Students' Pedagogical and Technical Challenges in Online Learning

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ABSTRACT

The advancement of the internet and the accessibility of technology has led to the development of online learning. Especially in this pandemic situation, students are forced to attend online learning despite their readiness. This study then aimed to explore the challenges faced by students of the English Language Study Program when attending online learning. This study used a descriptive qualitative method. The researcher gained the data by distributing questionnaires to students of the English Language Study Program from three universities in Jakarta, which are Universitas Negeri Jakarta, Universitas Muhammadiyah Prof. DR. Hamka, and Universitas Pamulang. The findings revealed that the students are facing the challenges in both pedagogical challenges and technical challenges. One of the challenges in pedagogical challenges is the results of students' work are not optimal due to a large number of assignments and lack of allocated time. While in technical categories, one of the challenges is the internet speed which is mostly slow due to bad weather or bad providers.

Keywords: Online Learning, Challenges, Pedagogical Challenges, Technical Challenges.

INTRODUCTION

During the last few decades, the strand of online learning research has been thriving as the advances in Internet technology have enhanced the convenience of learning, and the wide application of computer-mediated communication tools has led to learning interactions without the constraints of time or place (Kent, Laslo, &Rafaeli, 2016; Kim, Park, & Cozart, 2014). It is encouraging educators at the secondary level to believe that distance education technology can improve teaching effectiveness for students (Volery 2001). The term of online learning means that the learning process is carried out across distance, outside a traditional classroom (Manoj. K 2019). The learning process is supported by digital electronic tools and media as the instruments that could sustain the learning process (Hoppe et.al, 2003).

Online learning offers some benefits for the students and lecturers, for example, such learning activities as giving instructions, giving feedback, and submitting the assignments are primarily carried out over the internet (Watson and Kalmon, 2005). Also, students can easily adjust their learning pace as

the system is usually opened for a certain period of time (Gilbert, 2015). This contributes to the flexibility in the learning process, in terms of both the time and the place, allowing the students to learn at their convenience (Kim et.al, 2005). To add, some students believed that online learning allows them to interact with their instructors more closely than they could in traditional classroom settings (Kim et.al, 2005).

On the other hand, online learning also offers the students and teachers some challenges. Some researchers noted that students encountered a challenge in communicating in an online learning environment. Kim et.al (2005), for example, pointed out that students were having difficulties when communicating with other students to work with the assignments. The difficulties lie in time scheduling online team meetings and lack of emotional connection which created misunderstanding among students. Besides that, the students also have difficulties in having real-time feedback from the lecturers.

The findings reported from those previous studies have alarmed us on obstacles that students may find when attending online learning, especially in terms of communication and interaction between students – students as well as students – lecturers. With the current situation where a pandemic has forced most of the students to attend online learning, study on this matter becomes relevant and worth investigating. The present study tries to explore the challenges that students of English Study Programs face when attending English online learning courses, especially because students need a lot of practice in using the language in real communication in a real-life related context. To do that, two research questions were set out to guide the study: 1) What are the pedagogical challenges faced by students when attending an online learning course? 2) What are the technical challenges faced by students when attending online learning? This study will focus on the perception of the students of the English Language Study Program toward the challenges that occur in online learning. It is hoped that the information from students' perspectives about the pedagogical and technical challenges of online learning could help lecturers to innovate the learning processes when it goes online. Therefore, challenges can be overcome while also achieving the learning objectives.

METHOD

This study used a descriptive qualitative method. The researcher collected the data by distributing the questionnaire to 104 students of the English Language Study Program from Universitas Negeri Jakarta, Universitas Muhammadiyah Prof. DR. Hamka, and Universitas Pamulang which were taking English online learning courses which need practices, such as public speaking, English for Academic Communication, Peer Teaching, etc.

In collecting the data, the researchers adopted an instrument from Sarvestani et.al (2019). The questionnaire is chosen as the instrument for collecting data. It is constructed by using the semantic differential scale to discover the students' perception of the challenges while doing online learning. The scale consists of five points. The

semantic differential scale suggests a simple and accurate tool for collecting the data (Rosenberg & Navarro, 2018). To ensure the validity and reliability of each item, the researcher did a pilot study on 20 students of English Study, then did the validity and reliability test of each item using SPSS, 45 items passed the validity and reliability test.

