

## THE ANALYSIS OF STUDENTS' E-LEARNING READINESS ON ENGLISH LEARNING PROCESS

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Received : October, 2021

Accepted : December, 2021

Published : December, 2021

### ABSTRACT

*The process of English Learning before and during Covid-19 pandemic is very difference. The learning process which is conducted at school has changed into distance learning process. All schools are required to implement e-learning to support the distance learning process. This study was aimed at analyzing students' e-learning readiness toward the implementation of e-learning at SMK Negeri 1 Kubutambahan. A mixed-method research design utilizing concurrent embedded model which is a quantitative method as a primer method was employed in this study. A questionnaire of students' e-learning readiness and an observation sheet were used to collect the data. The obtained data were then analyzed quantitatively and qualitatively. The result of the study showed that the readiness of SMK Negeri 1 Kubutambahan students in using e-learning in the context of distance learning is classified on ready category which still needs some improvement. From the four aspects of readiness assessed, there is one aspect that belongs to unready category that requires a little improvement, namely the technological aspect. Meanwhile, the other three aspects, namely aspects of innovation, people, and self-development belong to the ready category which requires a little improvement in its implementation.*

**Keywords :** E-learning, E-learning readiness, distance learning

### INTRODUCTION

Students in Indonesia usually learn English at school with the guidance of their teachers. However, at the beginning of 2020, when Covid-19 began to hit Indonesia, there was a rapid transformation of education from a conventional system to a digital system. The learning process that was previously carried out at school suddenly has to move to be conducted at home. The teachers are required to do teaching and learning activities through online. According to Isman (2016), online learning is the use of internet network in the learning process. The implementation of distance learning is carried out as an effort to realize the goals of education in Indonesia in the midst of the Covid-19 pandemic, as well as an effort to prevent the spread of the Covid-19 virus. Thus, learning innovation is a solution that needs to be designed and implemented by teachers by maximizing the existing online media.

Teachers can conduct learning process by using E-Learning system which is a learning that uses information and communication technology. E-Learning is the most appropriate method to support distance learning (Stanley, 2020). The use of e-learning

can make students more independent in learning with various approaches that allow students to control or manage themselves in learning. Furthermore, Keller, et al. (2002) states that the use of e-learning in the learning process can improve student achievement because they can think widely. This has an impact on student self-confidence where students feel more confident in online class discussions than discussions that are carried out directly in the class.

All learning activities must be able to be carried out in the application of e-learning even though it is done remotely through technology and internet. According to Haughey & Anderson (1998), there are three types of e-learning model that can be used in the learning process, such as web course, web-centric course, and web-enhanced course. In the web course model, the learning process occurs without any face-to-face interaction between teachers and students. The use of the internet is very necessary in the learning process using this model. All learning activities such as discussions, assignments, and assessment or exams will be delivered with the help of the internet. This model can be categorized as distance learning. Web-centric course is an e-learning model that combines face-to-face learning and distance learning. In this model, the teacher will ask students to study the material obtained from the web or other sources and then the teacher together with the students will discuss the material in face-to-face interaction. Meanwhile, the main point of web-enhanced course is on the teachers' knowledge about internet technology in teaching the students. In this model, the teachers must be able to understand the use of internet on how to display learning materials in the website.

Based on the preliminary observations, SMK Negeri 1 Kubutambahan is one of the schools that utilizes e-learning in the learning process. This school has used e-learning since before the Covid-19 pandemic. Before the pandemic, most of the teachers in this school have used e-learning to support the learning process. However, the e-learning applications are only used for giving and collecting the assignments. Even though this school has been familiar with e-learning before the Covid-19 pandemic, there are still many obstacles and difficulties found in using e-learning applications, especially in learning English in the context of distance learning. Some of the obstacles and difficulties faced are unstable network or internet connections, lack of adequate hardware facilities, and lack of student understanding in using the e-learning applications. Therefore, the use of e-learning to support distance learning is still developing.

