

E-learning Classroom at A Private University in West Jakarta: Students' Challenges and Opportunities

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Abstract - E-learning classroom is getting more scope since the technological environment faced by universities nowadays. It provides flexible and convenient time and place to study for the students. However, compared to other teaching approaches, the students' readiness plays an important role in achieving an effective e-learning process. Apart from that factor, students' motivation and self-learning abilities are also the main factor for the successful implementation of e-learning classroom. This paper aims to present an in-depth investigation about students' challenges and opportunities regarding the implementation of e-learning classroom. This study involved a private university in Indonesia which offers all courses implementing e-learning. During the courses, the students were required to participate actively in e-learning classroom. The activities included online discussion forum, watch video, and join the video conference session. The data were collected by using questionnaire and were analyzed quantitatively. The result of the data analysis revealed some issues related to students' point of view about e-learning classroom and also the drawbacks that e-learning made.

Keywords: blended learning, challenges, e-learning, opportunities

I. INTRODUCTION

Changes in information technology have caused students and lecturers to conduct educational activities beyond usual time and place boundaries. This condition leads to the emergence of implementation of updated method for teaching and learning processes in the classroom. In this case the implementation of e-learning classroom is considered as the suitable one to accommodate the changes. The term e-learning was first defined as "any learning process that involves the usage of internet" [1]. However, nowadays the word "e-learning" refers to anything that is delivered, enabled, or mediated through electronic technology for the specific learning purposes [2]. It is then added that both teachers and students get the advantages from e-learning since the actual meaning of "e-learning" should be "evolving, enhanced, everywhere, every time and everybody" [3].

E-learning helps us cross the boundaries in teaching-learning process in nowadays condition. It enables flexible ways of learning for every student despite constraints [4]. E-learning also provides unique prospect for developing a sense of community engagement among online students.

Over the last decade, the implementation of e-learning has made a great progress all over the world, including Indonesia. It is then added with a fact that the outbreak of corona virus becomes the biggest pandemic in 2020. This condition forces all educational institutions to change the teaching and learning process and e-learning has become a major need in educational field. E-learning provides the opportunity of learning for the students at any time; however they also face some challenges at the same time. Therefore, the purpose of this study is to critically examine the challenges and opportunities of e-learning classroom that are faced by the students, especially at Bina Nusantara University of Indonesia.

II. LITERATURE REVIEW

A. The Advantages and Opportunities of e-Learning

In this era, e-learning is expected to include students' digital literacies and abilities that consists of collaboration and communication, among others. In order to be in line with e-learning, higher education institutions are expected to offer courses and platforms that supports the implementation of multidimensional capabilities and skills [5]. The implementation of e-learning can bring advantage to the universities since it creates flexibility in the learning process, however it should be completed with the use of interdisciplinary approaches [5]. In this class, the students can watch lectures before joining the class and engage more actively in the classroom discussion. It also provides a consistent material delivery since e-learning videos can be pre-recorded and shared among the students [6]. E-learning has possibilities to

support teaching-learning processes, as well as the evaluation of students' skills and comprehension of the content.

The implementation of e-learning also brings opportunities in higher education. Its implementation relates to the use of electronic media for a variety of learning purposes that range from add-on functions in conventional classrooms to full substitution for the face-to-face meeting by online encounters [7]. E-learning was designed for purposeful and disciplined students, since there is no direct contact with the lecturers, in this case there is a condition in which the students must work independently [8]. Another opportunity brought by e-learning is that students may independently improve their professional skills and competencies, such as self-study, planning and organizing, time management, problem solving, taking responsibility, working under pressure, and being creative and initiative [8]. It provides university students with opportunities to develop those skills which are undoubtedly important in modern professionals.

B. The Challenges of e-Learning

Despite the advantages and opportunities of e-learning as explained above, it is undoubtedly that e-learning also has some challenges as well, especially for university students.