To analyze the data, the researcher does some steps, those are: 1) Classifying which questionnaire results belong to Students' Experiences of E-Learning Challenges; a Phenomenological Study by Sarvestani et.al (2019); 2) Coding the data based on the table of analysis (adapted from Chang, Shen, Liu, 2014) which can be further seen in the Findings section; 3) Calculating all data using Mean ($\mu = (\Sigma Xi) / N$); 4) Analyzing the challenges faced by students when attending online learning in each item; and finally 5) Drawing conclusion.

FINDINGS AND DISCUSSION
Finding
The questionnaire was made in the google form and distributed through social media to the prospective respondents from the three chosen universities. There were 45 totals of items that had already been tested on validity test and reliability test through pilot testing. The findings are presented into two sub-sections based on the two research questions, which were Pedagogical Challenges and Technical Challenges. Each type of challenge was divided into two sub-categories. Pedagogical Challenges were discussed based on the educational aspects and assessment aspects, while Technical

Challenges were discussed based on the infrastructural aspects and communicational aspects.

RQ1: What are the pedagogical challenges faced by students when attending an online learning course?

The purpose of the first research question was to find out pedagogical challenges faced by the students of the English Study Program when attending online learning. Below are the results.

Table. 1 Students' Educational Challenges

The Perceptions of Students' Educational Challenges (PSEC)	
Categories	Mean
Lack of Training on Basic E-Learning (PE_1)	3,21
Too many assignments (PE_2)	3,86
Providing resources based on the interests of professors (PE_3)	3,44
Large number of modules (PE_4)	3,33
High expectations of the professors (PE_5)	3,81
The large number of resources (PE_6)	3,53

From the table 1 students had found the challenges in all aspects of educational categories (Lack of training on basic E-learning, too many assignments, providing resources based on the interests of the lecturers or professors, a large number of modules, high expectations from the lecturers or professors, the large number of resources). The most difficult challenges among six aspects that they faced were too many assignments, high expectations of the lecturers or professors, and a large number of resources, with significant mean scores of 3,86; 3,81; and 3,53 respectively.

Table. 2 Students' Educational Challenges

The Perceptions of Students' Educational Challenges (PSEC)		
Categories	**Item Questions**	**Mean**
Lack of Training on Basic E-Learning (PE_1)	PE_1a	3,41
Too many assignments (PE_2)	PE_1b	3,61
Providing resources based on the interests of professors (PE_3)	PE_1c	2,61
Too many assignments (PE_2)	PE_2a	3,98
High expectations of the professors (PE_5)	PE_2b	3,59
The large number of resources (PE_6)	PE_2c	4,02
Providing resources based on the interests of professors (PE_3)	PE_3a	3,78
	PE_3b	3,31
	PE_3c	3,22
A large number of modules (PE_4)	PE_4a	3,05
	PE_4b	3,46
	PE_4c	3,47
High expectations of the professors (PE_5)	PE_5a	4,08
	PE_5b	3,85
	PE_5c	3,50
The large number of resources (PE_6)	PE_6a	3,29
	PE_6b	3,63
	PE_6c	3,65

More details listed in table 2 illustrate that the mean scores (4,08; 4,02; and 3,98 respectively) show that high expectations from the lecturers, a large number of assignments, and sufficient time provided to do an assignment were the highest challenges that students faced when attending an online learning course. Meanwhile, the lowest mean score (2,61) was in terms of whether students understand the process of online learning or not, which means that most respondents did not find it difficult to get

familiarized with the online learning process.

Table. 3 Students' Assessment Challenges

The Perceptions of Students' Assessment Challenges (PSAC)	
Categories	**Mean**
In-person end of term examinations for the virtual education (PA_1)	3,69
Lack of focus on prerequisites that students must have before entering the program (PA_2)	2,14
Lack of attention to students' feedback (PA_3)	2,93

From the table 3, the highest mean score which was 3,69 shows that the students only perceived one challenge in this category, which was in terms of in-person end of term examinations for virtual education.

