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# DESIGNING ENGLISH LANGUAGE TESTING USING

## A WEB-BASED MONITORING PLATFORM

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## **Abstract**

As the learning activities were switched to online because of the COVID-19 pandemic, changes in the way of learning also affects the facilities used both in the learning and the test activities. This situation requires language test developers to think more creatively to make the test online and to provide safe environment for the test without compromising the validity of the test. This paper aims to describe the steps of choosing the appropriate application used for the online language test, trials of the test, and the user manual made for the test. So, it requires new guidelines and new way of proctoring the online language tests. There are 4 steps that accommodate the needs, 1) Technology Selections, 2) User Manual Making, 3) Trials, and 4) Question Making. It can be concluded that the platform can provide webcam monitoring and variations of questions in language assessment, such as audio for listening tests. User Manuals help the test taker in understanding on how to access the platform, and the trials made it more comprehensive. From the questionnaiers, it can be concluded that the platform help to solve the problems and the test can be conducted without problematic issues

**Keywords:** Online Language Testing, webcam monitoring, designing test

#### **Abstrak**

Seiring dengan beralihnya kegiatan pembelajaran menjadi daring karena pandemi COVID-19, perubahan cara belajar juga mempengaruhi fasilitas yang digunakan baik dalam pembelajaran maupun kegiatan ujian. Situasi ini menuntut pengembang tes bahasa untuk berpikir lebih kreatif di dalam membuat tes online dan menyediakan lingkungan yang aman untuk tes tanpa mengorbankan validasi tes. Artikel ini bertujuan untuk mendeskripsikan langkah-langkah pemilihan aplikasi yang tepat digunakan untuk tes bahasa online, uji coba tes, dan manual pengguna yang dibuat untuk tes. Jadi, diperlukan pedoman baru dan cara baru untuk mengawasi tes bahasa online. Terdapat 4 langkah yang mengakomodir kebutuhan tersebut, 1) Pemilihan Teknologi, 2) Pembuatan User Manual, 3) Uji Coba, dan 4) Pembuatan Soal. Dapat disimpulkan bahwa platform yang dipilih dapat menyediakan pemantauan webcam dan variasi pertanyaan dalam tes bahasa, seperti audio untuk tes mendengarkan. Panduan Pengguna membantu peserta tes dalam memahami cara mengakses platform, dan uji coba membuatnya lebih komprehensif. Dari kuesioner, dapat disimpulkan bahwa platform membantu memecahkan masalah dan tes dapat dilakukan tanpa masalah yang berarti.

**Kata kunci:** tes Bahasa online, monitoring webcam, rancangan tes

## Introduction

The world of education that has been affected by COVID-19 pandemic must carry out an online learning to avoid the spread of the virus. This was stated in the Regulation of Minister of Education and Culture of the Republic of Indonesia No. 20 of 2020, so learning activities were carried out online or called distance learning (PJJ). Changes in the way of learning also affect the facilities that must be used both in the learning process and the tests that must be carried out. In the case of tests for measuring language proficiency, according to (Ockey, 2021) this situation forces test instrument developers to be more creative (Tao & Gao, 2022) in their approach to ensure a safe testing environment without compromising the validity of the test itself. One solution that can be implemented is to use online application technology developed for the purpose of security and validation.

However, switching from paper based to online test is not an easy thing to do because there are so many things to be considered of (Szopiński & Bachnik, 2022). The application chosen has to accommodate the students' needs and limitation, and prevent cheating in conducting the test. The application has to be accessed by test takers or students from any gadgets that are available such as smartphone, computer or laptop. The decision to use mobile gadgets was because

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it is easy to use and access and students are more interested in using them (López et al., 2011). Then, it has to be able to accessed in one window or tab, to prevent test takers from opening new tab or window. In addition, proctoring must be able to be conducted via webcam monitoring to prevent cheating (Dendir & Maxwell, 2020). In addition, the most important thing is that teachers have to gain awareness of digital transformation and adapt to the new technology (Meirovitz et al., 2022).

This paper aims to describe the process of choosing the appropriate application used for the online language test, trials of the test, and the user manual made for the test.

#### Research Methods

This research was conducted using a qualitative approach because this approach can give deeper insights into issues related to designing, administering and interpreting language assessment (Rahman, 2016). As it has been mentioned earlier, with the change of the implementation to be online where students conducted the test from their residences, a new procedure was needed in carrying out the test. The steps of the study was referring to the article "The Need for New Guidelines and Training for Remote/Online Testing and Proctoring Due to COVID-19" by (Sando et al., 2021) then there are at least 4 (four) things that must be considered in fulfilling the needs of the test guide (user manual), which are explained below:

# 1. Technology Selection

Several applications have been made to help conducting online testing and the main thing in choosing this application is that it can secure the test taker's screen so that students cannot access outside of the test screen. Other things that the application must have are the ability to perform live tests, a webcam feature, and a performance recording feature for test reviews.