The universities are experiencing significant change because of the implementation of e-learning. There are three major challenges that are faced by universities [9], they are the lack of educational models that result in the difficulty in developing contents and this leads to reducing the enthusiasm of the students in their e-learning classroom, the lack of quality assurance mechanism that may lead to the unclear teaching standard and result in the poor quality of e-learning classroom activities, and the lack of infrastructure capacities [9].

Other challenges are also faced by the students in e-learning classroom. Those challenges can be related to how the content of the course meets the students' expectation regarding their course understanding and personal learning and the psychological problems of the students, such as problems caused by direct contact among classmates and lecturers, problems related to feeling of isolation from student community and problems regarding anxiety about learning process and learning results [10], [11].

Different challenges happen in students with low and high motivation, that the implementation of elearning may cause several issues. Some studies have focused on these issues [13], [12], they stated that despite its advantages, the implementation of e-learning has always been accompanied with several barriers and problems regarding students' motivation [13], [12]. The typical challenges that students may experience is group activities, in which the e-learning classroom will add challenges for the external or isolated students, especially regarding their engagement, access, community and support [15], [14]. Some of these issues are related to personal, such as the inability or difficulty in peer interaction and inequity in assessment [15]. All of those challenges can leave the students in an isolated place and influence their learning motivation.

III. METHODS

This study used a quantitative approach by taking a survey toward 100 students from Bina Nusantara University. A convenient random sampling method was applied to select participants by distributing online questionnaires to 10 English classes in which the students came from different departments. For the convenience of this study, we only took the first 100 students who gave their responses within the specified time frame. Thus, the responding participants consist of 55 female students and 45 male students from 9 departments. They were from the 1st, 3rd,5th,7th, and 9th semester. Although the blended learning system (online and offline) has been applied in Binus University for over a decade, participants will have various experience with the full online learning system which is applied in the current situation.

The instrument for this study was an online questionnaire consisting of 17 items. The questions asked for the students' preference of learning system, the problems of online learning and how they would optimize their online learning.

IV. RESULTS AND DISCUSSION

The results are presented following the questions in the questionnaire. Several items are presented in charts, some in percentages and the rest in qualitative description.

Q1. Which learning model do you prefer?

Results show that more than half of the participants prefer Blended learning model, that is the combination of face to face and online learning. Only 3 % of the students chose pure online learning. This result suggests that traditional model or face to face learning is still needed. The results can be seen in figure 1.



Q2. What is the ideal percentage of online and face to face learning?

Following the previous question, 44% of the participants chose the division of 70% face to face and 30 % online. This means the students wanted to have more face-to-face meeting than online learning. This 70-30 division between offline and online has been adopted in Binus University of a long time. Thus, it seems that the students still want to study in campus rather than studying online at home. The results can be seen in figure 2.

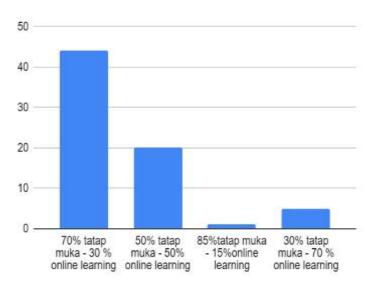


Fig. 2. Percentage of Learning Model

Q3. Is online learning suitable for all course subjects?

Q4. Give your reason for the previous question.

Students' choice of the proportion might be related to the course subject being taught. Not all subjects can be taught or delivered well by online learning. Thus, for this question, the mean of students' answer was 2.53, or in the middle between strongly disagree (1) to strongly agree (5). That means they did not think that online learning is suitable for all course subjects. As for the reasons, the students said that there are several subjects that are better taught in face-to-face method. Subjects that need on site practice or laboratory work also could not be delivered through online learning. Another reason for Q3 is again the need to interact directly with the teacher. Students still need to ask or discuss the course with the lecturers. In online learning, interaction can be done but it is difficult for the teacher to identify each student's problem. Thus, some students thought that online interaction is not effective.

Q5. What are the benefits of online learning?

