

Students' and lecturers' perceptions towards e-learning in higher education

Maya Marsevani^{1*)}, Rika Al Fitri²

^{1,2}English Language Education, Universitas Internasional Batam, Indonesia

¹maya@uib.ac.id, ²rikaalfitri01@gmail.com

*) correspondence: maya@uib.ac.id

ABSTRACT

This research determines the perceptions of students and lecturers on using e-learning at a private university in Batam. A mixed methods approach was employed to find out these perceptions. Researchers further collected the data through open and closed questionnaires from 243 students (2019-2022 school year) and 19 lecturers who were actively teaching and using e-learning. After obtaining the data, the questionnaire results were calculated using SPSS software version 25 and transcribed qualitatively. The results show that students and lecturers had positive perceptions towards e-learning. This is measured by the knowledge, adaptation, benefits, and attitudes of students and lecturers in using e-learning. However, several obstacles were faced by them, such as time management, difficulties in accessing the e-learning website, the user interface (UI) display is quite complicated, unsupported internet signal, and others. It can be concluded that both lecturers and students have good ability in using e-learning at higher education levels.

Keywords: e-learning; higher education; perceptions

INTRODUCTION

One form of educational innovation is the application of an online learning system or often referred to as e-learning. The concept of e-learning becomes a transformation in this modern educational era. According to Sabar (2011), e-learning is defined as a type of teaching and learning systems that allows the users to gain information in educational field. Anggraini (2018) adds that e-learning can be done remotely without face-to-face meeting in the room, making learning time more flexible. In other words, people who access this learning system gain information easily and quickly.

The use of e-learning has been carried out by several researchers (Goyal, 2012; Mardiah, 2020; Muzamilah et al., 2020; Rawashdeh et al., 2021; Rosalina et al., 2020). Most of the research found that there are advantages that can be gained not only for the students but also the teachers. They state that e-learning can improve students' achievement in learning because they easily can access the materials. However, e-learning was still difficult to use especially for stakeholders in university level. The obstacles they face include network constraints, insufficient smartphone storage to store files, and the limited quota they have for participating in online learning (Ja'ashan, 2020; Marsevani, 2022).

Before conducting the research, researchers interviewed lecturers and students at a private University in Batam, researchers found that there were several obstacles in accessing e-learning such as lack of information and guideline in using e-learning for students in the first year. Other students said that the server was always down when it was accessed by many students. The lecturers also claimed that there were many features that made them confused to use. In other words, the display of e-learning is quite complicated so that the lecturer has difficulty presenting teaching material. Hence, researchers planned to investigate the perceptions of students and lecturers on using e-learning and gain deeper about problems of students and lecturers while using e-learning in higher education.

METHODS

This research used a mix methods approach. It is used to explain the obstacles faced by students and lecturers in using e-learning. The researchers conducted research at one of private university in Batam, Kepulauan Riau, Indonesia. It was selected because after interviewing the head of department English language education, she claimed that she started implementing e-learning in early 2020 until now. The researchers chose this private university as a research location because it is one of the private universities that facilitate students and lecturers using e-learning to make it easier to meet the learning information needs on campus. The implementation of this research took place from November to December 2022.

The researchers decided to choose active students of 2019 to 2022 and lecturers in all majors of the undergraduate program in higher education as participants of the research. Furthermore, the researchers chose the participants randomly. The total participants of the research were 243 students and 19 lecturers. The data consisted of 161 female students, 82 male students. And 8 female lecturers, 11 male lecturers.

In this research, the researchers used open and close ended questionnaires. The questionnaire was adapted from Ja'ashan (2020) and Basar et al. (2021). The questionnaire was made through Google Form and distributed through WhatsApp application. Because it can be distributed to a large number of respondents in a relatively short time. All data collected through a questionnaire survey were classified and grouped according to indicators of students' and lecturers' perceptions of using e-learning. The close ended questions further were converted into average values and categorized based on the interpretation of the Likert four-point range score. After that, the data was analyzed using SPSS Version 25 software. For open-ended questions, it was used to gain students and lecturers' perceptions of e-learning. The participants were invited to expand on a respond to the questions given by researchers. Researchers recorded the individual responses then transcribed word by word.

