

OPPORTUNITIES AND CHALLENGES OF THE ONLINE LEARNING IN WEST SUMATERA: WHAT STUDENTS SAY ABOUT IT?

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Abstract: This research is a survey research to find out the opportunities and challenges of online learning in West Sumatra. A total of 227 students were randomly selected from two universities in West Sumatra as research participants. By conducting in-depth interviews, information was obtained about students' views on online learning in West Sumatra. An unstable internet network is a major problem for students to take online learning. Online learning opportunities in West Sumatra, namely: online learning provides benefits because it is more flexible and can be followed anywhere and anytime, students can carry out learning while entrepreneurship or work, and various educational institutions in West Sumatra with their quality have the potential to be able to keep up with the times by carrying out online learning in a more planned and programmed way. The challenges of implementing online learning in West Sumatra, namely: provincial and local governments need to provide internet services widely and reach all regions in West Sumatra, students need to be educated to be able to become independent learners from an early age, teachers need to design accessible learning content by students and must be by the needs of students, and the government needs to make efforts to provide extensive library services that can be accessed online.

Keywords: opportunities, challenges, online learning

The crisis in the education sector is one of the impacts of the spread of COVID-19 that has hit the world (UNICEF, 2020). Nevertheless, learning activities must still be carried out concerning the emergency education approach cycle, namely: prepare, cope, and recover. (World Bank, 2020). The learning system immediately changed from face-to-face learning to online learning or better known as distance

learning. This online distance learning is carried out to increase abilities in knowledge and behavior as a result of mediated experience, limited by distance and time, flexible, participants cannot share the same situation with what is learned, student-centered learning, both synchronously nor asynchronous (King et al., 2001); (Bušelić, 2012). This confirms that in online learning, technology becomes an intrinsic element in the learning system. Technology is

seen not as the ultimate goal of learning but as a solution used to reduce barriers and improve interaction and communication between students and educators (Bozkurt, 2019). Technological readiness and the ability to use various technologies by teachers and students are the main factors for the implementation of quality online learning (Tang et al., 2021).

Massive online learning in recent times aims to continue face-to-face implementation in the midst of the spread of COVID-19 (Qazi et al., 2021) and to stop the spread of COVID-19 (Yulia, 2020). Online learning that was carried out during the COVID-19 pandemic was not easy, especially for educational institutions that were not used to conducting online distance learning. This is felt especially by teachers and students as implementers of education in the classroom. Students as subjects in the teaching and learning process certainly experience various experiences during online distance learning. In connection with this, several studies are described that discuss student perceptions and student attitudes during online learning in various educational institutions in several countries. In an Arab country, students in chemical engineering classes said that they encountered significant technical difficulties during online learning (Ghasem & Ghannam, 2021); For students, online distance learning is carried out to meet their diverse learning needs and to keep up with technological developments. However, they are concerned about time management, motivation, and language skills (Fidalgo et al., 2020). In Georgia, students benefit from online learning although it is not always related to knowledge (O'Malley & McCraw, 1999). In Tanzania, students say that online learning is better than traditional learning due to quality learning content, presentation, and assessment (Messo, 2014). In Ghana, online distance learning is in high demand by married students as they can balance their education and work. However, they are worried about feedback from teachers, lack of learning facilities, and difficulty understanding learning (Osei, 2010). In Uganda, students gave positive ratings of the quality of online learning but gave negative ratings of feedback on assignments and exams, assessment of learning, methods, and presentation of materials, and lack of peer support (Denis & Simon, 2019). In New York, students in online classes are better prepared in

terms of content knowledge, academic performance, fairness, and learning objectives than students in traditional classrooms (Tribunella, 2004). In Morocco, students stated that online learning is no better than face-to-face learning because technical support and training are still needed to use online learning applications (El Firdoussi et al., 2020). In Romania, a number of educational institutions are not ready for online learning to be carried out suddenly using an e-learning platform. Problems arise when the teacher's teaching techniques are not in accordance with the online learning environment and the interaction between teachers and students is classified as bad (Coman et al., 2020). In Jeddah, a supportive and efficient infrastructure for online learning in the COVID-19 era has an impact on the student learning experience (Isman, Dabaj, et al., 2004).

However, the research findings have not specifically discussed online learning from the student's point of view, especially those related to the dualism of the learning system, the ups and downs of online learning, the implementation of online learning, the online learning environment, support for online learning, and students' efforts to improve the quality of online learning. This research was conducted to describe the opportunities and challenges of online learning based on students' perspectives on online learning, especially in West Sumatra, Indonesia.