Overall, students stated several benefits for online learning. The most stated benefit is being autonomous. Being autonomous means they can learn by themselves, have preferred learning style, and being able to learn as they want. The second mostly stated benefit is the efficiency of cost and time. They

did not have to go to campus so they can save transportation money and lunch money or even boarding cost, since they stayed at home. They can also save time and use their extra time for resting or just relaxing. Time management or the ability to schedule their own time is another benefit of online learning. Students also said that online learning is more practical, since they can learn at home, or everywhere with gadget or computer, and they can review the materials anytime from the recordings or videos given. Finally, some students said the benefit of online learning is to prevent being contracted with corona virus. So, it is better for them to learn at home rather than gathering with other students in campus and have the possibility of getting infected with Covid-19.

Q6. What are the disadvantages of online learning?

As for the disadvantages of online learning, most students mentioned that they did not understand the materials presented by the teachers through video conference, because sometimes teachers speak too fast or unclear. The inability to understand completely the materials was also partly caused by internet connection, either from the teachers' or the students' lines. Bad internet connection caused the online learning session inaudible, shortened or interrupted. Relating to internet, some students complained about internet quota which is too expensive for accessing online learning. Besides the internet, another problem is the place of learning. Since online class was done at home, some students could not find conducive environment for learning like in the classroom. Their houses might be too noisy, they could not focus, and there were too many distractions. Another notable disadvantage is the number of assignments given by the lecturers. Students thought that teachers only use the online learning to give a lot of assignments without giving them feedbacks. Finally, they mentioned financial loss, since they had to pay high tuition fee but unable to use campus facilities and they had to provide their study needs by themselves. A student even said, "Why do we have to pay for something that we can find from Google?"

Q7. If you have to take online learning, how should learning materials be presented?

Regarding the presentation type, 37% preferred power point presentation, in which the presentation is given by the lecturers using power point file. 41% chose video presentation, where the lecturers upload the video of their teaching. 16% chose power point plus reading links and 6% chose others, which they did not specify.

Q8. What is your level of understanding towards the course materials?

Online learning, where the lecturers should teach or present the materials through online technology such as video conference, might not be equally understood by all the students. When asked about their level of understanding of the course materials during online learning, half of the participants admitted they only understand three quarters of the materials. 34% of the students could understand up to 50 % of the materials. The whole result can be seen in figure 3.

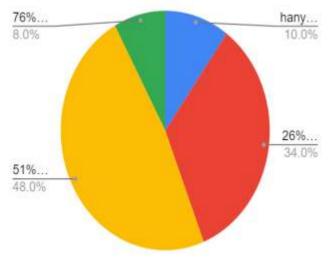


Fig. 3. Level of Understanding

Q9. What kinds of problem do you experience when doing online learning?

The participants' level of understanding was closely related to the problems that they face during online learning. Based on the types, the problems can be categorized into five sources: internet connectivity, hardware, environment, communication, and personal. The first and most stated problem was internet connectivity. Bad connection and limited quota can cause online learning disrupted. Online

learning also needs computer or laptops or cellphones with some specifications such as speed, ram, etc. Environment refers to the place where students do their online learning. Some of the students' houses seemed to be unconducive for learning because it was too noisy. Communication between students and teachers and among students themselves became the fourth problem. Finally, students have physically and mentally exhaustion from online learning.

Q10. What do you need to make your online learning successful?

Problems do not have to inhibit the students' progress in online learning. However, they need several things to make their learning successful. The first thing they wanted to do was to boost their self-motivation to study by themselves, by getting rid of distraction, finding their own learning materials, focusing on the study, and so on. Besides, they also required several things from their teachers. Teachers should be able to make interesting materials either in power point or in videos. Teachers should also conduct their video conferencing more often and more clearly, and also inserting more games or explanation during the online presentation. If necessary, the online presentation is recorded so that students can watch it repeatedly. The last thing they need was reducing the assignments during the online learning, because learning online does not mean that they have more time to do the assignments. Students need to do other things than studying and doing assignments.

Q11. If in the future online learning is given as a choice, will you choose it over the other? Q12. State your reasons for your answer in Q11.

