******

**International Conference on English Language Teaching (ICON-ELT)**

**English Education Department, Faculty of Teacher Training and Education, University of Islam Malang**

November 20-21, 2020

P-ISSN: xxxx-xxxx, E-ISSN: xxxx-xxxx

Volume: 1

**Enhancing ELT Classroom Using Moodle E-Learning during Pandemic: Students’ and Teachers’ Voices**

**Arifin Nur Himawan 1, Arlischa Ardinengtyas 2**

*1 Universitas Ahmad Dahlan (Master of English Education Program, Universitas Ahmad Dahlan, Yogyakarta, Indonesia,)*

*2 Universitas Ahmad Dahlan (Master of English Education Program, Universitas Ahmad Dahlan, Yogyakarta, Indonesia,)*

1arifinhimawan92@gmail.com, 2arlischa@yahoo.co.id,

**ABSTRACT**

Pandemic disease (COVID-19) that happened at the end of December 2019 brings tremendous impacts for Indonesian education. This phenomenon some how challenges the teachers and school stakeholders to find the best strategy to solve the problem. Responding to this situation, the ministry of education appeals to some educational institutions to conduct online learning during the pandemic. SMA Muhammadiyah 2 Yogyakarta is one of the schools which consistently adhered to the regulation by maintaining the learning process through Moodle E Learning-Based. This research is designed under a phenomenological study to explore the students’ and teachers’ perceptions toward the implementation of Moodle E-Learning in ELT during pandemic disease. The semi-structured interview was conducted among twenty students and three teachers to get the extricate data based on their beliefs, perceptions, experience, and perspectives toward the phenomenon. The use of Moodle E-Learning brings some benefits to the ELT Classroom. The result presents that the use of Moodle E-Learning builds the students’ learning interest. Moreover, it contributes to some enhancements of technological and pedagogical aspects in ELT. The integration of ICT internet broadband, comprehensive material, and learning sources are beneficial to expand the students’ autonomous learning and problem-solving skills. Maximizing Moodle E-Learning features such as discussion forum and teleconference can bridge the demand of blended learning. Thus, Moodle E-Learning is the recommended platform for conducting online learning.

Keywords: Moodle E-Learning; Platform; Students’ Learning Interest; Students’ Autonomous Learning; Problem Solving Skill; Blended Learning

**INTRODUCTION**

The use of technology is very popular for the young generation to attain their life and knowledge desires. R. Raja (2018) explains that students nowadays prefer to use technology because they can get positive outcomes. Online resources carry out students’ pleasure to get information and knowledge. The presence of technology has changed the educational paradigm in a modern style where the students have wide access for learning. An advance learning technology allows the teacher to conduct Distance learning (Thomas. At all.,2012).

The changes in the educational paradigm are generated from the contribution of industrial revolution 4.0. Lase (2019) states that industrial revolution 4.0 changes the way of thinking in education. The use of advanced technology, automation, and data exchanges improve classroom activities through the virtual world. In addition, Lase (2015) explains that industrial revolution 4.0 combines the virtual world, automation technology, and cyber technology to produce automatic production. Therefore, the use of internet is beneficial to expand virtual learning. This type of learning is commonly called as online learning. Internet can be defined as a global area network that connects the computer systems through networking system protocol and allows the user to share information (Setiyani, 2010). It helps the students to get sophisticated knowledge and information access with a low budget (Dogruer, Eyyam, and Menevis, 2011). Waryanto (2016) and R. Raja (2018) claim that the internet enables students to have stylish access of information through electronic learning (E-Learning).

The development of the internet has reached the future demand for learning. It has a great contribution to the development of E-Learning in education. Elyas, (2018) defines E-Learning as the use of the internet to facilitate the learning process through information data transmission. The interconnection network system enables the students to get information and knowledge beyond the limits. Ucu et al.(2018) explain that the characteristic of E-Learning class is to enable students and teachers to use electronic devices that provide autonomous learning. While Jethro, At. all (2012) say that there are some benefits of E-Learning in education such as improving learning quality, developing students learning engagement, and learning interest. E-Learning offers a wide range of tools to enable teachers and learners to be innovative and creative.

