Student Assessment of Application Use Safe Exam Browser (SEB) at Universitas Negeri Padang

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Abstract

This research aims to analyze student assessments of the use of the Safe Exam Browser (SEB) application for the final semester exam at Padang State University. This research was conducted using quantitative methods with a survey approach. The data source was taken using a questionnaire from seventy-five respondents who took general courses, all data was then analyzed descriptively. There are thirteen points discussed in student assessment. The research results show that the majority of students at Padang State University have experience using the Safe Exam Browser application and it also makes it easier for every student in the exam. Sometimes there are many obstacles in using it, because this is the first time using the Safe Exam Browser application. The results of this research can be used as initial data for subsequent researchers in studying different issues related to this problem as well as various other issues that are relevant to this context.

INTRODUCTION

The increasingly rapid development of human civilization influences the development of science and technology for world progress (Sudi, 2018; Surahman, 2013). Science and technology often include the interaction and impact of the results of science and technology on human life, in order to achieve the desired progress through the efficient and effective use of science and technology (Putra, 2017). Science and Technology is very influential in various fields, especially in the field of education, technological developments from time to time become more sophisticated based on innovation and human creativity (Suryana, 2020). In education, digital technology has become a tool to facilitate the teaching and learning process between teachers and students (Shalikhah, 2016). Innovation in learning is increasingly developing with the existence of e-learning innovation which makes the educational process easier (Silahuddin, 2015).

The use of distance learning or better known as online learning has been increasingly used since the end of 2019 for health reasons. Innovations in tools or applications have also emerged so that education can continue to be implemented in the midst of the pandemic outbreak that has hit the world, such as zoom, google classroom, discord, whatsapp, e-Learning, google form, quizz, and so on.

According to Achadah, (2019) a test is a form of evaluation instrument to measure how much a student's ability is to understand and master the main material that has been

taught. Exams are one way to evaluate the learning process (Hasan et al., 2017; Perkasa et al., 2015; Susilowati & Hidayat, 2022). In the world of education, exams are intended to measure the level of achievement of teaching objectives for students as learners, so that teachers and students can determine their level of ability in understanding the field of study. Exams are also a medium for measuring students' abilities, personality and intelligence in a field of study, with the results of these measurements obtained assessments that can be used to make various decisions (Daulay, 2016).

Online tests (online tests) are a method of assessing learning outcomes or measuring a person's level of ability to use a computer (Pradnya, 2020). This kind of learning method is very helpful for the process of assessing learning outcomes, because this kind of assessment is very accurate and minimizes the occurrence of human error, in contrast to manual tests using paper answer sheets. Factors of cheating and cheating among students still often occur in the written examination process and teachers as givers of final grades still experience difficulties in assessing students' answer sheets one by one. The online examination system was built based on demands for the effectiveness of the work of teachers in schools in holding efficient school examinations (Fitriyani, 2019). With this online examination system, it is hoped that it can provide a school examination system that is truly effective in updating the questions and the questions given are random and can determine the level of student intelligence.

The online examination system is part of the distance education information system via internet electronic technology or e-learning (Ambara, 2020; Sukanto, 2020). Information technology media is closely related to database systems as a data input and storage media that suits the needs of its users. As an information technology application, a web-based online exam system is software that implements a database management system (DBMS) in handling commands and requests from system users to the database. Online exams can reduce paper usage by up to 90% and exam result correction time by 100%. With this online examination system, it can reduce the budget and time required relatively little so that it is more effective and efficient (Arifin et al., 2018).

Safe Exam Browser (SEB) is a special anti-cheating web browser that restricts student actions to access other resources during the online exam. With the existence of this system, it is expected to facilitate and help schools and campuses in holding tests where the presentation of questions will be packaged practically and the answers to test questions will be evaluated automatically (Riyadi et al., 2019).

