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## **Analysis of Student Responses to E-learning Resources and Activities**

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## Analysis of Student Responses to Resources and Activities E-Learning

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### Abstract

In early 2020, the outbreak spread in the world. In response to this emergency condition, the world's higher education institutions have been forced to resort to e-learning and digital tools. This study was conducted to find out the students' responses to resources and activity e-learning. The sample was composed of 37 students. The data were collected by questionnaire and analyzed by mean score and Likert scale. Using ideal normal standards for the various data above, it can be concluded that the student response to e-learning used at the University of Sarjanawiyata Tamansiswa can be described as follows for the student response indicator to the resources in e-learning, has 4.1 mean scores, it can be concluded that students assess resources in e-learning are considered good. Then, the activities in e-learning have a mean score of 3.8. This indicates that it is in a fair category.

**Keywords: Students' Response, E-learning, Pandemic**

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## Introduction

Since the outbreak of the pandemic caused by the Coronavirus in Indonesia, many ways have been taken by the government to prevent its spread. One of the efforts is a regulation which controlling the implementation of Education Policy in an Emergency for the Spread of Covid and press release number: 064 / Sipres / A6 / III / 2020, the Minister of Education urges teachers and lecturers in areas affected by Covid-19 to not go to school or campus, all learning activities can be done at home by utilizing technology or distance learning.

Since January 30, 2020, WHO has designated Covid-19 as a health emergency that has troubled the whole world (Dewi, 2020). WHO recommends temporarily eliminating activities that can cause crowds (Firman & Rahayu, 2020). Therefore, conventional learning that gathers many students in one room needs to be reviewed. In addition, according to Pujilestari (2020), learning will be more practical when students or learners can access information anytime and anywhere.

One alternative learning that can be carried out during the Covid-19 emergency is online learning (Firman & Rahayu, 2020). According to Isman (2016), online learning is the utilization of internet networks in the learning process. Moore, Dickson-Deane, & Galyen (2011) conveys that online learning is learning that uses internet networks with accessibility, connectivity, flexibility, and the ability to generate various types of learning interactions. The research stated by Zhang, Zhao, Zhou, & Jay (2004) shows that the use of the internet and multimedia technology is able to change the way of conveying knowledge and can be an alternative to learning carried out in traditional classrooms.

In practice, online learning requires the support of mobile devices such as smartphones, tablets, and laptops which can be used to access information anywhere and anytime (Gikas & Grant, 2013). The use of mobile technology has a significant contribution to education, including the accomplishment of distance learning goals (Korucu & Alkan, 2011). Various media can be used to support the implementation of online learning such as virtual classes on Google Classroom, Edmodo, and Schoology services (Enriquez, 2014; Iftakhar, 2016; Sicat, 2015) and instant messaging applications, WhatsApp (So, 2016). Online learning can even be done through social media such as Facebook and Instagram (Kumar & Nanda, 2019).

Pujilestari (2020) explains that the readiness of the government in implementing the program is not optimal. It happens because of the lack of availability of human resources, the process of technological transformation, telecommunications infrastructure, and governing legal instruments. Even though the urgency of online learning before the Covid-19 pandemic has been recognized by educators, according to Sanjaya (2020), unpreparedness for college should not be a reason for the formation of financial compensation policy and grades for students. Higher education is responsible for stakeholders to ensure quality, namely by giving students the right to receive optimal knowledge. Learning disruption during this emergency period only occurs a week or two at the start, so there should be no excuse for lectures not giving optimal knowledge.

Therefore, it is necessary to evaluate online learning for one semester to obtain a good concept of learning in the new normal era. Quality assurance is the responsibility of the university in the learning process. Student responses in online learning during the last semester can be used as an aspect of making appropriate e-learning design. If Universities have suitable e-learning design, the students can accomplish the objectives of learning well.

E-Learning or electronic learning is a concept in the learning process using ICT, especially using Internet-based media (Darmayanti, Setiani, & Oetojo, 2007). E-learning is learning whose implementation is supported by technology services such as telephone, audio, videotape, satellite, or computer transmission (Kusmana, 2017).