The popularization of E-Learning begins to change the current learning trends. Blended learning is the most popular learning trends in education. Wahid (2019) explains that blended learning refers to the combination of face to face teaching and computer technology. The main purpose is to enhance learning flexibility and provide wide access for autonomous learning. Mufdalifah (2017) in her research explains that the use of E-Learning and social media platforms is beneficial to create an interactive learning environment. It facilitates the students learning needs in any situation.

Since the pandemic disease (COVID 19) spread to the entire population of the countries, the use of E-Learning is very popular for the teacher and educational stakeholders to conduct online learning during the pandemic. In Indonesia, it becomes an alternative way to be implemented. The ministry of education works collaboratively with some educational institutions to define an appropriate strategy to conduct online learning during pandemic. Some regulations have been taken including performing online learning for all educational institutions. Even, the ministry of education launches a circular No. 36962/MPK.A/HK/2020 which obligates all educational institutions to conduct online learning during COVID-19.

Responding to this situation, teachers and educators take a great consideration to utilize a suitable E-Learning platform to maintain the learning process during pandemic disease (COVID 19). E-Learning platform is defined as various stages of the institutional education process where the means of communication and informational technology are significantly utilized (Dodun et al., 2015). It is an interactive online service that provides a broad way of information access, tools, and resources to reinforce the learning process through the internet (Ghirardini, 2011). Currently, the use of open-source platform obtains high demand from the teachers and educators. There are many open e-learning resources available to be implemented such as google classroom, Edmodo, and also Schoology. Most of them are expedited by stylish and user-friendly features interface with an obvious operation. Usman (2016) accentuates that Edmodo and other open-source platforms are furnished by stylish features including grade book, quiz, library, file/link attachment, and many other features that empower teachers to maintain their online learning.

Apart from its sophisticated features, open-source E-Learning platforms such as Edmodo and Schoology gain some deficiencies. Usman (2016) reveals that the open-source platform such as Edmodo is mostly being designed by its provider for informal institution usage. The default platform interface cannot be customized in the formal display. In addition, Haryanto (2018) explains that the default setting of the Schoology restricts the user to access through non-android smartphone. As an open-source E-Learning platform, Moodle has some advanced features to cover those problems. Benta, Bologa, and Dzitac (2014) explain that Moodle is an open-source E-Learning platform designed to provide an integrated learning system to create a personalized and formal learning environment. Gunawan, at all. (2016) and Singh (2016) convey that Moodle is a distinguished E-Learning platform that is used to promote adaptive learning between teachers and students. In addition, it enables the user to get wide access to be an administrator to create the working structure and modify the course by using additional plugins.

Many kinds of research are conducted to investigate the potentials of E-Learning in education. Soliman (2014) and Almaqtri (2014) explain that the use of E-Learning is successfully generated students' language proficiency. Some online quizzes provide an effective way for the students to do the assignment. While Mutambik (2018) explains that the implementation of e-learning enhances students' language proficiency and independent learning. In addition, free E-Learning platforms such as Edmodo and Schoology take some benefits in classroom activities. Muhlis (2017) and Usman (2016) state that there are some potentials of Edmodo. It provides a convenient way to maintain online learning, discussion, and evaluation. Moreover, the use of another E-Learning platform such as Schoology can enhance the students’ learning achievement (Tigowati et al., 2017). Those researches are generally present the potentials and benefits of open-source E-Learning platform in education, but only a few data that present the use of customized E-Learning platform such as Moodle in education. Moodle is one of the common E-Learning platforms which has a customized design setting to support the learning process. It has multiple features that can be adjusted and integrated with the school portal and website. Hence, this research is conducted to find the potentials of Moodle E-Learning in education. The researcher develops some questions to investigate the potentials of Moodle E-Learning in education. First, how does Moodle E-Learning influence students' learning interests? Second, how does Moodle E-Learning influence learning quality? Third, how does Moodle E-Learning bridge the demand of blended learning trends?

**METHODS**

This research was developed under phenomenological qualitative research. Christensen, Johnson, & Turner (2014) explains that phenomenological research concern to describe the experience of phenomena happen to participant`s life world. The purpose is to describe a certain phenomenon accurately based on the truth of the fact (Groenewald, 2004). Further, purposive sampling was performed to determine the participants. Etikan (2016) explains that purposive sampling enables us to have a chance to determine the participants based on their quality possessed. Some criteria had been set up to be used as the measurement for the participants. For the students, they must be actively registered as the students of SMA Muhammadiyah 2 Yogyakarta, familiar with the internet or gadget, and they must have an experience to join the learning activities during COVID-19 by using E-Learning. Based on those criteria, the researcher chooses twenty students as participants. All the participants are taken from grade X because the researcher works an English teacher dedicated to teach grade X students. For the teacher, the criteria which have been set is the teacher who has at least five years of teaching experience in ELT, and the teacher must have the experience to use E-Learning at least for six months during the pandemic disease. As the result, there are three teachers available to meet the criteria of being the participant.