Research related to the Safe Exam Browser (SEB) exam has been studied by previous researchers such as Nasution & Nasution, (2020), but the researchers above took informal sources such as newspapers, magazines and bulletins. Then this material is integrated with the results of the study, namely content that has been linked to be combined with one's own knowledge. This process also requires critical analysis before carrying out the final process where a full report is provided by combining materials related to safe online alternative assessment through the Moodle learning management system with the referenced SEB (Safe Exam Browser) application as well as existing knowledge.

Padang State University also uses online learning media in lectures to maintain the learning process. There are various kinds of online learning media that are used duringstudy from home which was held at Padang State University, one of which was Safe Exam Browser (SEB). Safe Exam Browser (SEB) is a program for conducting exams, tests, etc. in online mode that provides various protections for exam administrators and reduces the level of cheating in exams among exam participants.

Regarding the use of the Safe Exam Browser (SEB) application at Padang State University, as is the issue raised and discussed in this research, the author needs to explain that there are many other exam applications, including Quizz, Google Form, and E-learning which can be accessed via the website so that There are differences between the SEB application and other applications. Padang State University uses this SEB application in holding general course exams January–July 2022.

METHODS

This research uses quantitative methods with a survey approach. The data source was taken through a questionnaire distributed to students taking general courses at Padang State University. Next, the research data was analyzed descriptively. According to Fitriani, (2020) descriptive analysis is one way to make it easier for writers to easily describe research results in quantitative research. Likewise, Mudjiyanto, (2018) stated that to describe the overall results of data analysis in a survey research, a researcher can use a descriptive analysis approach.

The population of this study were all Padang State University students who took general courses. Population is a combination of all elements formed by events, things, or people who have similar characteristics which is the center of attention of researchers, because it is seen as a research universe (Rachmad, 2019; Ratnawati & Vivianti, 2020). Population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Aprida et al., 2020; Karo-Karo et al., 2020).

The data collection method required in this research is a questionnaire. A questionnaire is a data collection technique that is carried out by giving a set or written statement to respondents to answer (Hasanah et al., 2020). The type of questionnaire used in this research is a closed questionnaire or structured questionnaire (closed questionnaire). Closed questionnaire is a questionnaire where alternative answers have been provided and respondents are asked to choose one answer that suits their characteristics, questionnaires distributed online use a Likert scale, the Likert scale is used to measure attitudes, opinions and perceptions of a person or group about social events or phenomena (Batubara, 2016).

RESULT AND DISCUSSION

Based on the results of statistical analysis of thirteen items that have been used as instruments related to student assessment of the use of the Safe Exam Browser application at Padang State University. The thirteen items are divided into four themes regarding student assessment in using the Safe Exam Browser application as shown below:
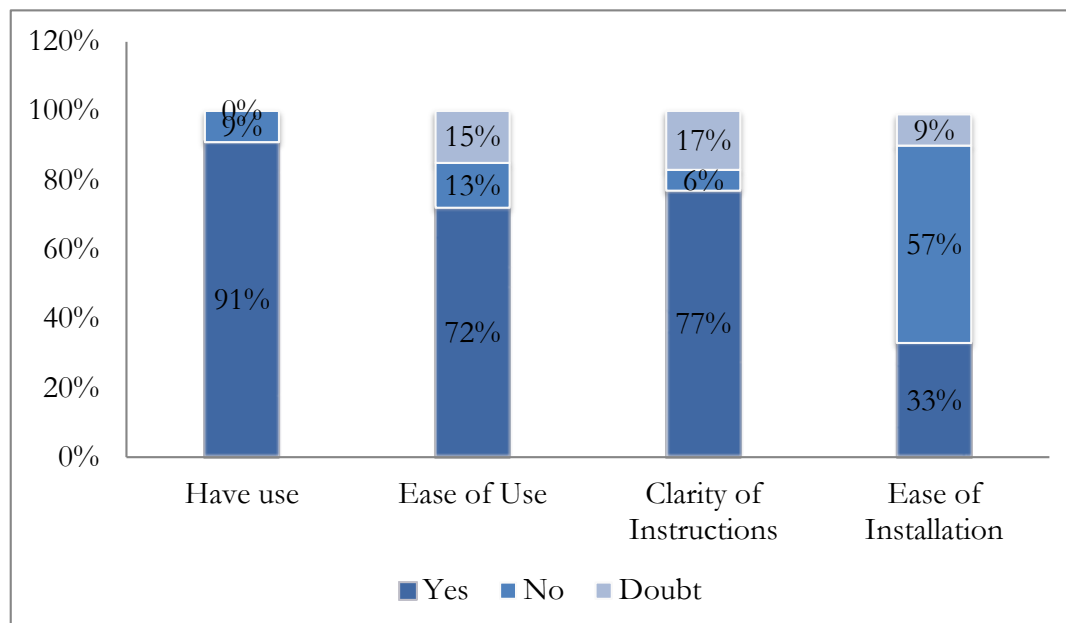
Fig 1. Descriptive analysis of students' assessments of the use of the Safe Exam Browser (SEM) application

