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"Literacy, Globalization, and Technology of Education Quality for Preparing the Society 5.0"

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WELCOME MESSAGE FROM CONFERENCE CHAIR

Assalamu'alaikum
Warahmatullahi Wabarakaatuh.
May peace be upon us all.

- The Honourable Rector of Universitas Sebelas Maret and Staffs;
- Honourable Dean and Vice Deans of the Faculty of Teacher Training and Education, Universitas Sebelas Maret;
- Distinguished Speakers;
- The Association of Indonesian Guidance and Counseling (ABKIN);
- Indonesian Doctoral Program of Educational Science Forum;
- Distinguished Guests, Participants.
- Ladies and Gentlemen

It is my great pleasure to welcome all of you to the International Conference on Learning Innovation and Quality Education (ICLIQE) 2021 hosted online by Universitas Sebelas Maret. We are so grateful to Faculty of Teacher Training and Education, Universitas Sebelas Maret, here in the City of Surakarta, Central Java Province, Indonesia.

Ladies and gentlemen,
This ICLIQE 2021 was an invitation to discuss various topics related to our Conference theme "The Future of Education and Guidance and Counseling era 5.0" such as; Guidance and Counseling, Science and Technology Education, Social and Humanities Education, Management Education, Basic Education, Special Education, Early Childhood Education and Development, Curriculum and Learning, Innovation and Learning Evaluation.

Ladies and gentlemen,
We invited four speakers in this conference namely; Prof. Dr. Sunaryo Kartadinata, the Indonesian Ambassador to the Republic of Uzbekistan and the Kyryzstan, Associate. Prof. Dr. Salleh Amat, Universiti Kebangsaan Malaysia, Prof. Dr. Hamdan bin Said, University of Technology Malaysia, Prof, Dr. Sunardi, M.Sc Faculty of Teacher Training and Education, Universitas Sebelas Maret, Surakarta.

Ladies and gentlemen,
We received a total of 127 abstracts to be presented in the conference coming from various institutions.

I believe you will have a stimulating and interesting conference today. Please take this opportunity to interact with each other to the fullest in this online environment and exchange your experience and create ideas for a better future. I wish you every success with this conference.

We are so grateful to Rector of Universitas Sebelas Maret, Dean of Faculty of Teacher Training and Education, Universitas Sebelas Maret for their tremendous support they have provided as Host and the Conference Organizing Committee, particularly the Conference Chair and Co-Chairs, whose members have put much effort into ensuring the success of day-to-day operation of the conference.

I look forward to learning the outcome. Thank you.

Wassalaamu'alaikum Warrahmatullaahi Wabarakaatuh.

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Sebagai Penulis *"One Year Reflection of Online Learning: The Students' Perceptions of The Effectiveness of Online Learning Amidst The COVID-19 Pandemic In A University"* pada *The ACM International Conference Proceeding Series - International Conference on Learning Innovation and Quality Education* Universitas Sebelas Maret Skala Internasional Terindeks Scopus Edisi 15 Juli 2022.

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One Year Reflection of Online Learning

The Students‘ Perceptions of the Effectiveness of Online Learning amidst the COVID-19 Pandemic in a University

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ABSTRACT

This research explores higher education students‘ perceptions related to the effectiveness of online learning amidst pandemics to get a better understanding of online classroom implementation in the learning and teaching practice. Understanding this issue is important because online learning is generally a new thing for students in Indonesia; thus, the exploration of students‘ perceptions would be the key to unpack the challenges in an online classroom context faced by the students. To investigate the issue, a case study was employed. This methodology allowed the researchers to delve into the problems by interviewing students using semi-structured interviews in a higher education institution. In this study, 6 students from different study programs agreed to participate and become the interviewees. To explore this topic, this research employed a model of predictors for effective online learning. Based on the analysis of the findings, most of the students believed that online learning was less effective compared to offline learning. The reasons are due to the inefficiency of learning tools, less interaction between teachers and students, teachers‘ lack of attention to students‘ workload and deadlines, disruptions coming from their home environment, and the challenges of managing time to join online classroom which led to the inflexibility of learning. The findings imply that there is a need to improve the learning management system and learning policy for both teachers and students to create a better learning atmosphere. Therefore, this study proposes that stakeholders should reconceptualize the teaching strategies and policies for the future of online learning.