If for one reason or another, full online learning is given as a choice in the future, 34% of the students declined, meaning that they would like to choose traditional learning with face-to-face meeting. Only 16% said they will choose it. Half of the participants answered maybe, meaning that they would consider taking online learning if the circumstances forced them to do so. For example, if the pandemic is still going on and there is no way for avoiding it.

Q13. Does online learning help you to be an autonomous learner?

Q14. State your reasons for your answer in **Q13**

One of the advantages of online learning is to make students more autonomous. Being autonomous means students can study on their own, from determining the time for study, finding learning materials and so on. However, 14% of the students did not think they were being an autonomous learning. 39% of the participants said yes and 47% were still hesitating as they said maybe. Those who answered 'no' reasoned that online learning made them lazy, unable to study at home, and that teachers gave too many assignments. Meanwhile, students who answered 'maybe' had several reasons such as they still need to study with other people and that online learning is not better than offline learning in terms of results gained.

Q 15. What features help you more in online learning?

In an online learning system, such as Binus Maya, there are several features that might be helpful for the students in carrying out their online learning. However, these features are not considered equal by the students in achieving their online learning purpose. In Binus Maya, video conference in small class was considered as the most helpful by the students, followed by discussion forum, while assignment was deemed not helpful for them. The results can be seen in Figure 4

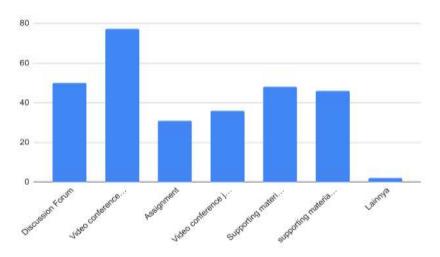


Fig. 4. Useful Features of Online Learning System

Q16. Provide reasons for your answer!

Video conference in small class with the lecturer was considered the most helpful by the students because it gave the opportunity for the students to interact with their lecturers, they can ask and discuss the materials with the teachers even though it was done through zoom meeting. The opportunity to interact with the teacher then became the first reason given by the students. Listening to their own teacher's explanation through video conference was also considered more understandable for them. Meanwhile, the reason for choosing discussion forum was because students can see other peoples' opinions or answers for certain discussion topic before writing their own opinions. In other words, some students feel more confident if their answers were in line with the others. Other reasons can be seen in figure 5 below.

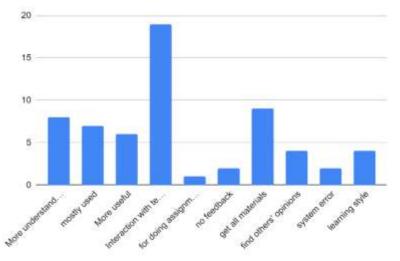


Fig.5. Reasons for Useful Features

Q17. What do you suggest for an effective e-learning system?

Besides having good features, an online learning system must be supported by several conditions. From the students' answers, their main concern is the system itself. 41 students thought that the system should be improved. They still found lag, freeze, inaccessible, or even error when using the Binus Maya. If these problems are addressed, their online learning will be smoother. 12 students asked for simpler features in the online system. As we are all aware, not all students (even lecturers) are technologically savvy. Some people need more time to familiarize or get used to online learning system. Therefore, user friendly, easy to operate features will be very much helpful. Other suggestions include giving notification and not giving too many assignments, as one student said, "We are doing online learning, not online assignments." Several suggestions can be seen in figure 6.