METHOD

The participants in this study were students from the 2018 2019 and 2020 batches who took online learning at Universitas PGRI Sumatera Barat and UIN Sjech M. Djamil Jambek Bukittinggi. Participants were 227 male and female students who were randomly selected. In addition, participants also came from various majors and fields of expertise, namely: Pendidikan Bahasa dan Sastra Indonesia as many as 96 people, Pendidikan Matematika as many as 44 people, and Ekonomi dan Bisnis Islam as many as 87 people. Universitas PGRI Sumatera Barat and UIN Sjech M. Djamil Jambek Bukittinggi were chosen as research locations because the students studying at the two campuses came from various cities and regencies in West Sumatra.

The instrument used in this study, namely closed interviews distributed via google forms. The questions given to participants amounted to 15 items. The questions given relate to experiences during online learning, between online learning and face-to-face learning, implementation of online learning, online learning environment, support for online learning, and student efforts to achieve effective online learning.

Students fill out questions on closed interview sheets distributed via google forms. Students are given time to answer questions and resubmit their answers. The answers received from 227 students as research participants were analyzed to describe their opinions about online learning they did during the COVID-19 pandemic and the opportunities and challenges of online learning in the future based on an analysis of students' views on online learning, especially in West Sumatra.

RESULTS AND DISCUSSION

Research Results

Students give their reflections on online learning that they carried out during the Covid-19 pandemic. The reflections given by students are grouped into six categories with several sub-categories, namely: experiences during online learning, online learning or face-to-face learning, implementation of online learning, online learning environment, support for online learning, and student efforts to achieve effective online learning.

Experience During Online Learning

During online learning, students generally feel a variety of pleasant and unpleasant experiences. Some unpleasant experiences during online learning that were felt by students were told by Participant 187 below.

During my online learning, I often encountered problems with an unstable internet network. Moreover, learning is often carried out using video conferences, such as zoom meetings. Due to network issues, I frequently go in and out of virtual spaces. I often miss the lecture material explained by the lecturer. The positive side that I get from participating in online learning is that I feel that I can manage my time well, starting from attending lessons,

doing assignments, helping parents, resting, and worshipping. In addition, I gain insight into the technology used for online learning, particularly zoom meetings. (Q01/P187).

The experiences during online learning were also stated by Participants 100 below.

When participating in online learning, I often find it difficult because the internet network in my village is often unstable. I live in the countryside, if the weather is bad and the electricity goes out, internet access in my place also automatically turns off. I often go to the internet cafe to attend lectures so that I don't miss learning. (Q1/P100).

The following experiences related to the availability of learning materials during online learning were complained by Participant 012.

In my opinion, online learning is very unsatisfactory, especially for courses that require face-to-face contact, such as: mathematics, accounting, and macro-economics. I also have trouble getting learning materials. I also can't use the library because it can't be accessed online. (Q1/P012).

Based on this, students in West Sumatra have had pleasant and unpleasant experiences during the implementation of online learning. From the experiences told by students through written interviews, information was obtained about the obstacles and benefits of online learning conducted by students. The problem of online learning that is often experienced by students is the problem of the availability of the internet network. The problem of unstable internet networks is often felt by students in rural areas. The unstable internet network is also affected by weather factors and erratic power outages in the area where they live. Due to the unstable internet network, students cannot attend lectures, either synchronously or asynchronously. Students have difficulty understanding lecture material and are often late in submitting assignments. To be able to attend lectures, students who are in remote areas must go to high places to keep the internet network stable. In addition to the unstable internet network, other factors cause problems in online learning, for example, economic difficulties during the pandemic have caused them to be unable to meet their internet quota needs to attend lectures.

Assignment-based online learning patterns cause undisciplined students to find it difficult to divide their time, sleep patterns are irregular, and assignments often pile up. This results in them not being able to understand learning well because each task given is no longer done optimally. Students also have difficulty obtaining learning materials because not all lecturers provide learning materials that are by the course. Students also said that not all courses can be carried out online. Lectures are generally conducted through video conferencing, causing students to have to look at their cellphones and laptops every day. This has an impact on eye health. Students also feel isolated because they are often alone in the room to attend lectures. In addition, feedback that is often late from lecturers also causes students to dislike online learning even more.

Furthermore, the benefits of online learning that are felt by students are that they do not need to be far from their parents and have more time to gather with their parents, are more enthusiastic about participating in learning because they always get positive encouragement from their parents, can help parents work, are more flexible because lectures can be held anytime and anywhere, can study while working, can add insight about various applications used in online learning, can repeat learning materials provided by lecturers, save expenses, and better ensure health and safety because lectures are carried out from home.

Between Online Learning and Face-to-Face Learning

Between online learning and face-to-face learning, students expressed their likes and dislikes, timing, and responses to changes in the learning system from face-to-face learning to online learning.

First, student assessment of online learning or face-to-face learning. Out of 227 students, 191 people (84.14%) prefer face-to-face learning to online learning. One of the reasons was stated by Participant 020 below.