E-learning eases the interaction between students and learning materials, moreover, the interaction between students and lecturers or fellow students. Students can share information on various matters relating to lessons and other needs for student self-development. Lecturers can commit teaching materials online that can be downloaded by students, and assign the students and submit them via email. Interaction can also be carried out directly between students and lecturers or fellow students through discussion forums (Muzid & Munir, 2005). E-learning is not only limited to a learning process that is static, stand-alone, and one-way, but must be collaborative (Chandrawati, 2010).

The limitations of e-Learning, as stated by Churchill, 2005, are:

1. The combination of the Internet with the concept of learning or internet learning.
2. Use of network technology (Web) to create, grow, disseminate, and facilitate the learning process without being bound by time and place.
3. Efforts to form (attitudes) someone so as not to be individualistic, broad-minded, dynamic in learning, able to develop knowledge, and to become learners and practitioners who are able to develop skills.
4. Efforts to develop accountability, increase intelligence, and provide opportunities for individuals and organizations to keep abreast of the times through the world of the Internet
5. A force that makes individuals and organizations compete and provides opportunities for them to keep abreast of global economic changes.

E-learning is a distance learning that utilizes the internet as an online communication medium (Yazdi, 2012). E-learning has been started since 1970. Various terms have been used, including online learnings, internet-enabled learning, virtual learning, and web-based learning. There are 3 important requirements in e-learning learning activities, namely learning activities carried out by the internet network, the availability of learning support services for students, for example, external hard drives, flash disks, CD-ROMs, and the availability of tutor service support that can help students if they experience difficulties (Hartanto, 2016).

Effective and efficient learning can develop three domains of learning, namely, knowledge (cognitive), attitudes (affective) and skills (psychomotor) (Herawati, 2015). The learning process and assessment techniques are used by the lecturer to determine the success of students in understanding and implementing the material (Trianto, 2009). Learning will be better with a relevant topic using the active learning method (Nyoman). Qualified learning should have measurable goals (Setiawan, 2017). Suyono (2011) explains that the criteria for effective learning include (1) fun learning, (2) fun method learning for challenging (3) learning is supported by lecturers and a friendly environment. Good learning can be created by various ways to stimulate the following kinds of individuals: (1) visual, namely through the sense of sight, (2) audio, namely through the sense of hearing, (3) kinesthetic, namely through individual movement, (4) tactile, namely through touch or smell (Setiawan, 2017). In essence, learning activities are systematical activities that manage environmental conditions thus, students can reach a certain level of ability (Gasong, 2018).

The response is an action given by other people after receiving, feeling, trying, and paying attention to something. Based on the Indonesian English dictionary written by Echols & Shadily (2005) states, the response comes from the word response which means answer, reply, or reaction. The Allen & Seaman (2013) report

looked at online education, including the growing presence of massive open online courses (MOOCs), from the institutional perspective, not from the students’.

The drafting standards used in making some of the questions in the response questionnaire regarding the use of learning media were developed using the RASE approach. This approach is explicitly used to see the effectiveness of social networks as a learning medium, RASE itself stands for (resource, activity, support, evaluation). Balasubramanian, Jaykumar, & Fukey (2014) said that the RASE Pedagogical model was developed to support teachers to use online learning platforms such as Moodle, Blackboard, or other media. Ineffective, student-centered and engaging way to achieve intended outcomes in their modules. The RASE approach in this study was used in seeing the approval, disapproval and neutrality of students through the answers given to the response questionnaire given by the researcher.

## **Method**

### **Research Types**

This research is survey research. The purpose of this study was to obtain an overview of student responses to the resources and activities contained in the e-learning feature at Sarjanawiyata Tamansiswa University. E-learning referred to online learning which can be accessed anywhere and anytime via an Android mobile phone, laptop or other gadgets. The research was conducted by distributing survey instruments to students. The instrument was developed using the RASE approach with 2 indicators and 10 items, which were then uploaded on the google form and filled out online by the respondents. The research subjects were students of the Sajanawiyata Tamansiswa University. The sample was 37 students. The range of the questionnaire is a score of 1-5, which is described in the criteria: Very Poor (VP), Poor (P), Fair (F), Good (G) and Excellent (VG). Furthermore, the data from the questionnaire were analyzed using the Miles & Huberman analysis model which consisted of three stages, namely data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994). Analysis of research data, the data reduction stage is the phase of collecting all the information needed from the survey results through a questionnaire distributed online. The data display stage is the exposure of data needed in research and that does not need to be discarded. The withdrawal and conclusion verification stage is the phase of interpreting research data to draw conclusions based on the phenomena obtained (Miles & Huberman, 1994).