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1 INTRODUCTION

The COVID-19 pandemic has spread globally and has forced all educational institutions to conduct online learning [1]. However, moving the classroom from offline to online does not always work. Many institutions in many countries are not yet ready to respond to the pandemic. Due to some important factors that hinder learning, such as insufficient preparation of Internet infrastructure and insufficient preparation of teachers for online teaching, the unprecedented impact has affected all education in the world, including Indonesia.

In Indonesia, the government has done its best to minimize the impact of the COVID-19 pandemic on Indonesian education. In March 2020, the Ministry of Education and Culture issued an important policy requiring all educational institutions to use online platforms. All schools and universities are not allowed to hold meetings in classrooms to prevent the spread of the COVID-19 virus. Not only in the teaching process, the Ministry of Education and Culture also stopped the national examination that year. All these measures are taken to promote social distancing and prevent the collapse of the national health system during a pandemic. By promoting social distancing from all societies, people have a greater chance of avoiding the virus [2]. Consequently, because face-to-face learning is prohibited, teachers and students should adapt to their teaching and learning strategies to make the learning meaningful.

To understand this phenomenon, many Indonesian researchers have been attracted to analyze potential problems in Indonesian online teaching practices. Most survey results indicate that teachers and students are working hard to make the learning process in online classrooms well-executed [5, 7]. According to their findings, some factors have become challenges that teachers need to overcome. In addition, other Indonesian researchers have also investigated online learning in Indonesia and discovered some challenging factors that hinder the learning process. The challenging factors are whether teachers are ready to use technology to teach students online, whether students are ready to learn on online platforms, and infrastructure is ready to meet the online and teaching-learning process [3-10].

As discussed in the previous paragraph, online learning seems to have become the focus of discussions among Indonesian researchers during the Indonesian pandemic. This is because online learning is relatively new to many teachers and students in Indonesia [11, 12]. Despite many studies conducted by Indonesian researchers, most studies on online learning in Indonesia mainly discuss the challenges faced by teachers and students. To better understand

the current situation, Widiyono [8] suggests that future research should investigate the factors that affect the effectiveness of online learning. Therefore, to fill this gap, this research focuses on investigating the learning effects of students and teachers when they meet on an online platform. To reveal this research gap, this research raises a question, "how are students' perceptions in a higher education institution about the effectiveness of online learning amid the COVID-19 pandemic?"

2 LITERATURE REVIEW

2.1 Online learning

Many researchers use different terminology, which makes it difficult to create general descriptions and definitions [13]. Some researchers define online learning as e-learning [14-16], some define it as virtual learning [17]. Others define it as computer-assisted learning [18] or distance learning [19]. Currently, researchers also call it synchronous and asynchronous learning [20-22]. Despite the introduction of so many terms, in general, these terms mean that the learner keeps a distance from the teacher and uses some form of technology to obtain learning resources and support from the instructor [13].

Due to the development of science and technology, many teachers and students can now teach and learn on the online platform. Since online learning platforms are easily accessible everywhere, online learning provides many students with learning flexibility [23]. This gives online learning a lot of advantages; however, doing online learning requires resources and commitment [24]. In addition, Ally [13] suggested that the resources and materials for online teaching should be appropriately designed and must be student-centered to ensure adequate support for students. In other words, teachers should have sufficient teaching knowledge before designing online learning for students.

2.2 The effectiveness of online learning

Effectiveness is the goal for all activities where reality has fulfilled the plans and hopes [25]. In the teaching and learning context, if teachers and students can complete the learning objectives specified in the curriculum, the effectiveness of learning can be achieved [16]. In other words, effective learning is a combination of structured activities involving people, facilities, media, and procedures that change someone's behavior according to their potential to achieve the learning goals set by the educational institution [26].