RESULTS AND DISCUSSION

Students' perceptions of e-learning

The result that was obtained from the questionnaire shows 89.7% of students had used e-learning. It was also found that 86.8% of the students had accessed e-learning in university level. In other words, most of them used e-learning in university level and they have background knowledge of using e-learning as an online learning activity. The background knowledge of using e-learning is important because it brings the feeling of self-responsibility in learning activities (Arkorful & Abaidoo, 2015; Chitra & Raj, 2018; Mardiah, 2020).

Most respondents further recognized and were familiar with e-learning in which they could described about e-learning platform. They said e-learning is an electronic learning application that has up-to-date features for online learning anywhere and anytime, and a platform that functions to assist lecturers and students in learning such as distributing material and collecting assignments. This statement is similar with Chitra and Raj (2018) who points out e-learning is electronic forms applied in educational field that commonly used to access learning materials.

Students' perceptions of adapting the use of e-learning

Table 1. Students' perceptions of adapting the use of e-learning

No	Statements	Mean	SD	Category
1	The use of e-learning is easy to use and learn	3.27	0.70	Strongly Agree
2	E-learning uses language that is easy to understand and understand	3.34	0.71	Strongly Agree
3	The menus in e-learning are well structured so that the available features are easy to use	3.18	0.78	Agree

No	Statements	Mean	SD	Category
4	In my opinion, the steps in using e-learning are easy to remember	3.30	0.70	Agree
5	In my opinion, e-learning is very flexible to access	3.24	0.73	Agree

Table 1 presents the findings obtained from the results of the students' perceptions on adapting e-learning. It turns out that item number 2 concerning the language used in e-learning has the highest average of 3.34. Meanwhile, item number 3 has the lowest average of 3.18. These findings indicate that most students easily understand the language used in e-learning.

There is also a display on the main e-learning page containing information about the whereabouts of the user, menus with display icons in English and Indonesian which are easy for students to understand. This finding is in line with Lugiati et al., (2022) which states the language criteria that are easily understood by users on e-learning is from in terms of icon function display, the language used (Indonesian or English) and information about course material.

Students' perceptions of advantages e-learning

Table 2. Students' perceptions of the benefits of using e-learning

No	Statement	Mean	SD	Category
1	Using e-learning helps me to find lecture material faster	3.25	0.70	Agree
2	Using e-learning helps me to improve my learning performance	3.08	0.73	Agree
3	Using e-learning increases productivity in lectures	3.16	0.72	Agree
4	Using e-learning can access learning materials anytime and anywhere	3.44	0.64	Strongly Agree
5	The use of e-learning is very useful for me	3.29	0.69	Strongly Agree

The results show that most of the students agreed that using e-learning is very useful. They pointed out that it can increase their productivity in learning English because they are able to access the materials everytime. Fakhri et al., (2022) states that one of advantages of using e-learning is the access of using e-learning. The benefits of e-learning during the learning process further can be seen from the results of research from Marsevani, (2022), Amri et al., (2021), Ferdiansyah et al., (2020) and Amalia and Pujiastuti (2017) that points out the use of this platform provides opportunities to the students such as gaining the information easily, accessing the materials in flexible time, and improving their learning performance.

Students' difficulties of e-learning

Five obstacles are explicitly described including difficulty accessing the e-learning website, the display of e-learning is quite complicated, and it is difficult to upload assignment files because limited file size, difficult to access the e-learning website and unsupported internet signal. It means obstacles are often found when using e-learning (Anggun, 2021).

The first obstacle the respondent wrote was the inability to access the e-learning website which is sometimes difficult to access, especially during peak hours and the server is under repair. The use of a learning media does require adequate facilities and infrastructure, so that everything can go according to what has been planned, in line with the findings Al-Balas et al., (2020) one of the most common e-learning problems experienced by students in learning e-learning is a technical matter that is, accessing websites, devices, tools, and processes. Zalat et al., (2021) suggests the university that use e-learning to have IT center in order to overcome this problem.

The constraints of the two respondents writing the appearance of e-learning is quite complicated so that students have difficulty using it. In line with Hatip et al., (2019) who researched the problems of the e-learning website which users still often complain about, one of which is the appearance of the user interface design which is less attractive because users are bored with the appearance of the website both in terms of color, menu arrangement, and descriptions and content language used. So, the researchers made improvements to the user interface design in e-learning.

