should be able to contact a support group right away when they have questions to save time.

Recommendations

- Since so many students are having problems with the software, it needs to be changed to better meet their needs.
- More time should have been given to students taking exams of the descriptive variety to upload their papers.
- There should be a technological expert who can quickly address problems with students.
- It is best to organize yourself into small groups for the examination.
- It's crucial to solve technical problems quickly because only then will students stop freaking out.
- A manual on how to take exams should be available to students.
- The students should be given more time to post their response sheets.
- A backup system should be ready before starting any examination.
- It's critical to provide guidance on the exam process and go over any potential issues.
- Any violations that might be noticed during an exam must be made known to the students. At orientation, students should receive information.
- An irrelevant pop-up should not be displayed to any learner using a mobile device.
- More time should be allotted for descriptive essay assignments.

- There should be a different way to submit the exam if a student can't administer it the following time due to connectivity or electrical problems.
- The students must be provided with some kind of study material or a practice test prior to exams.
- In order to be prepared for digital exams, our students must practice.
- For students who find the uploading issue to be particularly important, certain accommodation should be made.

Conclusion

In both the field of educational technology and general society, there has been a rapidly expanding excitement toward the educational innovation made possible by emerging technologies like AI and machine learning. Despite the upbeat thesis put forth by futuristic educational technologists, any alterations the new technologies make in a particular educational environment at a particular historical point call for careful scrutiny. The current study demonstrates how innovative online proctoring technologies are for the teacher-centered educational paradigm, which emphasizes various experiences in online proctoring exams. These technologies might appear to be a logical response to student misconduct in online assessments,

The CEO of Proctorio, Mike Olson, noted that the proctoring software did not punish students for being flagged; rather, it was the instructor's responsibility to review the footage and/or reports and determine whether or not there had been any instances of cheating. He points out elsewhere that instructors, not the program, decide what kinds of behaviors are marked as suspicious. The ability to control the student, the exam, and the environment is returned to us by online proctoring, but the focus on doing so obscures the original goal of the exercise, which was to give students a chance to show what they had learned and how they had improved. (Jessica Critten (2021, 23 July)

Numerous students taking online exams in various time zones and locations can be observed and helped by proctoring systems. Using computer surveillance software would significantly reduce cheating, ultimately protecting academic integrity, especially during this abrupt switch to remote learning.

In order to implement online proctored exams and their potential effects in the future, the current study identifies issues with technology compatibility, doubt about academic integrity/reliability, and validity. Students should also be well-informed in advance, and teachers should receive the appropriate training for this purpose. However, an online proctoring exam needs to be carefully planned in light of all these experiences.

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