To address the research question, this research employs and adapts the model of predictors proposed by Marks, Sibley and Arbaugh [27]. According to Marks et al. [27], it is believed that if educators are aware of these factors, effective online learning can be achieved. These factors include the interaction between students and teachers, the interaction between students and peers, the interaction between students and learning content or materials, the personality and demographic structure of students, and more importantly, the learning experience of students in online classrooms. In detail, Marks et al. [27] explained in their theoretical model that some variables will affect students' perceptual learning of the course. The variables consist of instructor-student activities, student-student activities, media for presentations, group discussions, individual projects, audio, video, and GPA. Similar to this concept, Peltier, Drago and Schibrowsky [28] believe that the effectiveness of learning can be evaluated by teachers' teaching strategies in managing the interaction between teachers, students, learning materials, learning technology, and student learning support. Ultimately, teachers should carefully design their learning activities to ensure that the learning process is effective.

Some studies supporting the above view have shown that interaction and student learning experience can improve the effectiveness of online platform learning. Hone and Said [29] and Mehall [30] show that the above factors are very important to ensure effective learning on online platforms. Related to interaction, Anderson [44] further suggests that teachers, students, and learning content should always interact in online classrooms. When the interaction between students, teachers, and learning materials is at a very high level, meaningful deep learning can be created in the classroom [44]. In addition to this argument, interaction can improve students' learning satisfaction. For example, Zhang and Lin [31] found that engaging and diverse interaction between students and course content is the key to creating high levels of learning satisfaction. This shows that teachers cannot ignore the role of interaction in online classrooms, because interaction provides a better online learning environment.

In terms of the learning experience, teachers should formulate appropriate learning designs to ensure that students get the best learning experience. After creating a good learning design, students might achieve the learning goals set by the school [32]. Research has shown that well-designed pedagogy is essential to the success of online learning [33, 34]. For example, Martin et al. [34] found that teacher facilitation, such as responding to students' work promptly, can give students the best learning experience and encourage them to participate in the course. This provides an opportunity to create effective online learning because students are heavily involved in course materials.

Based on the above discussion, this means that interaction, perceptual learning, teacher behavior that supports learners, and course satisfaction can also be included to explore the effectiveness of online learning. These four factors aid the researchers to deeply investigate the issue of the effectiveness of online learning in a higher education institution. These four factors have also been used by Marks et al. [27] to evaluate students' perceptions of online learning.

2.3 Learning and teaching experience in Indonesia amid the COVID-19 pandemic

During the COVID-19 pandemic in Indonesia, Indonesian researchers conducted many studies to investigate the impact of online learning on teachers and students. Many researchers investigate online learning issues during the pandemic because most teachers and students in Indonesia are not accustomed to online learning [12]. Therefore, they are forced to adapt to this new habit of online learning and teaching [11]. To solve this problem, Indonesian researchers mainly explore and investigate the basic factors that challenge the teaching process. The factors found in the research are related to the technical problems of managing online learning and insufficient human resource preparation [10, 35-39]

In terms of technical issues, some studies have shown that Internet infrastructure has always been a fundamental issue facing teachers and students. Indrawati [36], Jamal [6], and Annur and Hermansyah [3] found that Internet infrastructure hinders the teaching process. Both teachers and students often struggle to conduct online learning due to technical issues that occurred in the online classroom. For example, in some areas of Indonesia, geography issues often challenge teachers and students to learn online [6]. Internet signal is often disconnected because the signal in a specific area is not enough to support online learning.

Technical issues are not only related to signals but also related to how teachers and students participate in learning through technology. Many teachers and students in Indonesia are not yet ready for online learning [40, 41]. For example, Jalal [5] found that some teachers were not ready to use the technology. In his research, 35% of teachers are not yet ready to use technology for online learning. This means that teachers may find it difficult to effectively teach and learn during the COVID-19 pandemic.

3 METHOD

This study used a case study method to investigate this issue. Using this method is essential because this research attempts to reveal the "how" and "why" factors behind the problem [42]. Therefore, it was expected that students' perceptions of online learning can be deeply analyzed. In addition, the case study method was adapted to the investigation of a specific case. In this study, the specific case was the perceptions of higher education students on the effectiveness of online learning one year after the COVID-19 pandemic. Participating students were from a private university in Surabaya, which has sufficient technical resources for online learning during the pandemic.