In my personal opinion, online learning is very ineffective and inefficient. I prefer face-to-face learning in the classroom. During online learning, I felt stiff and nervous in a crowd because I was used to being alone in front of a screen. I don't feel social interaction during

online learning. I don't want to be a generation that looks down and is silent. (Q02/P020).

Another reason that face-to-face learning is better than online learning is stated by Participant 168 below.

In my opinion, I prefer face-to-face learning in the classroom to make it easier to understand the lesson. If you don't understand, you can directly ask the teacher. In online learning, questions asked to the teacher are often delayed in getting a response. Want to ask friends, friends don't really understand. In addition, the collection of tasks in face-to-face learning is easier. If there is a shortage of learning materials, you can immediately look for them in the library. (Q02/P168).

A total of 19 people (8.37%) prefer online learning to face-to-face learning. One of the reasons was stated by Participant 152 below.

In my opinion, online learning is better than face-to-face learning. Especially during the COVID-19 pandemic. During online learning, I can help parents, concentrate more on learning because I am alone in my study room. I also don't need to interact directly with other people and that's one way I can break the chain of covid-19 spread. (Q02/P152).

A total of 17 people (7.34%) did not give a choice about online learning or face-to-face learning. They prefer to follow government regulations. One of them is stated by Participant 055 below.

Both online learning and face-to-face learning both have advantages and disadvantages. I like online learning because I like using the internet and I also like face-to-face learning because I like learning in the classroom. Online learning is often ineffective because of network constraints and the material presented by the teacher is difficult to understand. In my opinion, online learning requires independence in learning. (Q02/P019).

Based on this, students in West Sumatra prefer face-to-face learning because they view face-to-face learning as more effective than online learning. There are many weaknesses of online learning that result in their ineffectiveness in receiving online learning, especially the unstable internet network. In addition, students

are accustomed to carrying out face-to-face learning in the classroom since they are in elementary school to high school. Online learning is something new to students. Facilities for online learning that are still minimal are also a big obstacle for them in implementing online learning.

Second, the effectiveness of timing between online learning and face-to-face learning. From 227 students, as many as 172 people (75.77%) stated that the time management in face-to-face learning was more effective than online learning. One of the reasons was stated by Participant 043 below.

In my opinion, the face-to-face learning time setting is more effective both in learning activities and in terms of working on and collecting assignments. My communication with the teacher and friends also feels more effective, for example in class discussion activities. I can hear various views from friends and information directly from teachers without being hindered by the internet network. On the other hand, discussion activities via video conferencing are often interrupted by an unstable internet network so that I cannot receive information properly. (Q11/P043).

A total of 20 people (8.81%) stated that the time management in online learning was more effective than face-to-face learning. One of the reasons was stated by Participant 016 below.

I think online learning is better. Moreover, the teacher provides lecture materials and structured assignments. Learning can be done anytime and anywhere. During the covid-19 pandemic, I don't have to go anywhere, I can attend lectures from home and that reduces the risk of spreading covid-19. (Q11/P013).

A total of 35 people (15.42%) stated that the time management in online learning and face-to-face learning was equally effective. One of them is stated by Participant 130 below.

In my opinion, face-to-face learning or online learning is the same. Understanding or not with learning, whether or not the time management is effective depends on each of us. Especially in the current pandemic which requires learning to be done online. We must be able to follow all conditions including online learning. As long as you can be

disciplined with time, I think learning in any way can be carried out. (Q11/P130) .

Based on this, students in West Sumatra view that time management in face-to-face learning is more effective than online learning. Online learning is generally assignment-based. Students are asked to be more independent in learning because assignments are often done individually. If students cannot understand learning well, it will affect the work they are doing. As a result of all assignment-based courses, students who cannot manage their time well are actually doing assignments as they are because they have piled up and the deadline for submitting assignments is getting closer. In contrast, in face-to-face learning, students meet directly with the teacher and can ask all things about the learning material to the teacher. In their view, the tasks given are more flexible and more in the form of group assignments.

Third, student assessment of changes in the learning system from face-to-face learning to online learning. Of the 227 students, as many as 24 people (10.57%) stated that they were happy with the change in the learning system from face-to-face learning to online learning. One of the reasons was stated by Participant 051 below.

At first, I was surprised by the sudden online learning, especially since I was just a student. Nonetheless, I feel fine. I can always be close to my family, learn from home, and get used to using various information technology applications in learning that I was not familiar with before. (Q13/P051).

A total of 147 people (64.76%) stated that they were not happy with the change in the learning system from face-to-face learning to online learning. One of the reasons was stated by Participant 022 below.