Table. 4 Students' Assessment Challenges

The Perceptions of Students' Assessment Challenges (PSAC)		
Categories	**Item Questions**	**Mean**
In-person end of term examinations for the virtual education (PA_1)	PA_1a	3,46
Too many assignments (PE_2)	PA_1b	3,94
Providing resources based on the interests of professors (PE_3)	PA_1c	3,67
Lack of focus on prerequisites that students must have before entering the program (PA_2)	PA_2a	2,35
High expectations of the professors (PE_5)	PA_2b	2,04
The large number of resources (PE_6)	PA_2c	2,05
Lack of attention to students' feedback (PA_3)	PA_3a	3,05
	PA_3b	2,63
	PA_3c	3,10

More details listed in table 4 illustrate that the mean scores of in-person end-of-term examinations for the virtual education aspect (which were 3,94; 3,67; and 3,46 respectively) were significantly greater than the other aspects. This result shows that students were worried that the levels of students cheating were increasing and the exam they sent were not well received by the lecturers.

RQ2: What are the technical challenges faced by students when attending online learning?

The purpose of the second research question was to find out technical challenges faced by the students of the English Study Program when attending online learning. Below are the results.

Table. 5 Students' Infrastructural Challenges

The Perceptions of Students' Infrastructural Challenges (PSIC)	
Categories	Mean
Slow internet speed (TI_1)	3,54
Lack of advanced equipment (TI_2)	2,46
Disconnections in the internal servers (TI_3)	2,99
Lack of access to resources at the library (TI_4)	3,18

From the table 5 students had found the challenges in two aspects among the four aspects of infrastructural categories. The mean scores (3,54; and 3,18 respectively) show that the slow speed of the internet connection, and lack of access to resources at the library were the highest challenges students faced when attending online learning. More details listed in table 6 reveal that bad weather, the unstable network served by providers, and the

lack of access to the library were the highest challenges that students face when attending online learning, with the mean scores of 4,11; 3,67; and 3,37 respectively.

Table. 6 Students' Infrastructural Challenges

The Perceptions of Students' Educational Challenges (PSEC)		
Categories	Item Questions	Mean
Slow internet speed (TI_1)	TI_1a	3,67
Too many assignments (PE_2)	TI_1b	4,11
Providing resources based on the interests of professors (PE_3)	TI_1c	2,83
Lack of advanced equipment (TI_2)	TI_2a	2,52
High expectations of the professors (PE_5)	TI_2b	2,60
The large number of resources (PE_6)	TI_2c	2,26
Disconnections in the internal servers (TI_3)	TI_3a	2,91
	TI_3b	3,10
	TI_3c	2,95
Lack of access to resources at the library (TI_4)	TI_4a	3,37
	TI_4b	2,88
	TI_4c	3,28

Meanwhile, the lowest mean scores (2,60; 2,52; and 2,26 respectively) were in terms of lack of advanced equipment aspects. It means that the respondents were able to provide the required devices to support their online learning process.

Table. 7 Students' Communicational Challenges

The Perceptions of Students' Communicational Challenges (PSCC)	
Categories	Mean
Lack of professor-students interaction (TC_1)	2,93
No face-to-face communication (TC_2)	3,97

Table 7 shows that students had found the challenge in one aspect of communication categories. The mean score of 3,97 shows that the unavailability (or lack) of face-to-face communication was the highest challenge students faced when attending online learning. They still hoped for regular meetings in which they could listen to the lecturers explaining or having discussions on the topics, either with the lecturers or among the students.