To collect the data, the first phase of the study is investigating the phenomenon that happened at SMA Muhammadiyah 2 Yogyakarta. After that, the researcher conducted a semi-structured interview with the participants to get deep information about the phenomenon. As explained by Anne Galleta (2013), the use of a semi-structured interview is beneficial to obtain extricate data based on the participants’ experience and perspectives toward the related phenomena. In this research, the researcher conducts a semi-structured interview for both students and teachers to extricate the data about their beliefs, experiences, and perspectives toward the phenomena. Interviewing both students and teachers avoids the subjectivity of the data finding. It is very beneficial to get the extricate data based on the student’s experience and perspectives toward the phenomenon without any intervention. It depicts the real fact of what the students feel, reflect, and experience in joining ELT classrooms using Moodle E-Learning. While for the teacher, the semi-structured was conducted to obtain detailed information related to their experiences, perceptions, and believes, toward the use of Moodle E-Learning in ELT during the pandemic disease. The next step is developing the descriptive comments taken from the interview transcript by identifying the key phrase, explanations, description, and emotional despond from the participants. The descriptive comments were used to create brief descriptions of the phenomena or cases being investigated. Cooper, Fleischer, & Cotton (2012) claims that the descriptive comments are beneficial to identify the key phrase, explanations, description, and emotional responses from the participants.

**RESULTS AND DISCUSSION**

In this section, the researcher provides some data findings to answer the research questions. The findings concern about students’ and teachers’ perceptions toward the use of the Moodle E-Learning platform during COVID 19). The finding data were constructed and analyzed based on the students' perceptions collected from the interview script and questionnaire responses. To ensure the participants' privacy, the researcher used the pseudo name of the participants such as Azhar (Students 1), Memei (Students 2), Anto (Teacher1), Yanti (Teacher 2), and so forth.

**Moodle E-Learning builds students’ learning interests.** The current Indonesian curriculum (Kurikulum 2013) tends to emphasize the students’ critical thinking and problem-solving skill. The use of an enjoyable learning strategy and learning media is a key to achieve the above learning goals. In this case, the use of Moodle E-Learning is an alternative way to build students’ learning interests. Luaran et al.(2014) explain that the use of advanced technology in Moodle E-Learning brings some positive environment in the classroom. The use of internet sources, interactive, and multimedia learning materials engage the students’ interest.

After conducting interview processes with some students, the researcher found that the use of Moodle as an E-Learning provides some enjoyment during the learning process and it improves their learning interest.

“I feel enjoy in this learning method. I am quite interested with the use of Moodle E-Learning because it provides an easy way for learning. It brings wide access for us to access learning source flexibly through the internet.” (Arif)

“The use of Moodle E-Learning is very interesting for me because at that time we need a learning system which enables students to study from home during pandemic disease. The features of the system are user friendly where the students can use it to expand their knowledge. It provides some effortless features which enable us to submit our work and do some online exercises.” (Adel)

While from the teachers’ perception, it can be realized that the students have positive responses toward the use of Moodle E-Learning. It provides enjoyable learning and evaluation where students can get stylish features on it. They prefer to use this platform to join long-distance learning because they do not need to have a direct meeting as usual.

“On my side, the use of Moodle E-Learning improves the students’ learning interest because it has stylish features that provide convenience for the students’ to access the learning materials. Furthermore, it has advanced features of evaluation where the students can get direct feedback through this platform.” (Yanti)

“………………….. the use of moodle E-Learning provides an efficient way and it is very simple ya.. because it can be accessed everywhere and any time, hence the students no need to have the direct meeting.” (Anto)

From the explanation above it can be inferred that the use of Moodle E-Learning improves students’ interest during the learning process. The stylish features and user-friendly display help the students to get enjoyment to expand their knowledge. Moreover, it provides a simple way to complete learning activities and learning assignments through interactive features.