One of the factors that lead to the successful of e-learning implementation is e-learning readiness. Demir Kaymak & Horzum (2013) define E-learning Readiness as the readiness of the institution or user in implementing e-learning to support the learning process. This is related to the readiness of users to use technology in the application of e-learning (Hashim & Tasir, 2014). There are several factors that can be used to measure the level of e-learning readiness, namely technology, innovation, people, and self-development (Aydin & Tasci, 2005). Technology in learning is a tool used to improve learning activities so that students are more critical in dealing with problems and aim at increasing the students' achievement. Technology consists of two components, namely hardware and software. An organization that will implement e-learning must have requirements at least for the minimum hardware requirements and software requirements that can run the hardware. The innovation factor considers the experience of human resources in the organization in adopting a new innovation,

namely e-learning. The innovation factor involves examining past experiences of e-learning users that may influence the current adoption of e-learning. Human factors consider the characteristics of the existing human resources in the organization. The success of an organization is strongly influenced by the skills of human resources. The self-development factor assesses the readiness of the organization to implement e-learning. Managers who believe in the power of self-development, and employees who have a positive attitude towards self-development can adopt e-learning innovations more easily compared to those who do not have this basic character (Aydin & Tasci, 2005).

Based on the results of research conducted by Stanley (2020) it was found that students' readiness to use e-learning was still lacking in terms of LMS training. In addition, the lack of internet connection is also a problem faced by students. The results of this study are in line with the problems found in SMK Negeri 1 Kubutambahan in the use of e-learning, which include unstable network status which can make the students difficult to access the e-learning applications used, limited knowledge in using e-learning applications or lack of LMS training, and lack of adequate technological facilities.

Based on this problem, there is an interest in conducting a research related to the implementation of e-learning, especially in learning English in the context of distance learning at SMK Negeri 1 Kubutambahan. This study was focused on analyzing the level of students' e-learning readiness toward the implementation of e-learning at SMK Negeri 1 Kubutambahan. Theoretically, the result of this research are expected to contribute to the level of students' readiness in implementing e-learning on the English learning process in the context of distance learning during this pandemic. Practically, the result of this study can be a reference to improve students' e-learning readiness and to improve the facility as well as infrastructure in implementing e-learning.

## METHOD

In order to achieve the purpose of the study, this research employed a mixed-method research design utilizing concurrent embedded model. In this research model, there are primary methods used to obtain the main data and secondary methods used to obtain data that support the main data. The primary method used in this study was quantitative method since the main goal of this study is to analyze the level of students' e-learning readiness toward the implementation of e-learning at SMK Negeri 1 Kubutambahan. The 11th grade students of SMK Negeri 1 Kubutambahan were chosen as the subject of this study since the students in this class have used e-learning to support the learning process since they were in 10th grade, so that they have experience in using e-learning even though the context is still in normal learning carried out at school.

Two instruments were used to collect the data in this study. The first instrument is a questionnaire of students' e-learning readiness developed using Aydin & Tasci model. Meanwhile, to collect the qualitative data, an observation sheet was used to observe the English learning process using e-learning media. The observation was done in order to describe the process of English learning by using e-learning in the context of distance learning. The data of observation were also used to support the data collected from questionnaire. Before being used for data collection, the questionnaire of students' e-learning readiness was tested for its validity and reliability. The content

validity test was done using Gregory formula which involved 2 experts as evaluator of the developed instrument. Based on the results of the content validity test, the questionnaire of students' e-learning readiness can be categorized as an instrument with a high level of validity. Then, the test was continued to empirical validity. To test the empirical validity, the instrument was tested on groups of students who were not included in the subject of this study. The calculation of empirical validity was done using the product moment correlation formula from Karl Pearson. Based on the results of the correlation index for all items of the instrument, there are 15 valid statements and 5 invalid statements. Thus, only 15 statement items can be used to collect the data on students' e-learning readiness. After obtaining a valid instrument, then the instrument reliability coefficient was calculated using Alpha-Cronbach formula. Based on the calculation results, the instrument reliability coefficient is 0.80. It means that the questionnaire of students' e-learning readiness has very high reliability, so this instrument can be used for collecting the data.

A descriptive statistical analysis was used to analyze the quantitative data of this study. This descriptive statistical analysis aims to obtain the mean score of each item analyzed. This mean score is used to determine the level of students' readiness in implementing e-learning in the learning process by looking at the ELR scale from Aydin and Tasci that can be seen in the following figure 1.