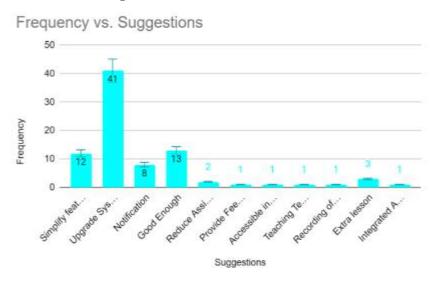


Fig. 6. Suggestion for better online learning system

V. CONCLUSION

E-learning classroom has become a necessity due to the current pandemic situation. Conducting elearning efficiently require a good e-learning system, such as the one applied by Bina Nusantara University with its application called Binus Maya. However, e-learning has not been fully accepted as an effective way of learning by the students. This study reveals several findings. First, vast majority of students chose traditional (face to face) classroom and blended classroom rather than pure online classroom. The main reason for this is that there is still a need for human interaction (with the teachers or with their peers). Secondly, online learning has fewer benefits than disadvantages. The benefits among others learning autonomy and time and cost efficiency. Yet, the most notable disadvantage is students' inability to understand completely the materials presented through virtual channel. Bad internet connection is also named as a disadvantage. Thirdly, online learning system's features such as video conference and discussion forum should be improved and simplified because these two features still enable students to interact with their lecturers or their peers, even though the interaction is limited.

REFERENCES

- [1] K.F. Fee, *Delivering E-Learning: A Complete Strategy for Design Application and Assessment.* London and Philadelphea: Kogan Page, 2005.
- [2] T. FitzPatrick, "Key success factors of eLearning in education: A professional development model to evaluate and support eLearning," *US-China Education Review.*, vol. A9 pp. 789-795, 2012.
- [3] H. Srimathi and S.K. Srivatsa, "Knowledge Representation in Personalize eLearning," Academis Open Internet Journal, vol 23, 2008. [Online]. Available: <u>http://www.acadjournal.com/2008/v23/part6/p4/</u>
 - [4] M. K. Hartnett, "The importance of motivation in online learning," in *Motivation in Online Education*, Singapore: Springer, 2016, pp. 5–32
- [5] G. Trentin, "A multidimensional approach to e-learning sustainability," *Educational Technology.*, 2007, vol. 47, no. 5, pp. 36-40.
- [6] J. Valverde-Berrocoso, M.D. Garrido-Arroyo, C. Burgos-Videla and M. B. Morales-Cevallos, "Trends in educational research about e-learning: A systematic literature review (2009-2018)," *Sustainability.*, 2020, vol. 12, pp. 1-23.
 - [7] S. Guri-Rosenblit, "Distance education and e-learning: Not the same thing," *Higher Education.*, 2005, vol.. 49, pp. 467-483.
 - [8] V.P. Mahlangu, "The good, the bad, and the ugly of distance learning in higher education," in *Trends in e-Learning*, InTechOpen, 2018, pp. 17-29.
- [9] N. Islam, M. Beer and F. Slack, "E-learning challenges faced by academics," in *Higher Education: A Literature Review Journal of Education and Training Studies*, vol. 3 no. 5, pp. 102-112, 2015
 - [10] D. Jaques and G. Salmon, Learning in Groups: A Handbook for Face-to-Face and online Environments. Abingdon, UK: Routledge, 2007.
 - [11] J. Little-Wiles and L.L. Naimi, "Faculty perceptions of and experiences in using the blackboard learning management system," *Conflict Resolution and Negotiation Journal.*, 2011, vol. 4, pp. 1-13.
- [12] A. Schroeder, S. Minocha and C. Schneider, "The strengths, weaknesses, opportunities and threats of using social software in higher and further education teaching and learning," *Journal of Computer Assisted Learning.*, 2010,vol. 26 no. 3, pp. 159-174.

[13] M. Afzalkhani and S. Ghods, "Evaluation of the situation of Intelligent secondary school deployment in Semnan Province from the viewpoint of managers and teachers," *Information Technology and Communication Technology Quarterly in Education Sciences., 2003*, vol. 2 no. 1, pp. 23-39.

[14] R. Davidson, "Wiki use that increases communication and collaboration motivation," *Journal of Learning Design.*, 2015, vol. 8 no. 3, pp. 94-105.

[15] C.R. Graham and M. Misanchuk, "Computer-mediated learning groups: Benefits and challenges to using groupwork in online learning environments," in *Online Collaborative Learning: Theory and Practices*, T.S. Roberts, Ed.,Hershey, PA: Idea Group, 2004, pp. 181-202.