At first, I didn't have a problem with online learning because of the COVID-19 pandemic. However, as time went on I felt uncomfortable following the lessons. I experienced many difficulties, especially the internet network which was often problematic, so that I was not so maximal in participating in learning. (Q13/P022).

A total of 56 people (24.67%) stated that they had no problem with any learning system,

both online learning, and face-to-face learning. One such statement was made by Participant 073 below.

The sudden change in the learning system, of course, took everyone by surprise because they had to adapt to the learning system and it was not easy. However, anyone must be prepared with all conditions for safety, especially during the COVID-19 pandemic. I have no problem with any learning system as long as it is prepared as well as possible so as not to harm students because not all students come from well-off families. (Q13/P073).

Based on this, students in West Sumatra are mostly dissatisfied with the sudden change in the learning system. Various reasons were put forward. The most acceptable reason is the lack of preparation so that the learning carried out is not optimal. Students need learning activities that are meaningful to them regardless of the learning system applied.

Implementation of Online Learning

Online learning has been carried out massively since the spread of COVID-19. From 227 students, as many as 136 people (59.91%) stated that the implementation of online learning had not met their learning needs. One of the reasons was stated by Participant 203 below.

In my opinion, online learning has not met my learning needs because I have difficulty getting references, especially since the internet network is often unfriendly. (Q04/P203).

A total of 9 people (3.96%) stated that the implementation of online learning almost fulfilled their learning needs. One of the reasons was stated by Participant 037 below.

The online learning that I took almost fulfilled my learning needs. Sometimes I understand, sometimes I don't. Many of the subject matter that I can not fully understand. (Q04/037).

A total of 28 people (12.33%) stated that the implementation of online learning was sufficient to meet their learning needs. One of the reasons was stated by Participant 063 below.

In my opinion, the online learning that I take is sufficient to meet my learning needs. It's just that I need to work hard to increase my

knowledge by looking for other references to understand material that I don't understand due to an unstable internet network. (Q04/P063).

A total of 54 people (23.79%) stated that the implementation of online learning had fulfilled their learning needs. One of the reasons was stated by Participant 212 below.

I feel my learning needs have been met. The proof is that my GPA has not decreased compared to before the online learning was implemented. Moreover, lecturers always send learning modules and structured assignments. I try to study well the given module if I have problems while following the lesson using the zoom application. (Q04/P212).

Students in West Sumatra complain about the implementation of online learning because the unstable internet network makes them not optimal in participating in online learning. In the implementation of online learning, there are several aspects that need to be considered, namely: the platform used, learning content, interaction in learning, achievement of learning outcomes and objectives, and feedback from lecturers. Campuses as higher education institutions have provided online learning platforms, such as e-learning/e-campus. The platform contains learning content that can be accessed by students anytime and anywhere. Lecturers also try to use video conferences to meet face-to-face virtually with students to reinforce the learning being carried out. If they are not constrained by internet access, students can feel that their learning outcomes and goals have been achieved. On the other hand, if they are constrained by the internet network, they do not enjoy learning at all. Finally, their learning outcomes and objectives were not achieved.

In the implementation of online learning, several aspects are of concern, namely: the platform used, learning content, interaction in learning, achievement of learning outcomes and objectives, and feedback from teachers.

First, the platform used for online learning. The devices used by students are generally smartphones and laptops. The platforms used are moodle for e-learning, What app, Google workspace such as: google classroom, google meet, and zoom meeting cloud application. Of the 227 students, as many as 120 people

(52.86%) stated that all applications used in online learning made it easier for them to participate in learning as long as the internet network was stable. As many as 60 people (26.43%) stated that whatever application they used for online learning made it difficult for them to follow the lesson because they did not like online learning. A total of 47 people (20.70%) did not say it was easy nor did they say it was difficult because whatever platform they use in learning will be able to help them as long as there are no internet network problems. If the internet network is constrained, automatic online learning will not be able to be carried out.

Second, online learning content. Students generally use learning content sourced from the internet. Some students also said that the teacher provided modules and assignments that were in accordance with the learning material. Of the 227 students, as many as 141 people (62.11%) stated that they easily understand online learning content. They access learning resources from the internet in addition to getting modules provided by the teacher. Teachers also present material in the form of videos that they can access via YouTube or send through the What app group. As many as 75 people (33.04%) stated that they had difficulty understanding online learning content because for them the information they received directly from the teacher was different from what they got from reading. They complained about the difficulty in getting learning content because not all learning resources on the internet match the learning materials they follow. In addition, as many as 11 people (4.85%) stated that they did not provide statements because for them the learning content was easy to understand and some were not easy to understand. They also stated that receiving information directly from the teacher in a face-to-face classroom is much better than simply reading material online.