## **Results and Discussion**

In the initial observation activities, researchers observed the conditions of lectures during the pandemic. In general, the three classes with various semester levels indicated that lectures were going well. Lecturers are able to apply distance lectures, but the learning which is felt by students has not been able to be mapped. All recorded assessments only come from students' cognitive results which were done online.

Researchers understand that lectures should be able to map students' abilities holistically. Lectures can not be called good if they are only measured from the implementation of direct learning. The quantity of lectures is indeed one aspect of lecture assessment. However, the quality of lectures needs to be observed so that the quality of knowledge gained by students can be equivalent to offline lectures.

After that, the researchers formulated important indicators to maintain the quality of the leading media for online lectures. Then, the researcher examines several theories that contain important things that must be met in e-learning. Student retention in online programs is particularly relevant to the discussion of student satisfaction with their online experience (Cole, Shelley, & Swartz, 2014).

The satisfaction of students can be measured by students’ responses to online learning. Walgito (2004) states that there are two factors for the formation of the response, namely:

1. Internal factors: related to body and spirit. Normal physical conditions make it easier to make an observation. With such conditions, the results are more precise so that the likelihood of response is higher. The second is the spiritual condition, which includes feelings and views to change or reinforce a person's decision to respond to something.

2. External factors: these factors relate to the objects used. The learning environment is influenced by the use of these objects, as users of the objects used will get a stimulus to create a response. Therefore, teachers who want to get student responses must be able to adjust between external factors and the physical and spiritual conditions of students.

Table 1. The Indicators of Students' Response Questionnaire

<b>Students' response to the e-learning resources</b>
I can find and download files on e-learning material easily
I like the file-sharing option because it allows me to access learning materials from the lecturers
I got unlimited digital storage, and it is very useful for storing data.
E-learning can preview files and it is very useful to review before downloading them.
I like the feature (filtering by submission) of the search options.
<b>Students' response to the e-learning activities</b>
I like to use e-learning to have group discussions with lecturers
I like to use e-learning to have discussions with friends
e-learning helps me for searching information that sent by the lecturer
e-learning helps me for searching information or files that sent by friends
I like to take tests via e-learning because the answer key will show directly after the test is finished.

The sum of the respondents is 37 students, with the following results:

Table 1. The Average Score of Students' Response on Each indicator

Indicators	Item Descriptions	Average Score Response
<b>Students' response to the e-learning resources</b>	I can find and download files on e-learning material easily	4.2
	I like the file-sharing option because it allows me to access learning materials from the lecturers	4.1
	I got unlimited digital storage, and it is very useful for storing data.	3.8
	E-learning can preview files, and it is very useful to review before downloading them.	4.1
	I like the feature (filtering by submission) of the search options.	4.1
<b>Students' response to the e-learning activities</b>	I like to use e-learning to have group discussions with lecturers	3.7
	I like to use e-learning to have discussions with friends	3.4
	e-learning helps me for searching information that sent by the lecturer	4.0
	e-learning helps me for searching information or files that sent by friends	3.9
	I like to take tests via e-learning because the answer key will show directly after the test is finished.	3.8

The details of the aspects will be described in the following chart:

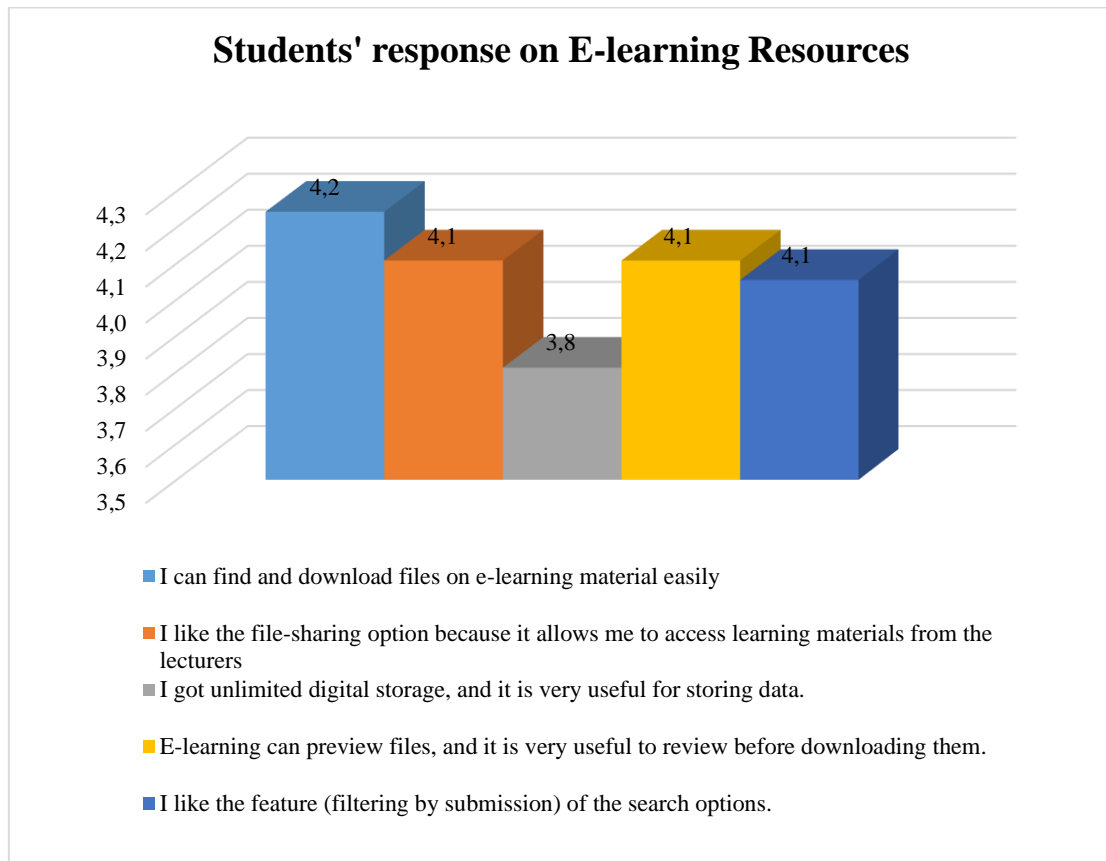


Figure 1. The Chart of Students' response to E-learning Resources

The graphic above is a summation of student responses to the resources on e-learning. The mean score of students' responses can find and download files on e-learning material easily is 4.2. The mean score of students like the file-sharing option because it allows me to access learning materials from the lecturer's ice was 4.1. Students stated that digital storage was unlimited so it was very useful, achieving a mean score of 3.8. Students stated that e-learning could preview files and it is very useful to review before downloading them, expressed by a mean score of 4.1. The mean score of students likes the e-learning features is 4.1.