The third obstacle was that the respondent wrote that it was difficult to upload the assignment file in e-learning due to the limitation of the maximum file size of 2 MB. In line with Febrianti et al., (2021) that there are many obstacles in using the features contained in e-learning, one of them is utilizing the assignment feature. There are those whose capacity to upload the task file is so small that if the file is uploaded the task must be reduced first. This obstacle had a major impact on the collection of assignments during the lecture process causing students to be late in sending assignments so that the assignment scores were forced to be empty (Lutfiyah, 2022). It can be seen that failed file uploads are very easy to overcome, students only need to upload files below the maximum number of uploaded files by reducing files using software or applications that function to compress PDF, Word, Excel files, or various image formats (Alviolita, 2015).

The fourth obstacle was that respondents wrote that it was difficult to submit assignments in E-learning on iPhone or iOS users. In this obstacle students can upload assignments on the E-learning website via a computer or laptop that is not using iOS. However, Alviolita, (2015) mention the inability to upload assignments using a cellphone is not a big problem.

The last obstacle the respondent wrote was having network or connection constraints. In E-learning-based learning, a good internet connection is needed so that learning becomes effective and efficient so that it can achieve the desired educational goals (Selfi & Akmal, 2021). However, in reality some students experience problems connecting to the internet network, this is due to the price of using internet data which is still considered quite expensive for some students. The way to overcome this can be done by providing quota subsidies. This has been implemented by the government in collaboration with a number of internet service providers. This aims to ease the burden on students and parents to meet internet quota needs. In fact, the quota provided has also been adjusted for online learning needs only so that it is not misused for other purposes (Gempiara & Supendi, 2021).

Lecturers' perceptions of e-learning

In the indicator of the lecturer's perceptions of e-learning knowledge, the researchers found out the lecturer's knowledge of e-learning. All of the lecturers had used e-learning. They have experience in using and designing learning materials, collecting of assignments and discussions through e-learning. In other words, e-learning is not new phenomenon for lecturers. They are familiar with e-learning and their experience surely affect the successful of e-learning (Ja'ashan, 2020).

However, the lecturers claimed that not all the features had been used. It was because they felt confused how to use the features and did not have much time to design the materials in e-learning well. It makes them very hard to design interactive e-learning appearance. It means that most of the lecturers had difficulties in time management to design the e-learning (Bhuana & Apriliyanti, 2021; Rosalina et al., 2020).

Lecturers' perceptions of adapting e-learning

Table 3. Lecturers' perceptions of adapting to the use of e-learning

No	Statement	Mean	SD	Category
1	In my opinion, the use of E-learning is easy to use and learn	3.10	0.80	Agree
2	In my opinion, E-learning uses language that is easy to understand	3.21	0.71	Agree

No	Statement	Mean	SD	Category
3	The menus in E-learning are well structured so that the available features are easy to use	2.94	0.77	Agree
4	In my opinion, the steps in using E-learning are easy to remember	2.78	0.91	Agree
5	In my opinion, E-learning is very flexible to access	2.84	0.76	Agree

In Table 3, it turns out that in item number 2 regarding the language used in e-learning has the highest average of 3.21. It can be stated that most of the lecturers easily understand the language used on e-learning. Although some of them still had difficulties in adapting e-learning, most of them felt the use of e-learning was easy to use and learn. Hence, it helps them to give materials and instructions for students. It means the effective of providing information and materials for the students is supported by e-learning (Hafeez et al., 2022).

Lecturers' perceptions of the advantages e-learning

Table 4. Lecturers' perceptions of advantages e-learning

No	Statement	Mean	SD	Category
1	Using E-learning helps provide lecture material to my students	3.47	0.51	Strongly Agree
2	Using E-learning helps me to improve my performance in teaching	3.10	0.80	Agree
3	Using E-learning increases productivity in lectures	3.21	0.78	Agree
4	Using E-learning can help me check assignment submissions from students anytime and anywhere	3.52	0.51	Strongly Agree
5	Overall the use of E-learning is very useful for me	3.15	0.60	Agree

