
LESSON LEARNED: REFLECTIONS OF UNIVERSITAS TERBUKA'S NON-TRADITIONAL ASSESSMENT SOLUTIONS

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Abstract

Modern technology advancements have been reshaping and reforming education throughout the world. Furthermore, the Covid-19 outbreak is a powerful urge to establish more adaptive policies. Universitas Terbuka (UT) or the Indonesia Open University realizes that students are expecting to have a more individual and flexible learning during the Covid-19 outbreak, including the examination. UT makes use of new technology and innovations to establish the online proctoring examination that enables students to take the examination at their own places without the presence of the human proctors. Requirements to ensure the online proctoring examination meets the quality criteria were established. Previous studies show that students showed positive attitude towards the online proctoring examination. In the context of UT, due to students living in remote islands and the issue of the limited internet access might potentially challenge UT to implement the online proctoring examination. To provide solutions to the challenges, UT is demanded to develop alternative innovative solutions. Therefore, partnership with the government, private sectors, and other organizations is a necessary.

Introduction

Universitas Terbuka (UT) or the Indonesia Open University was established in 1984 to provide high school graduates and working people a greater access to tertiary education. In addition, it aimed to increase in-service teachers' competencies. As the only distance higher education institution in Indonesia, UT has been experimenting significant transformations. The development of modern technology in the last ten years is a key driver in that such transformations. In short, UT has been transforming from a traditional distance learning university to a cyber university. In practice, however, as modern technology and infrastructure, in particular the internet coverage, have not been equally distributed throughout the country, conventional services are still maintained, such as on-site tutorials (face-to-face tutorials) and on-site examinations. Although the number of internet users in Indonesia is increasing, most of the users reside in Java (Asosiasi

Penyelenggara Jasa Internet Indonesia, n.d.). This situation is viewed as challenges and opportunities, at the same time, that enables UT to explore innovations in all aspects of learning services and operational management.

Recently, a Covid-19 outbreak has doubled the challenges to face and the opportunities at the same time, which in turns boost new innovations and development. Due to Covid-19, large scale social restriction policy which is implemented across the nation prevents UT to hold face-to-face tutorials and on-site examinations. On-site online examinations which are held in regional offices and some appointed learning centres are also suspended. To ensure students accomplish the learning competency, UT adopts fixed-scheduled take home exam (FSTHE). As the FSTHE is unsupervised, the questions are developed to measure the high-level thinking skills for all subjects. The FSTHE materials, including the question items, scoring instructions and examination procedures are developed by lecturers and professors from face-to-face universities. In order to improve the quality of the examinations and to ensure all students develop the skills and competencies, UT highlights the importance of further innovations, including the development of online proctoring exam that enables students to take the exam at their own place with close supervision of students during the examinations. This paper is expected to address some insights into the development and practice of online proctoring as study of online proctoring is particularly limited (Woldeab & Brothen, 2019).

Online Proctoring Examination

The idea to develop the online proctoring application emerged three years ago. UT understood and realized that students are expected to have a more individual and flexible learning. In addition, the information technology infrastructures of Indonesia have been developed. In addition, student information technology literacy has also improved. Therefore, UT believed that the idea should be successfully executed. Initially, two teams were formed; one team is to set up the system and application and the other is to prepare the academic policy, including preparing the examination rules and regulations.

System and Application

The application can be installed in student personal laptop. However, to ensure that the examination runs smoothly, several minimal requirements are requested, including:

- Windows 8 operating system;
- Dual Core 2 GHz Processor;
- RAM 4 GB;
- Hard Disk 100 MB;
- Bandwidth 1 Mbps.

Lesson Learned: Reflections of Universitas Terbuka's Non-traditional Assessment Solutions

Once a student has installed the application, he is able to log in with his student number. The system automatically verifies his identity (face detection in real time), the hardware (microphone and camera), the room or place (student must rotate the camera 360° to ensure he is the only person in the room and there is no other facilities to help him do the examination, such as books, other laptops or personal computers, and other electronic devices), and the internet connection. After all requirements are completed, the students can start the examination. Figure 1 below illustrates the students' verification result.

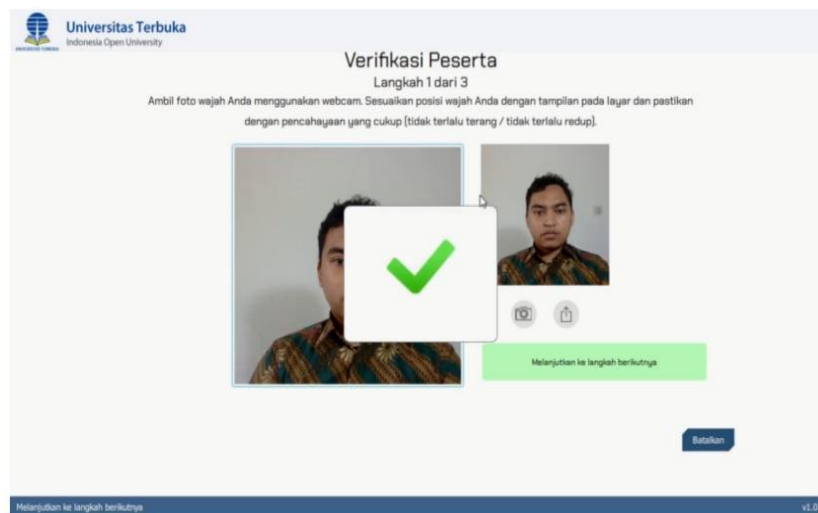


Figure 1. Student Verification

Proctoring process

During the examination, the camera on the laptop or personal computer is recording the student's head and eye movements. The application will recognize any suspicious movement and automatically there is a warning on the monitor to let the student know that he has violated the rules and regulations. This practice is also known as automated proctoring (Hussein, Yusuf, Deb, Fong, & Naidu, 2020). If the violations remain, the application will automatically close. This means that the student fails in the examination. However, if the student follows the rules and regulations, the application remains open as scheduled. After all questions are completed, the student clicks the submit button and the result will appear in several seconds.



Figure 2. Examination result

Figure 2 shows that the correct answers are 20 of 30 questions. The Examination Center at the UT Headquarter combines the score with, for example, the online tutorial score to generate a cumulative grade for each subject.

Quality assurance

UT has developed internal quality assurance framework that also covers both paper-based examination and online examination. As the online proctoring examination is particularly new, UT is currently developing a quality criteria for the online proctoring examination. The quality criteria are developed based on the standard for the paper-based and online examinations.

To minimize the problem during the online proctoring examination, UT provides an instruction manual to familiarize the students with the application. In addition, to meet with the requirements, UT keeps the recordings at the Universitas Terbuka Data Center for two years in case students complain about the examination results.

Future Trends

Student motivation and interest in taking the online proctoring examination at Universitas Terbuka is projected to increase, as it provides several advantages, including flexibility to take the exams anywhere, cost effectiveness, and instant results. Although majority the internet connectivity enjoyed by people living in urban areas, internet has been more accessible and affordable across the country. The idea to implement the online proctoring examination is supported by a study by Weiner and Hurtz (2017) who suggested that students have positive attitudes of online proctoring.

Students living on remote islands and the issue of the limited internet access might potentially challenge UT to implement the online proctoring examination. Therefore, UT is expected to develop a strategic partnership with the government, private sectors, and other organizations.

References

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