Third, interaction in online learning. Students interact and communicate with teachers and peers online using video conferences and social media. Of the 227 students, as many as 102 people (44.93%) stated that the interaction between him and his teacher and colleagues went well because communication was done online both during learning and outside the learning schedule. A total of 60 people (26.43%) stated that the interaction and communication with teachers and colleagues were quite good. In

the learning process sometimes communication is cut off due to an unstable internet network. Furthermore, as many as 65 people (28.63%) stated that their interaction and communication with teachers and colleagues were not good because they found it difficult to understand online learning materials. An unstable internet network is the main cause of lack of communication. Students also complain that text messages sent to teachers and colleagues often do not get satisfactory answers, especially those related to learning materials.

Fourth, the achievement of learning outcomes and objectives. Of the 227 students, 112 people (49.34%) stated that the results and learning objectives had not been achieved because they felt that online learning was not effective for them and they could not understand the learning materials well. A total of 23 people (10.13%) stated that their learning outcomes and objectives were almost achieved because there were learning materials that could be understood and some were not. A total of 42 people (18.50%) stated that their learning outcomes and objectives were quite achieved because they received learning materials from the teacher and did the tasks according to the material provided. As many as 50 people (22.03%) stated that their learning outcomes and goals had been achieved because as long as the internet network was stable they could participate in online learning to the fullest. In addition to getting learning materials from the teacher, they can also listen to the teacher's explanation through video conferences, such as zoom and google meet.

Fifth, feedback from the teacher. Of the 227 students, 156 people (68.72%) said that the feedback provided by the teacher was timely and very helpful for them in online learning if they did not have signal problems. The teacher always provides feedback through e-learning by providing a discussion of the assigned task. The teacher also reinforces learning materials through video conferences, such as zoom. A total of 42 people (18.50%) said that the feedback given was sometimes timely, sometimes not. The feedback given is not timely and does not help them during online learning. Sometimes they understand the material, sometimes they don't. If you ask friends, their friends don't really understand the subject matter. A total of 29 people (12.78%) said that they did not receive proper feedback from teachers

during online learning because they often experienced problems in the implementation of online learning. Teachers use zoom to provide feedback, but they can't be maximally involved in the virtual class because of internet network constraints. They feel dissatisfied with online learning because they do not understand the subject matter at all.

Online Learning Environment

A comfortable and conducive learning environment is one of the factors in achieving learning objectives. Of the 227 students, 17 people (7.49%) said that their online learning environment is very good because it is supported by very good graphic quality, excellent presentation of learning materials through modules and direct explanations from lecturers through video conferences, learning platforms. The online campus provided is very easy to use, and the access speed is also very good. All of this has greatly helped the implementation of online learning during the COVID-19 pandemic. Even though it is done from home, online learning can continue to be followed by students as long as the internet network is stable. A total of 31 people (13.66%) said that their learning environment was good even though not everything was satisfactory, for example the presentation of the subject matter was very good but the unstable internet network constraints made everything feel useless. For them, the key to online learning lies in the availability of a stable internet network because not all students are in urban areas that have a stable internet network. In connection with this, as many as 81 people (35.68%) said that they felt online learning was in the moderate category because it felt unsatisfactory if the internet network was not stable. The quality of the graphics is not good, the presentation of subject matter is not optimal, the online learning platform provided by the campus becomes difficult to use, and the speed of internet access becomes very slow so that it affects the acquisition of information from lecturers and the collection of assignments becomes late. This is felt by students who come from areas where the internet connection is really unstable. A total of 98 people (43.17%) said that the online learning environment for them was not at all good. This shows that most of the students stated that they were not comfortable participating in online learning

because their learning environment was not conducive. Most said that the quality of online learning was not of high quality because of frequent internet signal disturbances. They have difficulty following the learning because the network is not stable.

Support for Online Learning

In implementing distance learning online, students need support from various parties, such as parents, lecturers, campuses/colleges, and supporting facilities. such as the feasibility of a computer/laptop device and a stable internet network. Of the 227 students, as many as 92 people (40.53%) said that they received support from the campus by distributing free internet quotas and internet quotas from the Ministry of Education and Culture. The campus also provides online learning platforms such as e-learning so that they can access learning modules and assignments. All support from the campus helps them in carrying out online learning. Online learning that is done at home also goes well because parents also provide support and motivation to continue to be enthusiastic about completing college. All of this support really helps the implementation of learning as long as the internet network as the key to online learning is available and stable. A total of 95 people (41.85%) said that they don't get internet quota every semester, so they have to buy their own internet quota to keep participating in online learning. To ease the burden on their parents, some of them work while studying. For them, the quota provided has not helped the implementation of their learning. Moreover, they live in areas with unstable internet network. The internet network will automatically turn off if the electricity goes out and the weather is bad. The internet quota provided is limited to a few applications, such as Whats App Group and Zoom meeting cloud. In fact, they also need the quota to access learning materials from Google, such as access to research articles and electronic books. Furthermore, as many as 40 people (17.62%) said that they could not use the existing quota to participate in online learning because the network was unstable. They often miss information and cannot follow the lesson optimally.