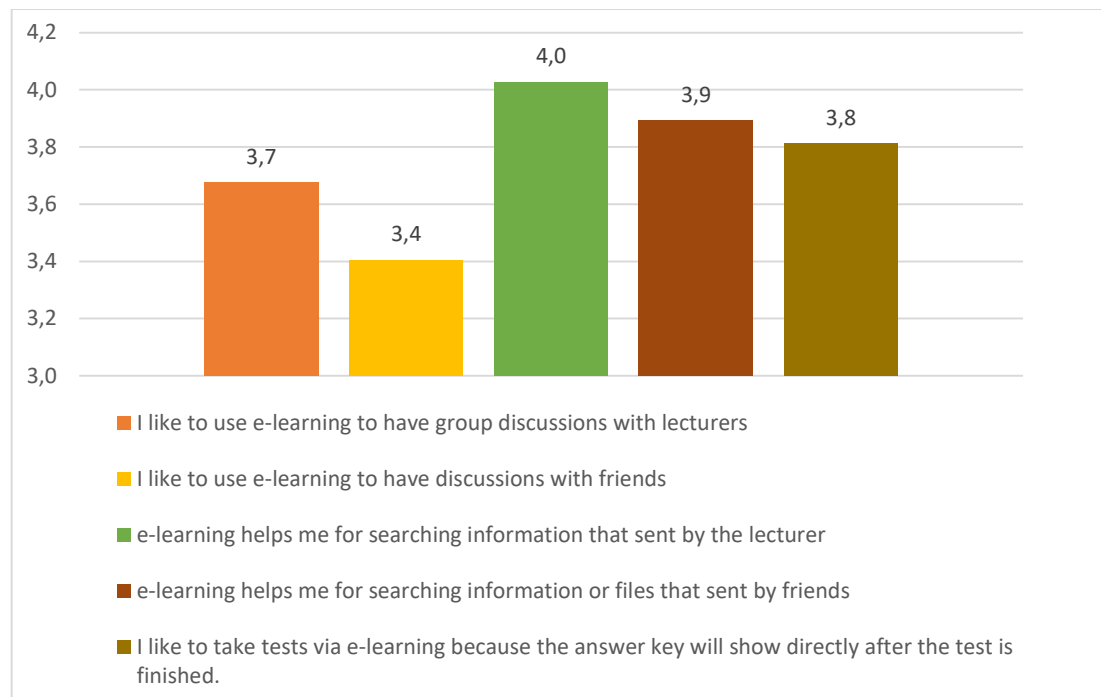


Figure 2. The Chart of Students' response to E-learning Activities

As illustrated in the chart above, the students' responses in the use of e-learning in discussions with lecturers obtained a mean score of 3.7. The average score of 3.4 is obtained in the use of e-learning when discussing with friends. This is because discussed with friends can use other platforms that are more flexible and have various features. The average score of student responses in responding to the e-learning facilities in helping to search for files or information which is sent by lecturers was 4.0. Student responses about e-learning that help them search for information or files sent by friends reached an average score of 3.9. In contrast, the mean score of student responses to activities in e-learning related to rapid assessment responses at the end of the test was 3.8.

Table 3. The Criteria Scale of Students' Response

Criteria	Scale
Excelent (VG)	> 4,36
Good (G)	4,06 – 4,36
Fair (F)	3,76 – 4,06
Poor (P)	3,47 – 3,76
Very Poor (VP)	< 3,47

Using ideal standards for the various data above, it can be concluded that the student response to e-learning used at the University of Tamansiswa sarjanawiyata can be described as follows, for the student response indicator to the resources in e-learning has a 4.1 mean score, it can be concluded that students assess resources in e-learning are considered good. Then, the activities in e-learning have 3.8 mean scores. This indicates that it is in a fair category.

The use of the internet and multimedia technology is able to change the way of conveying knowledge and can be an alternative learning method (Zhang et al., 2004). E-learning can connect lecturers and students in virtual classroom interactions (Kuntarto, 2017). In the traditional view, the direct study is the only one concept of learning in higher education between lecturers and students that take place in the lecture hall or the classroom (Darmayanti et al., 2007). Learning for students in tertiary institutions requires different strategies and techniques from learning for children (pedagogical). The assumptions of education or learning for adults are self-concept, experience, learning readiness, and learning orientation. Thus, a different approach is needed. The role of the facilitator in this case is not only transferring knowledge to students, but also encouraging student involvement in the learning process independently (Sudiyono, 2006). The student support system in e-learning



includes all services and supports that lead to student academic success. Therefore, some additional features need to develop for enhancing the e-learning quality.

## Conclusion

This study describes students' responses to two aspects in a series of questionnaires for monitoring the implementation of Elearning at the University of Sarjanawiyata Tamansiswa. The two aspects are students on e-learning resources which are considered to be in a good category, and student responses on learning activities that are in fair category.

## Recommendations

The results show that the University needs to develop an additional feature that can increase student activity in order to compromise with fellow students. The additional feature will be optimal if the feature can be connected with other platforms to enhance student interest.

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