The results showed that lecturers' perceptions of the perceived benefits of using e-learning turned out to be in item number 4 about being able to check assignment submissions from students whenever and wherever it had the highest average of 3.52 which was categorized as strongly agree. It can be stated that most of the lecturers can check the collection of assignments from students anytime and anywhere in e-learning. Fakhri et al., (2022) points out that lecturers have an access to check assignment submissions from students easily. It means that the use of e-learning has a pretty good effect as shown by lecturers who have the convenience of uploading teaching materials, delivering material, and assignments wherever and whenever. The opposite result occurred in research from Wijaya et al., (2020) explaining that e-learning has no effect on lecturer teaching results because of limited internet access, lecturer teaching hours are not limited, lack of communication and socialization between students and lecturers.

Lecturers' difficulties of e-learning

Based on the results, there are technical and non-technical issues faced by the lecturers. The first obstacle was it is sometimes difficult to access, especially during peak hours and the server is under repair. One of the most frequent e-learning problems that students experience in e-learning is technical problems, one of which is accessing websites, devices, tools, and processes (Al-Balas et al., 2020). To overcome this problem students can contact the person responsible for the online e-learning code or access the website outside of peak hours (Tavangarian et al., 2004; Vitoria et al., 2018; Zalat et al., 2021).

The second obstacle is that the display of e-learning is quite complicated so that lecturers have difficulty using it. In line with Hatip et al., (2019) who examines the problems of website e-learning. One of the things that users often complain about is the appearance of the user interface design which is less interesting because users are bored with the appearance of the website both in terms of color, menu arrangement, as well as descriptions and contents of the language used. So, the researchers made improvements to the user interface design in e-learning. Another difficulties found was they had not much time to prepare and design the learning materials well (Marsevani, 2022).

However, good adaptability is also needed from lecturers to be ready in using e-learning. One way to improve lecturers' readiness in using e-learning is by providing the training or workshops (Setiaji & Dinata, 2020). This training will be able to ease lecturers to understand the use of e-learning and avoid confusion. In other words, lecturers will have good and clear management in implementing e-learning (Vovides et al., 2007).

CONCLUSION

It can be concluded that both students and lecturers have good perceptions towards the use of e-learning. This perception is measured from the knowledge, adaptation, benefits, and attitudes when they use e-learning. Although most of the categories are categorized as good, there are still several obstacles that hinder learning in using e-learning such as difficulties to access the e-learning website, the appearance of the e-learning is quite complicated, time management difficulties for lecturers, difficulties to upload files task due to limited file size, difficulties to access the e-learning website, and unsupported internet signal.

This research hopefully is useful not only for the readers but also stakeholders that use e-learning in their learning management. The obstacles found in this research also can be noted for the universities to make e-learning system more effective and efficient. Moreover, the researchers hope that training of using e-learning can be carried out regularly by IT Center in order to improve students' and lecturers' experience in using e-learning. By having more experience regarding the use of e-learning, lecturers will be able to design learning materials well with limited time. Furthermore, students also have more knowledge to roll out learning successfully.

REFERENCES

- Al-Balas, M., Al-Balas, H. I., Jaber, H. M., Obeidat, K., Al-Balas, H., Aborajoo, E. A., Al-Taher, R., & Al-Balas, B. (2020). Distance learning in clinical medical education amid covid-19 pandemic in Jordan: current situation, challenges, and perspectives. *BMC Medical Education*, 20(1), 1–7. <https://doi.org/10.1186/s12909-020-02257-4>
- Alviolita, A. M. (2015). *Pembuatan User Manual On-Screen untuk E-Learning pada SMPN 1 Jember Berdasarkan IEEE STD 26514-2010* [Institut Teknologi Sepuluh Nopember]. [https://repository.its.ac.id/71622/1/5211100071-Undergraduate Thesis.pdf](https://repository.its.ac.id/71622/1/5211100071-Undergraduate%20Thesis.pdf)
- Amalia, N. F., & Pujiastuti, E. (2017). Kemampuan berpikir kritis dan rasa ingin tahu melalui model PBL. *PRISMA, Prosiding Seminar Nasional Matematika*, 523–531.
- Amri, C. O., Jaelani, A. K., & Saputra, H. H. (2021). Peningkatan literasi digital peserta didik: Studi pembelajaran menggunakan e-learning. *Jurnal Ilmiah Profesi Pendidikan*, 6(3), 546–551. <https://doi.org/10.29303/jipp.v6i3.291>
- Anggraini. (2018). Keefektifan pembelajaran elektronik (E-learning) sebagai pengganti perkuliahan konvensional untuk keefektifan meningkatkan kemampuan analitis mahasiswa. *Jurnal Sosial Humaniora*, 9(2), 95–105. <https://doi.org/10.30997/jsh.v9i2.1101>
- Anggun, P. (2021). *Analisis Kesulitan Belajar Siswa dalam Pembelajaran Tematik pada Siswa Kelas V SDN 5 Merak Batin Natar Lampung Selatan* [Raden Intan Lampung]. <http://repository.radenintan.ac.id/13224/>
- Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 29–42.