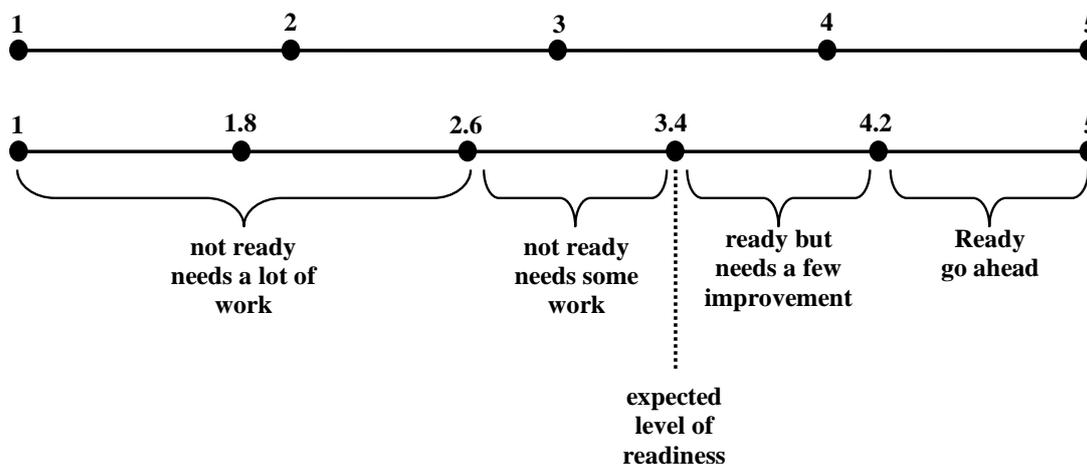


Figure 1. The ELR Scale from Aydin and Tasci (2005)

Meanwhile, the qualitative data was analyzed qualitatively by explaining or describing the phenomena encountered during the observation.

## FINDING AND DISCUSSION

This study was aimed at analyzing students' e-learning readiness toward the implementation of e-learning at SMK Negeri 1 Kubutambahan. The questionnaire used to collect the data of students' e-learning readiness was developed by adopting Aydin & Tasci (2005) which covers four factors of e-learning readiness, such as the factor of technology, innovation, people, and self-development. These four factors were developed into 15 statements after it was tested for content and empirical validity test.

The results of the student readiness questionnaire for the use of e-learning at SMK Negeri 1 Kubutambahan can be seen in the following graph (figure 2).