Referring to the results of the analysis as seen in the picture above, the author can explain that. First, almost all respondents have used the Safe Exam Browser application, as many as 91% of respondents have used the Safe Exam Browser application. Second, for the item of ease in using the Safe Exam Browser application, the analysis results showed that

75% of respondents stated that the SEB application was easy to access. Third, for the item explanation from the university which is quite clear and easy to understand in the Safe Exam Browser application installation guide, the results found that 77% of respondents expressed approval for its use. Fourth, for the item there were problems with the Safe Exam Browser application, 57% of respondents stated that there were no problems in use, meaning that the Safe Exam Browser application was easy to install.
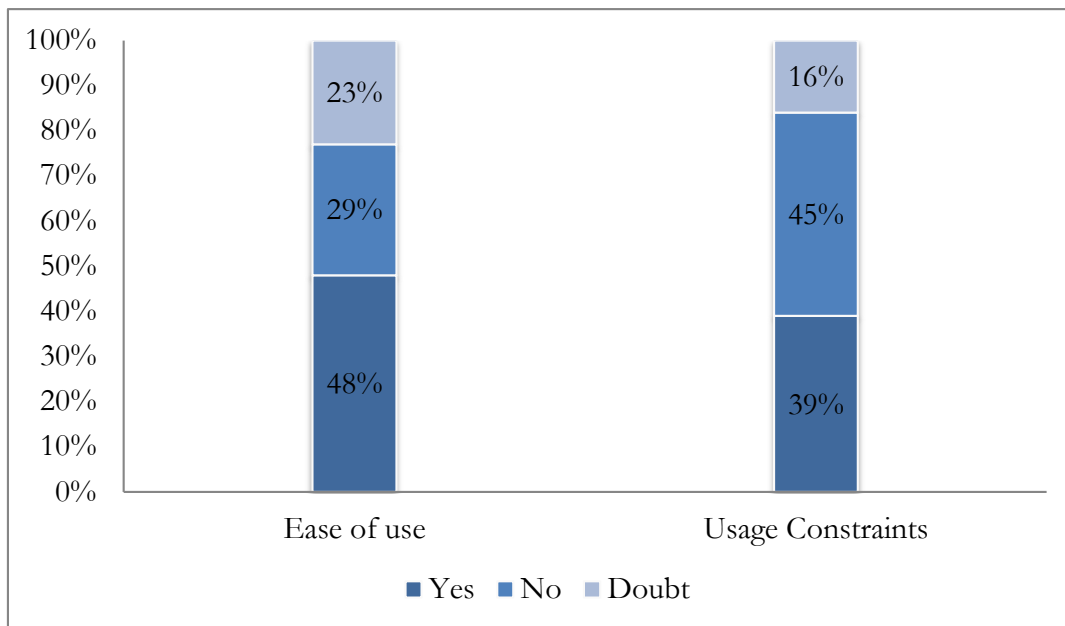
Fig 2. Descriptive analysis of student assessments of the ease and obstacles of using the Safe Exam Browser (SEM) application
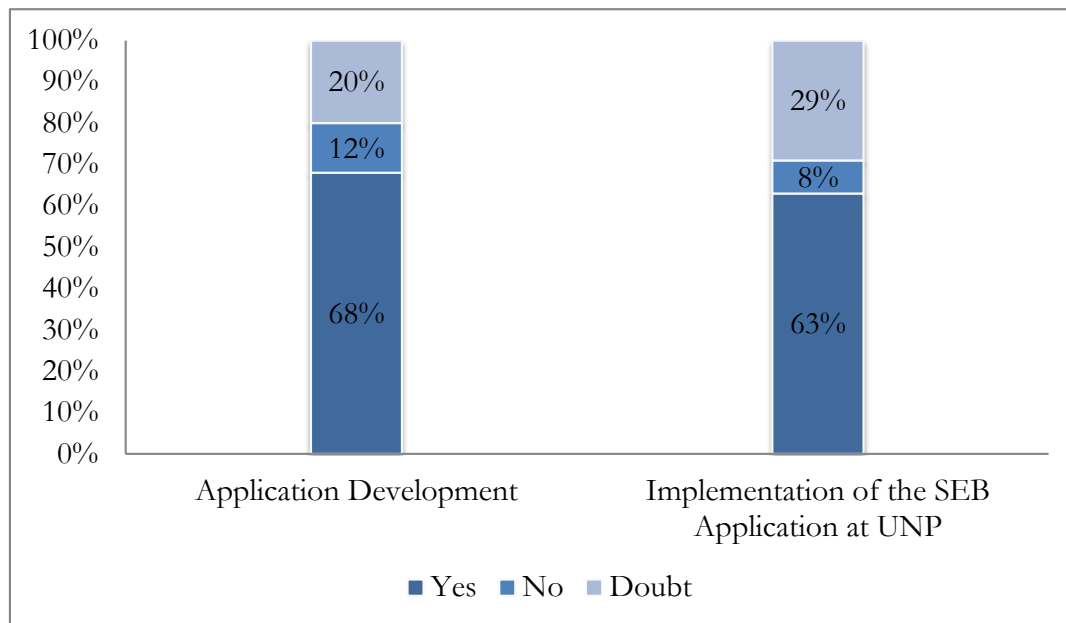
Fifth, Safe Exam Browser application questions provide ease of testing in Elearning, there are 48% of respondents who say it is easy and only 29% of respondents who say no.Sixth, for the item of problems in using the Safe Exam Browser application, the results showed that 45% of respondents stated that they had no problems using the Safe Exam Browser application.
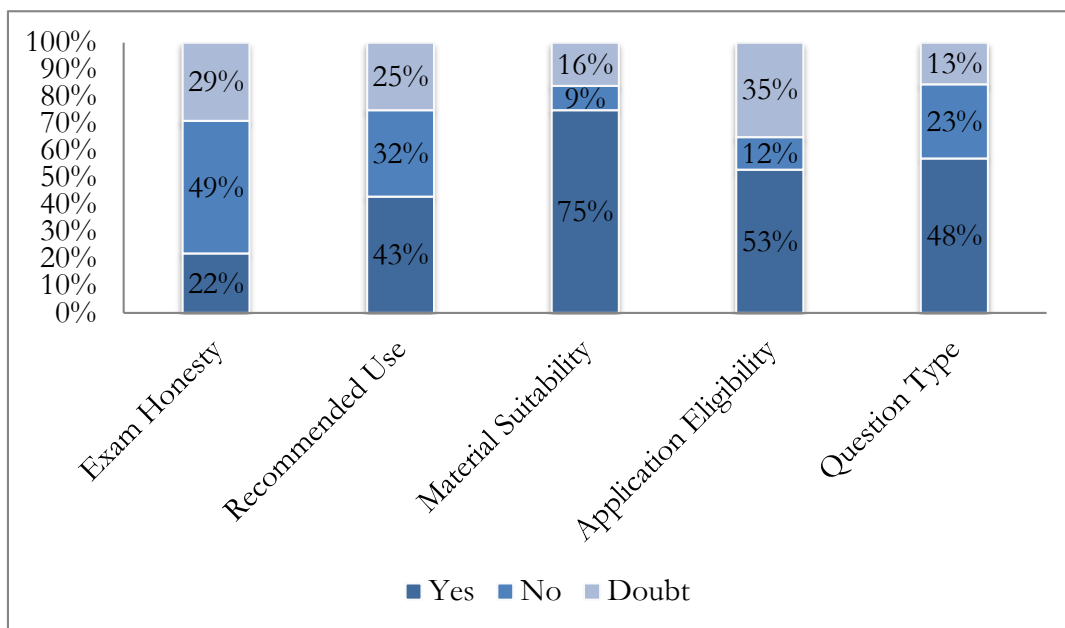
Fig 3. Descriptive analysis of student assessments regarding the suitability of using the Safe Exam Browser (SEM) application for Safe Exam Browser (SEM) material and questions