Overall, students gave an assessment of the quality of the online learning environment they

had participated in so far. Of the 227 students, 9 people (3.96%) said that the quality of their online learning environment was very good from all aspects including a stable internet connection. A total of 86 people (37.89%) said that the quality of their online learning was good. They only occasionally have internet network problems. When they move to a place that has a stable internet network in their home environment, they can again follow online learning well. A total of 112 people (49.34%) said that the quality of their online learning was in the moderate category because they experienced internet network problems and sometimes economic problems so they could not always provide their own internet quota. Sometimes they can take online learning, sometimes they can't. Furthermore, as many as 20 people (8.81%) said that the quality of their online learning was not at all good because they often did not participate in online learning due to various obstacles, one of which was an internet connection that suddenly died or their smartphone suddenly died because it was not working. All applications can't be opened by the smartphone.

Thus, students in West Sumatra receive online learning support from various parties, such as the government, campuses, lecturers, and parents. From the Government, students get internet quota that can be used to open applications that support learning, such as: zoom, google classroom, and Whats App. From campus, in addition to receiving internet quota assistance, students are also provided with e-learning to make it easier for students to take part in learning. Through e-learning, students can access learning modules, assignments, and can discuss with lecturers and classmates through chat rooms. From the lecturers, students get convenience with the lecturers providing learning modules along with structured assignments. Lecturers also provide opportunities for students to be able to interact and discuss in virtual rooms, such as chat rooms in e-learning, chat using Whats App, and face-to-face virtual via video conference. From parents, students get support by providing a comfortable study space at home, not being required to help with their work, and providing everything they need to support online learning. All the support felt by students because of the stable internet network. On the other hand, all

that support feels useless because the internet network is often unstable.

Student Efforts for Effective Online Learning

In general, students said that face-to-face learning in the classroom is better than online learning because they no longer need to rely on an internet connection. Of the 227 students who were asked about the continuation of online learning, as many as 10 (4.41%) students said that they agreed that online learning would continue because they did not experience significant problems during online learning. They can do many things while studying because flexible online learning can be done anywhere and anytime. as many as 199 people (87.67%) students said they did not agree if online learning continued to be implemented. They feel bored studying at home because they are only dealing with a computer screen. The unstable internet network makes them less willing to learn online. Furthermore, as many as 18 people (7.93%) students said that they would take lessons with any system as recommended by the government. For them, both online learning and face-to-face learning have their advantages and disadvantages. They agreed that online learning was carried out because it was useful for the common interest and to break the chain of the spread of COVID-19. They also agreed that face-to-face learning would be carried out again if the situation had improved.

If learning continues to be carried out due to conditions that do not allow face-to-face learning, students say some efforts they can do to improve the quality of their learning. Efforts made by students to improve the quality of their learning, namely: focused, serious, and have a high curiosity, more diligent and not complaining, time management and consistent with the schedule that has been prepared, always trying to increase creativity and be more innovative, often self-motivated themselves to be more advanced and increase independence, have a high spirit and not give up easily, be more disciplined and actively participate in lectures, provide laptops and spare quotas to overcome network problems and seek to study in a place with a stable network, maximize all learning media used by lecturers in implementation of learning, using anti-radiation glasses to protect the eyes, understanding lecture materials provided by lecturers and trying to find various

sources to facilitate the work of assignments in addition to broadening horizons, being more open to all the latest information, trying to make peace with the situation and utilizing the technological sophistication to maximize learning, have a study journal to record all weaknesses and try to learn from experience, arrange a comfortable learning environment at home, increase interaction with lecturers if given the opportunity by the lecturer, often discuss with subject groups, and build a spirit of collaboration to improve self quality.

Based on the explanation of students' reflections on online learning, the opportunities and challenges of online learning in West Sumatra were formulated. Opportunities for implementing online learning in West Sumatra are described below. *First*, online learning provides benefits because it is more flexible and can be followed anywhere and anytime. *Second*, students can carry out learning while entrepreneurship or working. *Third*, various educational institutions in West Sumatra with their quality have the potential to be able to keep up with the times by implementing online learning in a more planned and programmed way. The challenges of implementing online learning are described below. *First*, the provincial and local governments need to provide internet services widely and reach all areas in West Sumatra. *Second*, students need to be educated to be able to grow independently from an early age. This requires the role and cooperation between parents, teachers, educational institutions. *Third*, teachers can design learning modules or learning content that is easily accessible by students and must be by student needs. Teachers can use technology to develop various learning content. *Fourth*, the government needs to make efforts to provide extensive library services that can be accessed online. Parents at home also need to provide a family library so that students have the habit of reading and are accustomed to learning independently by utilizing various learning resources.