To explore the case, this study conducted semi-structured interviews through an online platform. Additionally, to question the students, researchers adapted the questions proposed by Marks et al. [27] to delve into students' thoughts about online learning. To elicit the data, the researchers conducted purposive sampling and invited some students from the university. As a result, 6 participating students agreed to participate in this research. The students were from 6 different study programs, and they had 30-40 minutes of interviews. To get a wider perspective and perceptions, the students who participated in the interview should be students who have ever studied in face-to-face classrooms. This was because they might share a comprehensive evaluation of online learning compared to offline learning.

Due to the COVID-19 pandemic, the interview was conducted on an online platform. In this research, the researchers utilized Google Meet to interview the participants. Before conducting the research, the interviewer informed the interviewee about the nature of this research by explaining the purpose of the research, the rules of the interview, and how the data is collected and managed. Then, the interview was recorded by using recording tools provided by Google Meet. Subsequently, the recording data is stored in Google Drive which is a data storage cloud on the internet. Furthermore, to make the participants' identities anonymous, this research labeled participants as student 1 (S1), student 2 (S2), etc.

Before analyzing the data, the recording will be transcribed to get better pictures of participants' arguments and perceptions [43]. Thematic analysis was used to analyze the data; thus, the researcher coded the data to find unique statements and classify them into some themes. The themes were based on the adaptation of evaluation measures proposed by Marks et al. [27]. It discussed four fundamental factors to seek and explore the effectiveness of online learning. Those were: (1) course interaction, (2) perceived learning or course quality, (3) instructor behavior, and (4) course satisfaction.

4 FINDINGS AND DISCUSSION

4.1 Course interaction

According to some participants, some students believe that the interaction between students and educators needs some improvement. The students said that although it feels different from an offline or face-to-face meeting, the lecturers have done their best to interact with the students. They admit that there is less interaction on online platforms compared to offline learning. In the interview, S1 stated:

S1: Many [lecturers] can handle it, but the problem is that the lecturers teach too fast. Thus, [we] rarely get a response. In an offline classroom, the interaction was very high. Meanwhile, in an online classroom, only 5 and 6 students responded [to the lecturer]. There is also no interaction between students in an online [platform], such as WhatsApp. Many lecturers do not motivate students to interact with each other, they only motivate [students] to make case studies. In online learning, [students] mostly get bored, and in an online classroom, we should only listen [to the lecturer]. Many lecturers asked for opinions, but the students' responses were lacking.

Like this statement, S4 explained that interaction in an online classroom needed some improvement, especially related to student-to-student interaction. S4 stated that there was almost no interaction with other students because the lecturer rarely motivates the students to have some interactions with other students. In detail, S4 explained that:

S4: Online classes [materials] can be understood, but it is more difficult compared to offline classes. But [it is] still understandable. Related to interaction with friends, it rarely happens. This is because, in offline classes, we can directly interact with the whole students. But in online classes, we only chat with close friends by WhatsApp or private chat. [We] rarely use the telephone or video calls, [it is] only once or twice. However, [we] use Discord instead. The lecturers rarely motivate students to interact, [they] only advise on how to do assignments and telling in which media we can communicate. Fortunately, lecturers often let students express their opinions. For example, [the lecturers] asked, 'is the task difficult or not? which one is difficult? if there is something difficult, just say it and discuss it together. If I have a question, the lecturers will answer it. Nevertheless, only one lecturer will answer. If not, [the lecturers] give incoherent answers.