**Moodle E-Learning contributes to the enhancement of technological and pedagogical aspects.** The use of advanced technology and pedagogical aspects are keys for having outstanding online learning. Bezhovski and Poorani (2011) explain that an excellent installation of technology including an E-Learning platform and infrastructure which enables students to get an adequate learning facility and resource. While E-Learning content is the pedagogical aspect used to expand the learners’ knowledge. After conducting some interviews with the students, it can be realized that Moodle E-Learning provides stylish learning features and enjoyable tools to support the learning process.

“A good e-learning platform such as Moodle provides some enjoyment for the students to join virtual learning with their gadgets. I am very interested in it because I think it is the new style of learning where we can enroll in the class with our gadget.” (Ray)

“I think that the learning material on Moodle E-Learning is very interesting. I can get a lot of information, not only in conventional form but also in stylish mode. My teacher delivered the material well by using learning flog video, and learning animation so I can get a lot from that.” (Delvin)

From the teachers’ responses, the use of technological platforms, internet broadband, and infrastructure is very useful to support online learning activities and build a positive learning environment. While the pedagogical aspects such as comprehensive learning material and supportive media are very useful to conduct virtual learning during pandemic disease (COVID 19).

“I think it is very beneficial to improve both technological and pedagogical aspects. Moodle E-Learning becomes one of the learning platforms which contributes to support the technological aspect because it enables the teachers to develop their technological skills and knowledge. Furthermore, it encourages the teacher to improve their skill to design the attractive learning material using technological platforms to facilitate the students to enroll the online learning during the pandemic.” (Bunga)

“….. of course, because the teachers need to have good knowledge in both technological aspects and pedagogical aspect. Those aspects cant be separated during the learning process. The use of moodle E-Learning helps the teacher to improve their technological and pedagogical aspects.” (Yanti)

By considering the responses above, it can be concluded that both technological and pedagogical aspects are essential to conduct online learning. Moodle E-Learning provides stylish learning features and enjoyable tools to support the learning process. Moreover, the use of comprehensive learning materials and enjoyable learning media is very useful to conduct virtual learning during pandemic disease (COVID 19). While the implementation of Moodle E-Learning encourages the teacher to improve both technological and pedagogical aspects.

**Moodle E-Learning features provide various learning styles.** Generating learning styles is an essential aspect to be considered by the teacher because it provides wide access for the students to have successful learning. Prystiananta (2018) defines the learning styles as the way of students to retain knowledge and information. There are some differences in learning styles among the students including visual, auditory, and kinesthetic. Every student has their learning style and they may choose the best one to assist their understanding.

The result of the interview process showed that Moodle E-Learning features assist the students to learn the material through various styles. They explained that the use of Moodle generates various learning styles. It has stylish features and user-friendly display that enable students to have various learning styles.

“I think that the features are very useful to improve the learning quality because it provides a variety of learning. It avoids some monotonous learning and I like it.” (Arif)

“……….The use of multimedia learning, visual and audiovisual learning helps the students to have good comprehension. (Ceny)

From the teachers’ responses, the students give more insights toward the use of Moodle E-Learning during the learning process. According to their perspective, it provides flexible learning and efficient learning. Students can get wide access to find any learning resource through the internet, therefore they get a lot of exposures for learning and they can perform the best learning style.

“Sure, because the Moodle E-Learning provides many kinds of features that enable students to access learning materials in the form of video, audio, learning modules, and other online resources. Therefore, it guides the students to get many exposures and varieties of learning styles. They can find their best.” (Yanti)

“Moodle E-Learning directly guides the students to explore the learning materials in many ways. By using internet, they can explore so many learning resources to improve their knowledge through digital data transformation, visual, and audiovisual, and multi-media learning resources.” (Bunga)

From the discussion above, the use of Moodle E-Learning is useful to provide various learning styles. The use of stylish and user-friendly features enables students to expand their learning styles. Moreover, Moodle has equipped with audio-visual and multi-media tools that accommodate the students’ advanced learning. The other side, it allows students to access multiple learning resources can provide efficient learning and fun learning.