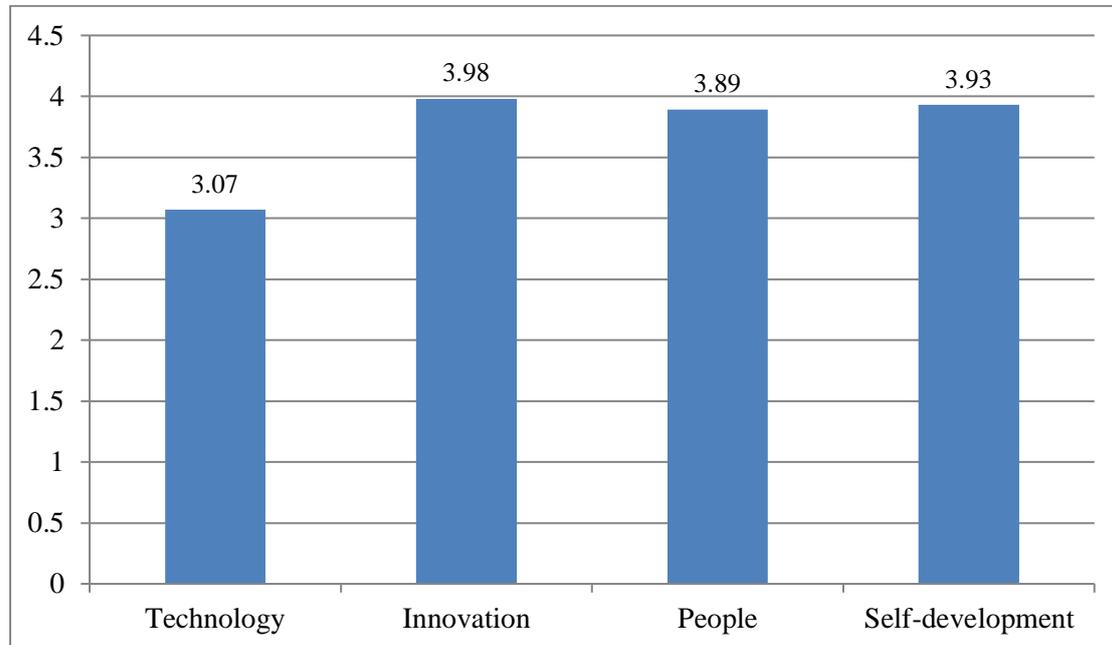


Figure 2. The Mean Score of Students' E-Learning Readiness on English Learning

According to Aydin & Tasci (2005), the mean score of 3.41 is the minimum score for the level of readiness to implement e-learning. Based on the the ELR scale from Aydin and Tasci on figure 1, it can be seen that the students of SMK Negeri 1 Kubutambahan are not ready and need a little improvement on the technological aspect in the implementation of e-learning with the mean score is 3.07. This is also supported by the result of observation during the learning process using e-learning. In every meeting, there were some students who cannot follow the lesson due to the lack of adequate technology owned by the students. Besides, the students responded the teacher's instructions and questions slowly since the device used often have trouble and very slow in operating e-learning. It showed that the software and hardware facilities used by students are inadequate which can make the students quite difficult to participate in online learning through e-learning.

Technological problems including software and hardware facilities often occur in the implementation of e-learning. Ramadan, et al. (2019) also found that students are not ready to implement e-learning and also need improvement. All findings contained the same meaning which requires the school to make various improvements in order to make the implementation of e-learning successful. One of the improvements that need special attention is technology readiness. The students must have adequate technological facilities to make learning more effective. This also support the research findings conducted by Muryani (2017) which found that the readiness of high school students in Central Java in terms of technology skills was in the medium category and needed various improvements. Good facilities are very important in the implementation of e-

learning since facilities are tools to enable students to learn in e-learning classes effectively.

Besides the technological readiness, the innovation aspect is also one of the important factors to measure the level of student readiness in the implementation of e-learning (Aydin & Tasci, 2005). The innovation factor involves examining the past experiences of e-learning users that may influence the current adoption of e-learning. Based on the result of questionnaire, it was found that the students' e-learning readiness on the aspect of innovation is in ready category which needs a little improvement with the mean score of 3.98. From the observation conducted in the learning process using e-learning can be seen that there were some students who had weak internet connection problems in participating the learning process using e-learning. However, the students could overcome this problem by finding the nearby Wi-Fi spots that have good internet connections so that they can rejoin the learning process using e-learning.

The findings on this aspect of innovation are in line with the findings of research conducted by Handining, et al. (2019). The findings showed that the students' readiness in the innovation aspect in the application of e-learning belongs to ready category and the students have a good understanding of solving problems in the implementation of e-learning, such as students being able to find locations with good internet connections and Wi-Fi spots to support the learning process using e-learning. According to Sadikin & Hamidah (2020), the use of Wi-Fi with a good internet connection plays a very important role in the implementation of e-learning which can make the students easily to follow the distance learning process and can do the learning activities well through e-learning. By seeing the efforts of the students who are already active in finding solutions to solve problems and fix the obstacles, it can be concluded that the students are ready to implement e-learning, especially in the aspect of innovation.

Furthermore, people readiness is also one of the important aspects that can be used to measure the students' readiness in implementing e-learning (Aydin & Tasci, 2005). According to Muqtadiroh, et al. (2018), the aspects of people readiness related to the human resources and the students' ability to use e-learning. It makes the human skills in using e-learning becomes the key success in implementing e-learning. The result of questionnaire showed that the students of SMK Negeri 1 Kubutambahan are classified as ready and need a little improvement in the use of e-learning, especially in the people aspect. The mean score obtained on the aspect of people readiness is 3.89. This is in accordance with the findings of observations conducted in the learning process using e-learning which shows that the students have been able to follow the distance learning process well, although some are still seen to be very slow. The students were seen to be able to access the material provided, able to participate in the discussions guided by the teacher and also able to work on and collect the tasks given well.