Nevertheless, not all participating students perceived that the interaction in an online classroom was insufficient. Based on S3 statements, some lecturers have succeeded to maintain the interaction in the online classroom because they always check students'

assignments and activities, and these lecturers motivate the students to retain their interaction in the online platform. For instance, S3 stated that:

S3: [It is] a bit difficult [to have online learning] because we need to adapt to it. The same thing goes for maintaining interaction with friends. The only difference [compared to offline learning] is that we use Google Meet to discuss and do assignments. Lecturers also motivate us to interact with each other by checking the students one by one. They check whether the students pay attention or not. In addition, the lecturers always provide us with some help, especially after giving the material. Lecturers would answer questions in the WhatsApp group when students are still confused. We, as students, somehow feel reluctant and it is better to ask friends first. The atmosphere of the discussion is different from offline, it is quieter than the discussion in class. It feels like being alone.

Based on the findings above, it appears that not all lecturers have the same teaching strategies to maintain interactions between students, lecturers, and implicitly to the learning materials. Lecturers, in this particular university, do not treat the students in the same manner. Some lecturers do focus on maintaining the interaction; nevertheless, some do not have the initiative to maintain the interaction.

4.1.1 Discussion of course interaction. This finding supports Marks et al. [27]. Learning activities will be associated with students' perceived learning. In this study, students S1, S4, and S3 believed that the lecturer did not maximize online learning activities, which caused the students to exhibit negative perceptual learning. This can be seen when students explain that they feel lonely (see S3 transcript), feel bored (see S1 transcript), and have some difficulties in understanding the material (see S4 transcript).

Based on the above findings, simple interaction does not guarantee that students will give a positive view. For example, although S3 admitted that the instructor had done his best to interact with the students, S3 still felt lonely and did not participate in the course. Anderson [44] believes that to achieve a high level of teacher-student interaction, instructors need to build content-centered, learning-centered, community-centered, and evaluation-centered interactions. This means that asking about problems that the students face and asking about students' assignments are not enough to attract students. Teachers should establish interactions that respond to the curriculum needs [44].

To create supportive interactions, teachers should engage in interactions that support individualized learning, engage the knowledge, collaborate, and evaluate student performance at the same time. The study of Coogle and Floyd [45] proves this view. In this study, when students had the opportunity to collaborate with friends, interact closely with professors, and propose various learning strategies, students admitted that they had a positive view of online classrooms. This means that simple interactions may not make students view online learning positively. In addition, the results of the study are similar to those of the Nambiar [46]. Nambiar found that when there is a lack of interaction, students are likely to find that online learning is not effective. Therefore, teachers should pay attention to how they structure the interaction in the online classroom.

4.2 Course quality

In general, students perceived that course quality was good. Lecturers help students by providing various learning videos, modules, and e-books, so students can understand easier even though they use different tools. However, some courses that require equipment to be practice with, which not all students have, has challenges for both parties. For example, S4 explained that:

S4: About the learning materials, I can understand it. At least, I just need to reread the PowerPoint slides, but the assignment is more challenging. But there is one course that cannot be done online. Both lecturers and students are confused because the problem is more with the tools we have. And there are no facilities offered regarding computer equipment from both the lecturer and the campus.

Supporting S4 arguments, S5 stated that the materials were understandable. The only problem was when S5 wanted to ask questions to the lecturer, time and place sometimes hinder her to ask. In the interview, S5 responded:

S5: I can understand some parts of the learning materials. However, if I want to ask a question directly to the lecturer, sometimes it is not too flexible to ask. If I can meet the lecturer, I can directly and ask, 'what is it about sir/ma'am?' or 'how can it be like that?'. I think [online learning], is not efficient.

Then, S5 also continued her argument that the learning materials offered by the lecturers were beneficial for S5's future. She continued saying that:

S5: I think the materials and skills taught by the lecturer are good, and in my opinion, I need them to prepare for my future. For example, a business computer course helps me to delve into Microsoft Excel software. My lecturer also taught some authentic tips for working such as using pivot or table in Excel.

These findings show that lecturers have already prepared the course for the students. However, in the online classroom, teachers and students met some challenging factors which hamper the process of learning and teaching such as time constraints and lack of access to get the facility.