**Moodle E-Learning promotes students' autonomous learning.** The use of Moodle E-Learning is beneficial to comply with the requirement of curriculum 2013 where students’ critical thinking and problem-solving skills are emphasized. Ahghar (2012) states that critical thinking and problem solving become an essential skill that must be achieved by learners in life issues. The current educational also concern about the development of students’ independent learning. The previous study showed that most of the students lack these skills, hence they got problems on how to start learning, how to get the learning resource, and how to obtain the solution. The use of Moodle E-Learning provides wide access for students to develop their learning curiosity through multiple learning sources. From the result of the interview process, the use of Moodle E-Learning allows students to have freedom of learning, flexibility access, and autonomous learning.

"Overall I can enjoy the learning process and it is very interesting sir. It’s beneficial for us to have freedom of learning. Students can access many sources, not only from the book given by the teacher but we can access from the e-learning server, and other sides such as the internet, e-book, newspaper, and so on." (Alif)

"It provides practicality and flexible access for students to reach any learning resource. It’s applicable to be used in the current situation when we have to stay at home and maintaining social distancing. We feel free to get learning resources and to do the assignment." (Najwa)

While from the teachers’ responses, it showed that the use of Moodle E-Learning enables students to expand their digital learning experience, open their minds to have a new insight, find their way to solve the problem.

"On my side, there are some benefits of e-learning for the students. It is fun learning because students can learn from any device that promotes digital learning experiences. It allows the students to open their mind to get a new insight. They can learn from any resources. Moreover, it encourages the students to find their way to solve the problem." (Anto)

"In my opinion, it has some benefits for students because it develops students’ autonomous learning, improves the students’ literacy awareness, and critical thinking to solve the problem." (Yanti)

From the discussion above it can be seen that Moodle E-Learning is beneficial for developing students’ autonomous learning because it provides freedom of learning and flexible access, so therefore it can improve the students learning experience. Moreover, the use of Moodle E-Learning expands the students’ digital learning experience and help them to open their mind to improve their problem-solving skills.

**Maximizing the Moodle E-Learning platform bridges the demand of blended learning trends.** A sophisticated technology had been developed to maintain the learning process to be more effective and efficient. The current demand for blended learning is to facilitate the students with virtual learning environments and resources. Wahid (2019) explains that blended learning requires the combination of face to face teaching and computer technology to enhance flexible learning and autonomous learning. The use of Moodle E-Learning provides multiple features to maximize online learning. From students’ perspectives, those should be practice in advance and the teacher need to expand their competence to adapt its features.

“On my side, I prefer to use E-Learning during the pandemic disease of COVID 19. E-Learning (Moodle) is a good decision because it provides complete features for learning. I can see that there is access for teachers and students to have face to face learning through a virtual environment. I believe that it can expand the students learning experience and help the students to understand the material well. The problem is that the teachers rarely use these features.” (Arif)

“I like to use E-Learning (Moodle). It provides a stylish features interface with a single login portal so the students get easier access for online learning. Students no need to access multiple links. It is supposed to be more interesting if the teacher can maximize the learning process using teleconference features, I am interested in it. It is very helpful to expand the students’ comprehension of the learning material. I need it. We need to get more practice on it, and the teacher should expand their ability to use this feature. I believe it will be fun learning.” (Azzra)

While from the teachers’ responses, the researcher found that students enjoy joining E-Learning. The use of E-Learning provides an easy way to access the learning materials and resource through a single login interface. From their points of view, there should be some improvements in teaching and learning activities. The use of teleconference and group discussion and smart white-board applications should be optimized.

“The use of Moodle E-Learning provides multiple features that are beneficial to support online learning. But some features should be developed in advance such as discussion forum and teleconference because the current features are unstable to be used.” (Yanti)

“ …………The use of smart board application is beneficial to enhance the learning process. It enables the students to give some feedback by using a sentence, or vignette through the smart boards hence the interactive learning can be generated. It should be equipped with some features which accommodate two-ways communications between teachers and students.”(Bunga)

From the explanation above it can be inferred that maximizing the features of Moodle E-Learning bridges the need of blended learning. It has advanced learning features and friendly user interface which enables students to access the learning materials easily. Furthermore, the stylish user interface provides an easy way for the students to access learning materials. The sophisticated E-Learning features like video and teleconference are available to enhance students learning pleasures. Maximize those features helps the students to have enjoyment in learning and it can meet the students learning needs through blended learning.