These findings also support the research findings conducted by Handining, et al. (2019) who revealed that the students in today's era have good skills in the use of technology. Students are able to use applications in e-learning to carry out the learning process and do the assignment effectively. According to Suprayekti (2018), the students in the current era are very skilled in using technology since they belong to Z generation in which this generation has been familiar with technology when they were children. This is also supported by the development of a new curriculum that emphasizes the students to master technology related to learning. Besides, Shampa Iftakhar (2016), argues that the students in the current era are very close to the use of technology and the

internet. It makes difficult for them to be separated from the use of the internet in supporting their daily activities.

The last aspect used to measure the students' readiness in implementing e-learning is self-development (Aydin & Tasci 2005). This aspect relates to the improvement of the students' learning outcomes through the use of e-learning in the learning process. Besides, this aspect also assesses the readiness of organization to implement e-learning. This aspect includes the organization's willingness to prepare a special budget to carry out the development of organizational and individual initiatives. Budget or funds are one of the determining tools, without the support of adequate funds, the work will not run smoothly (Suryosubroto, 2002). According to Suharsini stated in Suryosubroto (2002), the sources of financing for educational activities come from four sources, namely the government, students' parents, and government loan funds from abroad. As long as the financial support is still running, the implementation of e-learning will run smoothly and can improve the students' learning outcomes.

Based on the result of questionnaire, the students' readiness in the aspects of self-development belongs to ready category which still needs a few improvements. The mean score for this aspect is 3.93. This readiness can also be seen from the result of observation which showed that most students are able to interact actively in the distance learning process and can improve their learning outcomes which cannot be separated from the internet quota assistance provided by both schools and the government in the form of internet learning quotas. Kristina, et al. (2020) revealed that the high school students in Indonesia get free internet quota of 35 GB that can be used by the students in accessing e-learning as a support for the distance learning process. Furthermore, Mudawamah (2020) explains that the use of the internet is a very important factor in improving student learning outcomes in the distance learning process using e-learning. The free internet quota can help students to download the materials and assignments given continuously. It also supports the research finding of Kristina, et al. (2020) who found that the students are able to download the learning materials easily without worrying about the costs incurred during the distance learning process using e-learning.

When it is viewed from all aspects, the total score of students' readiness level shows the number of 3.72. It means that the level of students' readiness to implement e-learning in English learning on the distance learning context at SMK Negeri 1 Kubutambahan belongs to ready category which needs a few improvement in its implementation. These findings are in line with the research findings conducted by Handining et al. (2019). In their research, it was found that most of the factors indicate that students are ready to implement e-learning, although some improvement is still needed with a total score of 3.77 for all factors. Furthermore, Muryani (2017) in her research also found that the readiness of high school students in Central Java to the application of e-learning is classified as a medium category. This means that students are ready to use e-learning in the learning process but still need some improvements.

## IMPLICATION

The result of this study showed that students are ready for e-learning but need a few improvements. Several factors should be improved, such as technology, people, innovation, and self-development. In the technology factor, the schools should be more concerned about the e-learning facilities. Students need to have proper facilities in e-

learning, including software, hardware, and network. it makes the learning process using e-learning run well, especially in the context of distance learning. Regarding to the innovation factor, the teacher can make a useful teaching strategy using e-learning. The teacher can use learning media such as video to engage the students in learning. It will make the students interest in learning by using e-learning. For the people factor, the school should give training or workshops for teachers and students in using e-learning. It is needed because the students' skill is related with how they can learn in e-learning. The last improvements which is needed is in self-development. In this case, the teacher can give motivation to the students by giving them games quizzes online. It will make the students feel happy in learning as well as to improve their achievements.

## CONCLUSION

Based on the result of the study, it can be concluded that the level of students' readiness to implement e-learning in English learning on the distance learning context at SMK Negeri 1 Kubutambahan belongs to ready category which needs a few improvement in its implementation. From the four aspects of readiness assessed, there is one aspect that belongs to the not ready category that requires a few improvements, namely the technological aspect. While the other three aspects, namely aspects of innovation, human, and self-development are classified into ready category which requires a little improvement in its application.