Discussions

Online learning in fact has a positive impact and a negative impact. Online learning will have a positive impact if it is carried out with good planning, especially in terms of technological readiness and the ability of teachers and students to use technology. On the other hand, online learning will have a negative impact if it is carried out suddenly without paying attention to the readiness of the technology and the users of the technology. If implemented properly, online

learning can provide quick and easy educational opportunities for everyone without focusing on the limitations of distance, space, and time (Isman, Dabaj, et al., 2004). If online learning is well planned to start from the assessment system, assessment options, training on using the platform, to online technical support, students will be able to follow the learning well (Almusharraf & Khahro, 2020); (Ulfa & Fatawi, 2020); (Long & Khoi, 2020); (Eldokhny & Drwish, 2021). Online learning that is carried out optimally and with good preparation influences student learning needs, problem-solving, providing feedback, and academic performance (Tribunella, 2004); (Spencer & Temple, 2021); (Al-Salman & Haider, 2021). Online learning also has an impact on the teaching and learning experience of students and teachers (Alasmari, 2021) because it provides convenience and flexibility in learning without having to go to campus (Alchamdani et al., 2020). In addition, support from the government by developing online public services is marked by the use of collaborative methods involving various parties, for example in the field of education marked by the development of learning content (Yoshida & Thammetar, 2021).

The implementation of online learning in West Sumatra seen from the reflection of students still requires attention from educational institutions. Students considered that if they had to choose between online learning and face-to-face learning, most of them chose face-to-face learning to be re-implemented and online learning abolished. Students prefer face-to-face learning because they don't have to mess around with an unstable internet network anymore. They also feel isolated and antisocial if they are constantly at home. However, if conditions do not allow face-to-face learning to be carried out, they also seek to improve the quality of their learning to make it more leverage. Motivating themselves and not complaining, time management, using study journals, and increasing interaction with lecturers and friends are some of the efforts they choose to improve the quality of their learning. Basically, online learning and face-to-face learning are equally effective as long as they are implemented according to the system and the parties involved move beyond the phenomenon and follow the developments of the world (Nguyen, 2015). Similar to face-to-face learning, online learning

also requires special skills and knowledge at the planning, implementation, and evaluation stages of learning (Mursyidin et al., 2021).

Online learning in West Sumatra generally uses a platform designed by every university, such as Moodle, e-learning, e-campus. Learning using e-learning is seen as an effective online education implementation solution (El Firdoussi et al., 2020); (Hermawan. Daniel, 2021); (Al-Salman & Haider, 2021); (Souabi et al., 2021). E-learning has also increased teacher and student access to information, provided a rich learning environment with collaboration between students, and raised academic standards (Arkorful & Abaidoo, 2014). E-learning creates a creative communication environment for the exchange of knowledge, thoughts, and ideas that satisfy educational needs for self-expression and creativity (Shurygin et al., 2021). In addition to using e-learning, online learning can also be done by developing a virtual smart classroom (Songkram et al., 2021) and Massive open online courses (Ushanov et al., 2021). Virtual smart classrooms are developed with constructivist principles to guide and foster creative and innovative thinking among students (Songkram et al., 2021).

The welfare of students in online learning so far is low because it is influenced by factors of emotional state, social interaction, information content, learning materials and instruments, self-regulation, as well as physical conditions and contexts (Popescu et al., 2021). Other obstacles are school financial constraints, teachers' difficulties in managing learning activities, students forced to make academic adjustments by limiting social interactions, busy parents, and additional costs to buy internet data packages (Musthofiyah et al., 2021). When learning takes place, students often feel bored, confused, scared, anxious, and stressed (Susanto, 2021). Especially in remote areas, online learning is a problem for students because of their ignorance of online learning methods, unstable internet connections, lack of parental support, and independent learning. (Indrayadi et al., 2022). This often happens because online learning is done suddenly and not well planned.

Student interaction in online learning is low (Farah & Jabari, 2020); (Coman et al., 2020). In fact, the interaction between students and learning content, students with teachers, and students with students is the main key in online

learning (Isman, Altinay, et al., 2004). Students tend to avoid interaction because they do not have the confidence to speak and participate in online learning, have a poor internet connection and do not even have an internet connection, they do not have the devices used to access the learning, there is no opportunity to participate, and the teacher does not have access to learning skills using technology (Farah & Jabari, 2020).