**CONCLUSION**

Living in the digital era expands people's desire to obtain wide access to science and technology. The development of ICT contributes a lot of improvement in the way of teaching and learning. The use of E-Learning is one of the alternative ways to achieve the human desires of knowledge and science. Adapting the situation of COVID-19, Moodle E-Learning provides some potential features to maintain virtual learning. The result of this research indicates that Moodle E-Learning builds students’ learning interest. The stylish features and user-friendly display help the students to get enjoyment and interest to expand their knowledge. Learning assignment features have been designed in an interactive arrangement where the students get enthusiastic to enroll. The use of Moodle E-Learning contributes to some enhancements of technological and pedagogical aspects. Performing integrated ICT internet broadband, comprehensive material, and learning sources are very beneficial to improve the learning quality. It allows the students to expand their autonomous learning, digital learning experience, and problem-solving skills. Moreover, the audio-visual and multi-media tools provide various learning styles where the students can reach an advanced learning experience. Maximizing its features such as discussion forum and teleconference can bridge the demand of blended learning. This research suggests that the use of Moodle E-Learning still have more beneficial aspects in education. Therefore, the researcher recommends the next researcher to conduct further research about the implementation of Moodle E-Learning in other educational fields.

**REFERENCES**

Ahghar, G. (2012). Effect of Problem-solving Skills Education on Auto-Regulation Learning of High School Students in Tehran. *Procedia - Social and Behavioral Sciences*, *69*(Iceepsy), 688–694. https://doi.org/10.1016/j.sbspro.2012.11.462

Anne Galleta. (2013). *Mastering the Semi-Structured Interview and Beyond*. New York University Press.

Benta, D., Bologa, G., & Dzitac, I. (2014). E-learning platforms in higher education. Case study. *Procedia Computer Science*, *31*(July), 1170–1176. https://doi.org/10.1016/j.procs.2014.05.373

Bezhovski, Z., & Poorani, S. (2011). The Evolution of E-Learning and New Trends. *Information and Knowledge Management*, *6*(3), 50–57. https://www.iiste.org/Journals/index.php/IKM/article/view/29274

Christensen, L. B., Johnson, R. B., & Turner, L. A. (2014). *Design , and Analysis twelfth edition*. Pearson.

Cooper, R., Fleischer, A., & Cotton, F. A. (2012). Building connections: An interpretative phenomenological analysis of qualitative research students’ learning experiences. *Qualitative Report*, *17*(17), 1–16.

Dodun, O., Panaite, E., Seghedin, N., Nagîţ, G., Duşa, P., Neştian, G., & Slətineanu, L. (2015). Analysis of an E-learning Platform use by Means of the Axiomatic Design. *Procedia CIRP*, *34*(1), 244–249. https://doi.org/10.1016/j.procir.2015.07.059

Dogruer, N., Eyyam, R., & Menevis, I. (2011). The use of the internet for educational purposes. *Procedia - Social and Behavioral Sciences*, *28*(12), 606–611. https://doi.org/10.1016/j.sbspro.2011.11.115

Elyas, A. H. (2018). Penggunaan Model Pembelajaran E-Learning Dalam Meningkatkan Kualitas Pembelajaran. *Jurnal Warta*, *56*(04), 1–11.

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1. https://doi.org/10.11648/j.ajtas.20160501.11

Ghirardini, B. (2011). *E-learning methodologies: A Guide for Designing and Developing E-Learning Courses*. Federal Ministry of Food, Agriculture and Consumer Protection.

Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods*, *3*(1), 42–55. https://doi.org/10.1177/160940690400300104

Gunawan, A. S., Maharani, H., & Tatuh, K. K. (2016). *ANALISIS DAN EVALUASI REKOMENDASI E-LEARNING BERBASIS OPEN SOURCE ( STUDI KASUS : SMKN XYZ BANDUNG )*. *3*(1), 46–53.

Haryanto, S. (2018). Kelebihan Dan Kekurangan E-Learning Berbasis Schoology. *Prosiding Seminar Nasional Geotik*, *2016*, 106–110.

Lase, D. (2015). Industrial Revolution 4 . 0. *Research Gate*, *3*(5), 0–15. https://doi.org/10.24114/jh.v10i1

Lase, D. (2019). EDUCATION AND INDUSTRIAL REVOLUTION 4.0 Delipiter. *Jurnal Handayani*, *10*(1), 48–62.