4.2.1 Discussion of course quality. Based on the above student arguments, it can be inferred that the participating students agree that the lecturer has effectively prepared the course. However, due to challenging factors such as the availability of tools and time constraints, students cannot learn materials effectively. In Indonesia's online learning environment, this is nothing new. Research has shown that many teachers or instructors in Indonesia do not have sufficient knowledge for operating the gadgets to teach online [10, 39]

For example, Asmuni [10] and Surahman, Santaria and Setiawan [47] shows that online learning facilities for teachers and students have become a major issue in Indonesian education. Asmuni [10] emphasized that the problems of online learning facilities are not only related to physical objects such as gadgets or laptops, but also the level of technical literacy and incorporating it into the learning process. To address this issue, Marks, Sibley and Arbaugh [27] suggest that teachers should continually learn to improve their knowledge in facilitating online learning so that more interactive learning experiences can be offered to the students.

4.3 Instructor behavior

In online learning, students admitted that lecturers attempt to discuss with students by asking questions related to case studies or opinions about assignments, submission deadlines, and others. Lecturers also like to make a joke and praise the students. However, the student showed a negative attitude toward online learning compared to offline learning. For example, S3 explained that:

S3: Lecturers always persuade the interaction about two to three times, that is done after explaining the material and providing case studies. Lectures also like to joke around so that the atmosphere is not too serious. [Lecturers] often praise students before giving suggestions even though the results of the work are not good. In terms of calling students, we are more comfortable being called with 'friends' so that we feel more humbled and comfortable during discussions because we are considered as friends although we still understand the boundaries between students and lecturers. The lecturers are open and easy to communicate if we do not understand the material. Moreover, the lecturers are willing to provide additional online meetings to help us understand the material better. However, lecturers still rarely ask about students' feelings and opinions on matters related to assignments. More students immediately asked for additional time for the deadline when we knew it was very short.

Similar to S3 statements, S2 mentioned that:

S2: Lecturers often interact, but student responses are low. Most of the time, they are also joking. In terms of calling names in class, there is no problem, and I feel that younger lecturers are much more friendly and less formal than senior ones. And all lecturers are very open when communicating during class, but when it is ended, the lecturer's response is so long.

The above student statement indicated that the lecturer tried to behave like a friendly person so that the student could participate in all activities in the online classroom. The students think this is a good teaching method. They think this method helps them reconnect the learning materials provided by the instructor. Although in some parts, students are still uncomfortable about following the instructions of the instructor, because the instructor has not solved some basic problems faced by students in online learning, such as assessment deadlines and assignment details.

4.3.1 Discussion of instructor behavior. As discussed in the results above, students believe that the behavior of the lecturer in the online classroom is good. Students feel at ease when joining any classroom at this university. However, the interaction between teachers and students needs to be strengthened. Anderson [44] believes that if teachers want to achieve effective online learning, teachers should meet students' expectations and respond immediately. In other words, any teacher who teaches online should act as an active guide for students [27]. Marks et al. Believe that teachers should involve students in any form of discussion, help students remember materials, explain subject-related issues, strengthen student performance, and ask students questions about homework and materials to ensure that students can participate in the course intensively.

Some studies have confirmed how teachers' behavior in online classrooms can help students participate more in the course. For example, in a study conducted by Smits and Voogt [48], it was found that teachers who perform more complex teaching behaviors in online classrooms, such as elaborating content and providing specific feedback to individuals, will get a positive impression of students. These positive Impressions affect student participation, so students are more involved in the course [48]. However, when teachers do not actively exhibit appropriate teaching behaviors in online classrooms, the learning process will not be effective [10]. In this study, Asmuni [10] showed that if teachers do not master the correct teaching strategies, most students will not understand the materials provided by the teachers. And, in some cases, because teachers cannot control the classroom, students do not actively engage with the course and do not follow teachers' explanations [10]. Ultimately, controlling behavior is a significant factor in changing the learning outcomes of online learning. If teachers can properly address issues in online platforms, students will likely engage more as proven in previous studies.