## 2. User Manual Making

The User Manual can be made by schools, test administrators, or committees involved in administering tests. Then, this guide can be included in a syllabus or lesson plan, or sent to test takers via e-mail, and preferably there is a form stating students' understanding of the guide and signed. The guide can contain rules for the test facilities and infrastructure used, the test environment, or even the test taker's uniform. Then the test guide must also be able to provide information on the person in charge of the test if there are obstacles or emergencies in the implementation of the test. And most importantly in the guide are the sanctions given if the test takers do not follow the rules and guidelines that have been given.

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#### 3. Trials

The test takers must conduct a trial test on the application used and this must be done because the application has features that have not been used before by the test takers. This can also include a participant's test environment statement, confirmation of identity, understanding of test times, and confirmation of the user id for the test.

# 4. Question Making

Even though the integrity of the confidentiality of the test questions will be upheld by the test committee, it is likely that the questions will already be known by other test takers. Therefore, test questions must be made in several types or there is a diversity of questions.

There are some indicators that show the success of the study, one of which is the questionnaires asking about the test takers' understanding on using the test platform, and obstacles in understanding the features.

#### **Results and Discussion**

As it has been mentioned before, the study following the steps above.

# 1. Technology Selection

One of the applications that provides access to webcam monitoring-based online exams is the web platform e-ujian.com, so this platform was chosen because it can accommodate the intended webcam monitoring-based online English proficiency test. This platform can help administer the exam without the need for additional software and provides webcam monitoring and audio for the listening test, and provides these features in one test location. Taken from the e-ujian.com website, the following are excellent features that can be found on the platform in line with the needs of the language test.



Figure 1. Main features in the platform

From the features shown in Figure 1 above, they can accommodate the language test model, where the variations of the type of questions are audio, reading text and figure. The most important feature is webcam monitoring. So, the platform is suitable for language

assessments that have question models that require audio for the listening section, and of course this webcam monitoring feature can accommodate valid test implementations. Therefore, selecting an application on the e-ujian.com platform is the most appropriate choice because of its main features that can accommodate the language test question model as described above.

# 2. User Manual Making

As it has been suggested above, the making of the User Manual was conducted with a discussion between the headmaster and the related parties on the procedure of the test itself and the requirement of the test. Step by step explanation on how to use the platform was both written down on the User Manual in line with the actual process on accessing the platform and showed with pictures to give more visual explanation. While the requirements of the test was related to the purpose of the test, the test takers, and the design of the questions.

#### Trials

The purpose of the trials was to make the test takers familiar with the platform of the test, on how to log in, finish the test, answer the question and move on to the next one, and access the audio. However, there were obstacles that were found during trials:

#### - Electricity shut down

To overcome this, the setting on the platform was made into "Stop Timer when offline", so test takers can continue the test on the same page where it is left behind once the electricity shuts down.

#### Unstable internet connection

This causes audio unavailable to access, overlap, and arrive late on the platform. The suggestion was given to the test taker where they have to provide themselves and be ready with a stable internet connection. The results of this Trial are included in the User Manual so that participants can understand the problems that may encounter and know the solutions that can be taken. However, if other obstacles may arise, the guide includes the names and numbers of committee to help solve the problems encountered.

# 4. Question Making

The variations of questions made for the language tests can be accommodated by the platform. For listening questions, besides entering the text questions, audios have to be uploaded on the platform. For common types of question, the text questions can be directly put on the questions bar provided. And the last, for

The success of the implementation of the test can be seen from the questionnaires discussed by (Resdiana et al., 2021) where 94.1% understand the instruction of the test, 94.1% did not find any difficulties in accessing the platform and could log in easily and 88.7% did not encounter any obstacles in accessing the platform.

reading questions, the texts can be put on the reading text section, and the

questions are put on the place for questions.

## Conclusion

The process of designing a language assessment following the steps above can create a platform that is suitable for the needs. From the problems encountered because of the restrictions from the COVID-19, the platform can provide a valid and safe environment for the language testing because it was conducted based on web monitoring. Test taker could not access other tab and platform during test to prevent cheating. The technology selection was appropriate with the needs of the assessment where the platform can provide webcam monitoring and variations of questions in language assessment, such as audio for listening tests. User Manuals help the test taker to comprehend more on accessing the platform, in addition the trials made it more effective. From the questionnaiers distributed to the test takers, indeed the platform help to solve the problems and the test can be conducted without problematic issues.

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