Luaran, J. @ E., Samsuri, N. N., Nadzri, F. A., & Rom, K. B. M. (2014). A Study on the Student’s Perspective on the Effectiveness of Using e-learning. *Procedia - Social and Behavioral Sciences*, *123*, 139–144. https://doi.org/10.1016/j.sbspro.2014.01.1407

Mufdalifah, M. (2017). Personalized Learning Dan Multimedia Berbasis Komputer Masih Perlukah Guru? *JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran) Kajian Dan Riset Dalam Teknologi Pembelajaran*, *1*(1), 50–57. https://doi.org/10.17977/um031v1i12014p050

Muhlis, A. (2017). Potentials and Challenges of Using Edmodo Postings on Efl Reading Activity : Teacher and Students ’ Perception. *2nd NEDS Proceedings*, *2*(1), 25–39. http://english.stkipbjm.ac.id/wp-content/uploads/2017/06/Azhari-Muhlis.pdf

Mutambik, I. (2018). The Role of E-learning in Studying English as a Foreign Language in Saudi Arabia : Students ’ and Teachers ’ Perspectives. *English Language Teaching*, *11*(5), 74–83. https://doi.org/10.5539/elt.v11n5p74

Oludare Jethro, O., Moradeke Grace, A., & Kolawole Thomas, A. (2012). E-Learning and Its Effects on Teaching and Learning in a Global Age. *International Journal of Academic Research in Business and Social Sciences*, *2*(1), 2222–6990.

Prystiananta, N. C. (2018). Indonesian EFL Students’ Learning Styles. *Linguistic, English Education and Art (LEEA) Journal*, *2*(1), 30–42. https://doi.org/10.31539/leea.v2i1.344

R. Raja, P. C. N. (2018). Impact of Modern Technology in education. *Journal of Applied and Advanced Research*, *3*, 33–35. https://doi.org/10.4324/9780203168899\_chapter\_10

Setiyani, R. (2010). Pemanfaatan Internet Sebagai Sumber Belajar. *Jurnal Pendidikan Ekonomi Dinamika Pendidikan*, *5*(2), 117–133. https://doi.org/10.15294/dp.v5i2.4921

Singh, G. (2016). Proposed Stemming Algorithm for Hindi Information Retrieval. *International Journal of Innovative Research in Computer and Communication Engineering (An ISO Certified Organization)*, *4*(10), 11449–11455. https://doi.org/10.15680/IJIRCCE.2016

Soliman, N. A. (2014). Using E-Learning to Develop EFL Students’ Language Skills and Activate Their Independent Learning. *Creative Education*, *05*(10), 752–757. https://doi.org/10.4236/ce.2014.510088

T, A.-M. M. A. (2014). How Effective is E-learning in Teaching English ? : A Case Study. *Journal of Education and Human Development*, *3*(2), 647–669.

Tigowati, T., Efendi, A., & Budiyanto, C. W. (2017). E-Learning Berbasis Schoology Dan Edmodo: Ditinjau Dari Motivasi Dan Hasil Belajar Siswa Smk. *Elinvo (Electronics, Informatics, and Vocational Education)*, *2*(1), 49–58. https://doi.org/10.21831/elinvo.v2i1.16416

Ucu, N. L., Paturusi, S. D. E., & Sompie, S. R. U. A. (2018). Analisa Pemanfaatan E-Learning Untuk Proses Pembelajaran. *Jurnal Teknik Informatika*, *13*(1), 8. https://doi.org/10.35793/jti.13.1.2018.20196

Usman. (2016). Politeknik Negeri Samarinda. *Jurnal Eksis*, *12*(1), 3295–3298.

Wahid, J. H. . (2019). BLENDED LEARNING; FIFTH SEMESTER STUDENTS’ MOTIVATION IN LEARNING ENGLISH LANGUAGE AT ENGLISH DEPARTMENT OF MUHAMMADIYAH UNIVERSITY NORTH MALUKU. *Jurnal Pendidikan “Dodoto,”* *17*(17), 1–19. https://doi.org/10.4324/9781315853178

Waryanto, N. H. (2016). On-line Learning Sebagai Salah Satu Inovasi Pembelajaran. In *Pythagoras* (Vol. 2, Issue 1, pp. 10–23). http://staff.uny.ac.id/sites/default/files/132304807/Online Learning sebagai Salah Satu Inovasi Pembelajaran.pdf