Things that need attention in online learning, namely: the content being taught that needs to be adapted to the online learning system, the implementation of education is carried out differently according to certain age groups due to different skills and learning styles, the implementation of learning needs to pay attention to different levels of education because it affects the level of academic achievement, it is necessary to provide the most up-to-date telecommunications infrastructure because the quality of learning is influenced by the telecommunications system, and provide training to teachers to get used to using online learning systems (Isman, 1999). In order for online learning to run well, educational institutions need to develop online learning that suits the needs of students and online learning systems (Paudel, 2020). The government and higher education stakeholders need to provide adequate online learning facilities for students who live in remote areas so that they can follow their studies well (Indrayadi et al., 2022).

Although the implementation of online learning raises pros and cons and faces various obstacles, online learning in West Sumatra still has the opportunity to be implemented and must be able to answer all the challenges that exist. Various educational institutions in West Sumatra have the potential to develop and implement online learning with the government expanding the reach of the internet. A stable internet network and good technology support are the main factors in the implementation of online learning. Technology readiness determines students' readiness to participate in online learning because the main factors for the effectiveness of online learning are the carrying capacity of network access and the ability of devices to access the internet (Hamid et al., 2020); (Hermanto & Srimulyani, 2021); (Shatri et al., 2021); (Al-Salman & Haider, 2021). In addition to providing extensive internet access, educational institutions can provide online

library services that are free of access and with collections that meet learning needs, and parents at home provide family libraries to support student learning at home because libraries can also facilitate the implementation of online distance learning (Ramadhanti, Yanda, & Yenti, 2020).

Virtual activities that use technology should be widely carried out by teachers and students to motivate students to improve learning practices and online learning strategies. Meanwhile, teachers must also carry out online learning continuously and in a planned manner (Tang et al., 2021). In addition, teachers are also trying to improve their interactions with students and increase student interest and involvement during the implementation of online learning in virtual spaces (Lapitan et al., 2021). In the implementation of online learning, teachers can use various ways to improve the quality of online learning, including using social media because it is easily accessible and used by almost all groups including students (Jogezai et al., 2021) and proven effective and efficient in conveying messages and achieving learning objectives (Perguna et al., 2021). Teachers also need to have digital skills to be able to utilize, use, and apply digital technology in all educational activities (Perifanou et al., 2021). Teachers are also required to be able to design learning content that suits students' learning needs and is easily understood by students for online learning, for example designing learning modules and presenting tasks that require students' independence to learn (Ramadhanti, Yanda, Basri, et al., 2020). To find out the progress of student learning, both teachers and students can use reflective journals to reflect on the teaching and learning activities carried out. Reflective journals can be a reminder to reflect and evaluate the learning process carried out (Ramadhanti, Ghazali, Hasanah, et al., 2020).

In addition to teachers, students must also be able to independently cope with their learning. Supposedly, the problems they face during the implementation of learning can improve their learning and learning experience (Osei, 2010). Online learning will work well as long as students have the skills to use online tools and perceive that online distance education is a useful and flexible, effective, and efficient way to learn, communicate and share (Sahin & Shelley, 2008); (Perifanou et al., 2021). Online

learning that is carried out with good planning will be able to improve students' intercultural communication competence (Litvinova et al., 2021).

Both online learning and face-to-face learning can actually have a good influence on the achievement of teaching and learning objectives if teachers and students understand their respective roles (Isman, Altinay, et al., 2004). The teacher's role in online learning, namely: realizing student autonomy, using real and up-to-date information to convey knowledge, understanding the importance of student thinking, being aware of individual student differences, knowing students' prerequisite skills in content to build new knowledge, being a communicator that establishes interaction between teachers and students. students, implementing student-centered learning, students must feel the responsibility of learning and consult with teachers, help self-development and student responsibility with their guidance, provide a collaborative learning environment for students, and provide appropriate feedback. Meanwhile, the role of students in online learning, namely: interacting with teachers to get appropriate feedback according to their lessons, taking responsibility for their own learning, learning to be researchers to find solutions to problems faced, must be reliable problem solvers, informed are good at technology and do not experience learning barriers just because of technical problems, and become lifelong learners. If teachers and students understand their respective roles, learning in an online or face-to-face system will be carried out properly.

CONCLUSION

Although the implementation of online learning raises pros and cons and faces various obstacles, online learning in West Sumatra still has the opportunity to be implemented and must be able to answer all the challenges that exist. Various educational institutions in West Sumatra have the potential to develop and implement online learning with the government expanding the reach of the internet. A stable internet network and good technology support are the main factors in the implementation of online learning. Students prefer face-to-face learning because they don't have to mess around with an unstable

internet network anymore. They also feel isolated and antisocial if they are constantly at home. However, if conditions do not allow face-to-face learning to be carried out, they also seek to improve the quality of their learning to make it more leverage. Motivating themselves and not

complaining, time management, using study journals, and increasing interaction with lecturers and friends are some of the efforts they choose to improve the quality of their learning.

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