4.4 Course satisfaction

In online lectures, the voices of the students are divided into two. Some students are satisfied with the learning process although some are not. Various reasons why students are satisfied and unsatisfied with online learning. The students who are satisfied with online learning argue that lecturers have properly cascaded their knowledge. For instance, S4 explained that:

S4: I think it [the online learning] is normal. This is because there are some [aspect] that I am very satisfied although there are some [aspect] that I am not satisfied with. But mostly I am satisfied. The thing that makes me feel satisfied is that once the lecturer explained, I immediately understood and could do the assignment.

Nevertheless, some students were against this argument and said that they were not satisfied with the process of online learning. For example, S6 Stated that:

S6: I am not satisfied with online learning. This is because, sometimes, it is hard to dig in more information from the lecturers. For example, if I want to ask questions, I am lazy to do it because the response time for chatting is quite long. I know sometimes it is a student to blame, but if it is in an offline context, I can directly meet the lectures.

Similar to this statement, S1 agreed and explained that:

S1: In my opinion, online satisfaction is lower than offline because the discussion atmosphere is not alive. Thus, it affects the mood, and it makes [the student] lazy to study, easily distracted, play games, eat. If there is a policy from the campus to do online lectures in the next semester, I will not agree. The duration is quite satisfactory, but the deadline of assignments, some are too fast. If the lecturers focus on online learning and use the platform well, we can get all the knowledge we want, but personally, it is difficult to study online.

Based on the students' statements, it can be inferred that students' satisfaction was depending on how the lecturers respond to the feedback and interact with the students. As we can understand from the students' opinion, when the lecturers failed to create a better learning atmosphere and quick responses to the students' questions, students would get lazy and unsatisfied with the learning. However, when the explanation was understandable, some students admitted that they were satisfied with the online learning conducted by the lecturers.

Discussion of course satisfaction

Marks et al. [27] hypothesize that teacher-student interaction, student-student interaction, and content-student interaction predispose learning satisfaction in an online learning context. Based on the findings above, Marks et al. hypothesis is confirmed. It can be inferred that the lecturer who did not create better interaction to the students, the students tended to be lazy and perceived the learning negatively. For instance, S1 mood was affected, and became lazier to study because S1 felt that discussion between teacher to students or students to students were not alive. Consequently, S1 admitted that S1 was easily distracted by games or food near the students. Hence, the learning was not effective.

To maximize students' satisfaction with online learning, Kauffman [49] argues that instructors should provide quick responses and more collaborative learning like the class that is conducted offline. This kind of interaction is a significant factor to ensure that students are satisfied with the learning [49]. In the study of Baber [50] during the pandemic of COVID-19, it is found that interaction is an essential part of online learning. The absence of facial expressions, emotions, and body language that exist in offline learning is vital to cascade the knowledge from teachers to students, and it affects the students' learning satisfaction [50]. In the end, lecturers cannot neglect the importance of interaction with students. Once it is not maximised, students will not satisfy with the online learning.

5 CONCLUSIONS AND IMPLICATIONS

During the pandemic of COVID-19 in Indonesia, online learning has mushroomed in all education sectors. However, many students and teachers in Indonesia are not ready to adapt to this circumstance. To better understand the implementation of online learning in Indonesia, this current study unveils students' perceptions of online learning in a private university to face challenges coming from online learning. Based on the results, it appears that online learning is not significantly effective to support the process of learning. Students perceived the learning negatively because their expectations are not fulfilled by all lecturers. This study also found that interactions between teachers and students and teachers' behaviors are vital aspects to ensure that the learning is effective. Without them, online learning will not be effective, and students will tend to disengage from the course. Well-designed interactions and behavior will create better engagement from the students who expect that online learning should be more interactive and collaborative. This implies that future studies should attempt to seek proper online teaching strategies which can address more on interactions and teachers' behavior to scaffold students' understanding and engagement to the course. Thus, by designing proper online teaching strategies, it could make students engage more in the content and strengthen the communication between teachers and students.

6 LIMITATIONS

Because of the time constraints and the small scale of the study, this study cannot be taken as a general picture of online learning in Indonesia amid the COVID-19 pandemic. However, this study offers a deep understanding of small cases in Indonesia's education when online learning is conducted in a particular institution, especially related to the understanding of the effectiveness of online learning.

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