- Basar, Z. M., Mansor, A. N., Jamaludin, K. A., & Alias, B. S. (2021). The effectiveness and challenges of online learning for secondary school students - A case study. *Asian Journal of University Education*, 17(3), 119–129. <https://doi.org/10.24191/ajue.v17i3.14514>
- Bhuana, G. P., & Apriliyanti, D. L. (2021). Teachers' encounter of online learning: Challenges and support system. *Journal of English Education and Teaching*, 5(1), 110–122.
- Chitra, A. P., & Raj, M. A. (2018). E-Learning. *India Journal of Applied and Advanced Research*, 2018(3), 11–13. <https://doi.org/10.21839/jaar.2018.v3S1.158>
- Fakhri, M. M., Fadhilatunisa, D., Rosidah, R., Satnur, M. A., & Fajrin, F. (2022). Pengaruh media e-learning berbasis LMS moodle dan motivasi belajar terhadap hasil belajar mahasiswa di masa pandemi covid-19. *Chemistry Education Review (CER)*, 5(2), 157–169. <https://doi.org/10.26858/cer.v5i2.32724>
- Febrianti, S., Nursafwa, H., Arifin, B., Hayati, I., & Zailani, Z. (2021). Analisis faktor-faktor yang mempengaruhi minat belajar mahasiswa di masa pandemi pada mata kuliah penulisan karya ilmiah di Universitas Muhammadiyah Sumatera Utara. *Al-Ulum: Jurnal Pendidikan Islam*, 2(1), 48–57.
- Ferdiansyah, F., Ambiyar, A., Zagoto, M. M., & Putra, I. E. D. (2020). Pemanfaatan media pembelajaran berbasis e learning dalam meningkatkan hasil belajar pada matakuliah media pembelajaran musik. *Komposisi: Jurnal Pendidikan Bahasa, Sastra, Dan Seni*, 21(1), 62–72. <https://doi.org/10.24036/komposisi.v21i1.108082>
- Gempiara, G., & Supendi, M. (2021). Efektivitas program bantuan kuota belajar di Universitas Muhammadiyah Prof. Hamka. *Dinamika Governance: Jurnal Ilmu Administrasi Negara*, 11(2), 256–273. <https://doi.org/10.33005/jdg.v11i2.2784>
- Goyal, S. (2012). E-Learning: Future of education. *Journal of Education and Learning (EduLearn)*, 6(4), 239. <https://doi.org/10.11591/edulearn.v6i4.168>
- Hafeez, M., Kazmi, Q. A., & Tahira, F. (2022). Challenges faced by the teachers and students in online learning during covid-19. *Cakrawala Pendidikan*, 41(1), 55–70. <https://doi.org/10.21831/cp.v41i1.35411>
- Hatip, A., Sucipto, S., & Setiawan, W. (2019). Pelatihan penggunaan e-learning berbasis media sosial edmodo bagi guru SD negeri Mulyorejo I Surabaya. *Jurnal Pengabdian Dan Penerapan IPTEK (JPP IPTEK)*, 3(1), 61–68. <https://doi.org/10.31284/j.jpp-ipitek.2019.v3i1.428>
- Ja'ashan, M. M. N. H. (2020). The challenges and prospects of using E-learning among EFL students in Bisha university. *Arab World English Journal*, 11(1), 124–137. <https://doi.org/10.24093/awej/vol11no1.11>
- Lugianti, D., Indramawan Nugroho, B., & Surejo, S. (2022). Penerapan sistem interaksi manusia dan komputer pada website e-learning di STMIK Tegal. *Jurnal Minfo Polgan*, 11(2), 36–44. <https://doi.org/10.33395/jmp.v11i2.11639>
- Lutfiyah, I. (2022). *Evaluasi Pembelajaran Bahasa Inggris di Era Pandemi Covid-19 di SMP Muhammadiyah Kota Malang* [Universitas Muhammadiyah Malang]. <https://eprints.umm.ac.id/87790/1/naskah.pdf>
- Mardiah, H. (2020). The use of e-learning to teach English in the time of the covid-19 pandemic. *English Teaching and Linguistics Journal (ETLj)*, 1(2), 49–55. <https://doi.org/10.30596/etlj.v1i2.4894>
- Marsevani, M. (2022). The challenges of e-learning for higher education lecturers and learners. *Journal of Education Technology*, 6(3), 467–477. <https://doi.org/10.23887/jet.v6i3.45537>
- Muzamilah, S., Suriyah, P., Education, A., & Education, A. (2020). Teachers' challenges in implementing E-Learning to teach EFL writing. *Jurnal Pendidikan Edutama*, 1–10.
- Rawashdeh, A. Z. Al, Mohammed, E. Y., Arab, A. R. Al, Alara, M., & Al-Rawashdeh, B. (2021). Advantages and disadvantages of using E-learning in university education: Analyzing students' perspectives. *Electronic Journal of E-Learning*, 19(2), 107–117. <https://doi.org/10.34190/ejel.19.3.2168>
- Rosalina, E., Nasrullah, N., & Elyani, E. P. (2020). Teacher's challenges towards online learning in