Seventh, for the Safe Exam Browser application item that guarantees honesty in exams, there are some who think that honesty is not guaranteed, and there are some who

guarantee honesty. As many as 49% of respondents stated that the Safe Exam Browser application did not guarantee honesty in exams and as many as 22% of respondents stated that the Safe Exam Browser application could guarantee honesty during exams. Eighth, for the recommendation item for the Safe Exam Browser application compared to other applications, as many as 43% of respondents stated that the Safe Exam Browser application was recommended as an application that is worth using compared to other applications. As many as 32% of respondents stated that it was not recommended for use. Ninth, for test question items that match the material, as many as 75% of respondents stated that it was appropriate and only 9% of respondents stated that it was not appropriate. Tenth, For application items suitable for use in the next exam, as many as 53% of respondents stated that the Safe Exam Browser application was suitable for use and only 12% of respondents stated that it was not suitable for use. Eleventh, for items using the Safe Exam Browser application, not only using objective answers, as many as 23% did not agree with it, and as many as 48% of respondents preferred to use only objective answers.

Fig 4. Descriptive analysis of student assessments regarding the development and implementation of the Safe Exam Browser (SEM) application

Twelve, for the Safe Exam Browser application item that can be developed for the learning process, as many as 68% of respondents agreed to this and only 12% of respondents did not agree with the development of the application. Thirteenth, As for the Safe Exam Browser application item, it is appropriate to implement it at Padang State University, as many as 63% of respondents agree with this, and only 8% of respondents disagree with it.

CONCLUSION

This research succeeded in revealing thirteen student assessments of the use of the Safe Exam Browser application at Padang State University. The thirteen assessment results are i) almost all respondents have used an application similar to Safe Exam Browser, ii) the Safe Exam Browser application is easy to access, iii) the explanation from the university is quite clear and easy to understand in the Safe Exam Browser application installation guide, iv) no there are problems in using the Safe Exam Browser application, v) the Safe Exam Browser application makes it easier than taking exams in E-Learning, vi) a small number of respondents experience problems in using the Safe Exam Browser application, vii) the Safe Exam Browser application guarantees honesty in exam, viii) recommend the Safe Exam Browser application when compared to online exams using G-form and the like, ix) the exam questions are appropriate to the material, x) the Safe Exam Browser application is

suitable for use for the next exam, xi) agree if you use this Safe Exam Browser application not only objective answers, xii) the Safe Exam Browser application can be developed for the learning process, and xiii) the Safe Exam Browser application is suitable for implementation at Padang State University.

Most students at Padang State University have experience using the Safe Exam Browser application and it also makes it easy for every student in the exam. Sometimes there are many obstacles in using it, because this is the first time using the Safe Exam Browser application. At least this research can be used as a basis and reference for future researchers to research this problem in different contexts and issues.

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