Table. 8 Students' Communicational Challenges

The Perceptions of Students' Communicational Challenges (PSCC)		
Categories	Item Questions	Mean
Lack of professor-students interaction (TC_1)	TC_1a	2,52
Too many assignments (PE_2)	TC_1b	2,43
Providing resources based on the interests of professors (PE_3)	TC_1c	3,85
No face-to-face communication (TC_2)	TC_2a	3,84
	TC_2b	3,97
	TC_2c	4,11

On the other hand, the interaction between the lecturers or professors with the students was not that lacking. Moreover, in table 3.8, the mean scores (4,11; 3,97; and 3,85 respectively) indicate that the absence of face-to-face communication made group work ineffective and sometimes made the students misunderstand the messages that their lecturers or friends were intended to convey, also lack of communication with the lecturers made the learning less effective for the students.

Discussion

The objective of this study is to explore the challenges that students face when attending an online course in the context of online learning in English Study. It will focus on students' perception of the challenges that occur in online learning. This study uses surveys to find out the pedagogical and technical challenges which occur when students attend an online learning based on Students' Experiences of E-Learning Challenges; a Phenomenological Study by Sarvestani et.al (2019). The major findings of this research are summarized as follows. Most students have to face challenges in online learning, especially in terms of education and communication. In terms of assessment, students face a problem in the in-person end of term examination for virtual learning. Most of them worry about the examination whether the works they have done will be accepted or not and about the increased chance of cheating if there is no in-person examination. Moreover, most of them also feel lacking face-to-face communication, so the learning process is less effective. From those 15 basic categories, students are having a problem with 9 categories, most of which are in educational categories. It means that they still have difficulty when attending online learning.

Table. 9 Students' Challenges in Online Learning

Students' Challenges in Online Learning	
Categories	Mean
Educational	3,53
Assessment	2,92
Infrastructural	3,04
Communicational	3,45

In the educational category, the mean score (3,53) (see table 4.1) identified that students are having a problem. Especially in terms of too many assignments and high expectations of the professor, with the mean scores of 3,86; and 3,81 respectively. From this category, the results are in line with the study conducted by Sarvestani et.al (2019). Their study stated that educational issues may make challenges for students in analyzing the content, purpose, media, organizing learning materials and other educational materials and reduce their learning quality (Sarvestani et.al, 2019), which means those challenges are caused by lack of training on e-learning, a large number of assignments, modules and resources, uninterested resources, and lecturer's high expectation.

In table 9, the mean score (2,92) shows that students also face challenges in the assessment category. Table 6 shows most students are having a problem with the first and third aspects of this category, which is in-person end-of-term examinations for virtual education and lack of attention to students' feedback with the mean score 3,69 and 2,93 respectively. On the other hand, the mean score (2,14) in the lack of focus to educational prerequisites identified that students are having no problem with this. This result is different from Sarvestani, et.al (2019), which said that the lack of focus on educational prerequisites is one of the training challenges that will lead to other challenges.

In terms of infrastructure, the mean score (3,04) indicates that students are also facing challenges in this category. In detail, the biggest challenge is in terms of slow speed of the internet with a mean score 3,54 (see table 8). It is due to bad weather and bad internet providers. This result is in line with Gilbert's (2015) study in terms of lack of reliable internet. On the other hand, in terms of lack of advanced equipment, disconnection in server, and lack of access to resources at library are different with Sarvestani, et.al (2019), which said that software and hardware issues which is not well-suited for the virtual medical education, low bandwidth was one of the main infrastructure challenges, and resources, as well as the access to databases, needs more attention to the content management system.

CONCLUSION

This study aimed to find out the pedagogical and technical challenges that usually occur when students attend English online learning courses such as public speaking, Peer Teaching, English for Academic Communication, etc. With the current situation where a pandemic has forced most of the students to attend online learning, study on this matter becomes relevant and worth investigating. This study focuses on students of English study program perception toward the challenge that occurs in online learning.

The findings show that students are facing the pedagogical and technical challenges. Pedagogical challenges when attending online learning are in lack of training on basic e-learning, students are not ready and not well prepared to do an online; large number of modules, resources and assignments given by the lecturer make students exhausted and loss of focuses, so the result of their works are not optimal; the

resources provided are not meet the interests of students; and students are pressured with the lecturers' expectation. Meanwhile, the technical challenges that mostly occur when students attend an online learning course are the internet connection speed which is mostly slow and the lack of face-to-face communication between student-student and student-lecturer.

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