- pandemic era. *LET: Linguistics, Literature and English Teaching Journal*, 10(2), 71. <https://doi.org/10.18592/let.v10i2.4118>
- Sabar. (2011). Penggunaan web (e-learning) dalam proses pembelajaran bahasa inggris di Briton International English School Makassar. *Jurnal Komunikasi KAREBA*, 1(4), 444–456. <https://doi.org/10.31947/kjik.v1i4.324>
- Selfi, G., & Akmal, A. (2021). Pelaksanaan pembelajaran berbasis e-learning masa covid-19 pada mahasiswa tahun masuk 2020 PPKn UNP. *Journal of Civic Education*, 4(3), 212–218. <https://doi.org/10.24036/jce.v4i3.543>
- Setiaji, B., & Dinata, P. A. C. (2020). Analisis kesiapan mahasiswa jurusan pendidikan fisika menggunakan e-learning dalam situasi pandemi covid-19. *Jurnal Inovasi Pendidikan IPA*, 6(1), 59–70. <https://doi.org/10.21831/jipi.v6i1.31562>
- Tavangarian, D., Leybold, M. E., Nölting, K., Röser, M., & Voigt, D. (2004). Is e-learning the solution for individual learning? *Electronic Journal of E-Learning*, 2(2), 273–280. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.116.8017&rep=rep1&type=pdf>
- Vitoria, L., Mislinawati, M., & Nurmasyitah, N. (2018). Students' perceptions on the implementation of e-learning: Helpful or unhelpful? *Journal of Physics: Conference Series*, 1–6. <https://doi.org/10.1088/1742-6596/1088/1/012058>
- Vovides, Y., Sanchez-Alonso, S., Mitropoulou, V., & Nickmans, G. (2007). The use of e-learning course management systems to support learning strategies and to improve self-regulated learning. *Educational Research Review*, 2(1), 64–74. <https://doi.org/10.1016/j.edurev.2007.02.004>
- Wijaya, R., Lukman, M., & Yadewani, D. (2020). Dampak pandemi covid19 terhadap pemanfaatan e learning. *Jurnal Dimensi*, 9(2), 307–322. <https://doi.org/10.33373/dms.v9i2.2543>
- Zalat, M. M., Hamed, M. S., & Bolbol, S. A. (2021). The experiences, challenges, and acceptance of e-learning as a tool for teaching during the covid-19 pandemic among university medical staff. *Plos One*, 16(3), 1–12. <https://doi.org/10.1371/journal.pone.0248758>