There are some suggestions that need to be conveyed based on the result of the study. These suggestions are addressed to the students and teachers who implement e-learning on English learning process. The students are expected to be more motivated in the learning process by using e-learning, especially in learning English. The students are advised not to give up easily in finding solutions to various problems encountered in conducting the learning process using e-learning. Besides, the school and the teacher should be more concerned on technological facilities, both software and hardware owned by students in implementing e-learning. Moreover, it is very important for the school to conduct socialization and training related to the use of e-learning applications that can support the distance learning process.

## REFERENCES

- Aydin, C. H. & Tasci D. (2005). Measuring Readiness for e-Learning: Reflections from an Emerging country. *Educational Technology & Society*, 8(4).
- Demir Kaymak, Z., & Horzum, M. B. (2013). Relationship between Online Learning Readiness and Structure and Interaction of Online Learning Students. *Kuram ve Uygulamada Egitim Bilimleri*, 13(3), 1792–1797. <https://doi.org/10.12738/estp.2013.3.1580>
- Hadining, A. F., Sukanta, & Hidayat, W. (2019). An Investigation of Student Perspective for E-Learning Readiness Measurement. *Proceedings of the International Conference on Industrial Engineering and Operations Management, 2019 (MAR)*, 548–555.

- Hashim, H., & Tasir, Z. (2014). E-learning readiness. *Proceedings - 2014 International Conference on Teaching and Learning in Computing and Engineering, LATICE 2014, April 2014*, 267–271. <https://doi.org/10.1109/LaTiCE.2014.58>
- Haughey, M. dan Anderson, T. (1998). *Networking Learning: The Pedagogy of the Internet*. Montreal: Cheneliere/McGraw-Hill.
- Isman, Mhd. (2016). Pembelajaran Media dalam Jaringan (Moda Jaringan). *The Progressive and Fun Education Seminar*, 586.
- Keller, C., & Cernerud, L. (2002). Students' Perceptions of E-learning in University Education. *Journal of Educational Media*, 27(1–2), 55–67. <https://doi.org/10.1080/0305498032000045458>
- Kristina, M., Sari, R. N., & Nagara, E. S. (2020). *Model Pelaksanaan Pembelajaran Daring pada Masa Pandemi Covid 19 di Provinsi Lampung. IV(2)*, 200–209.
- Mudawamah, N. S. (2020). Perilaku Pengguna Internet : Studi Kasus pada Mahasiswa Jurusan Perpustakaan dan Ilmu Informasi UIN Maulana Malik Ibrahim. *Jurnal Kajian Perpustakaan dan Informasi, Vol. 4 No.(1)*, 107–113. <http://journal2.um.ac.id/index.php/bibliotika/article/download/14762/6000>
- Muryani, C. (2017). Importance Developing E-Learning for High School Students in Sragen Regency, Central Java. *IJPTE : International Journal of Pedagogy and Teacher Education, 1(2)*. <https://doi.org/10.20961/ijpte.v1i2.14884>
- Ramadan, R., Pradnyana, I. M. A., & Suyasa, P. W. A. (2019). Pengukuran Tingkat Kesiapan Implementasi E-Learning (E-Learning Readiness) di SMAN 2 Singaraja Menggunakan Model Chapnick. *Jurnal Pendidikan Teknologi dan Kejuruan, 16(2)*, 258. <https://doi.org/10.23887/jptk-undiksha.v16i2.18683>
- Sadikin, A., & Hamidah, A. (2020). Pembelajaran Daring di Tengah Wabah Covid-19. *Biodik, 6(2)*, 109–119. <https://doi.org/10.22437/bio.v6i2.9759>
- Shampa Iftakhar. (2016). Google Classroom: What Works and How? *Journal of Education and Social Sciences, 3*, 12–18.
- Stanley. (2020). The Effect of E-Learning Based on Schoology and Student Interest to Metacognitive Thinking Skill of Vocational High School Students in Archival Subject. *International Journal of Research and Review, 6(Januari)*, 397–404.
- Suryosubroto. (2002). *Proses Belajar Mengajar di Sekolah*. Jakarta: Rineka Cipta.