



## STUDENTS' PERCEPTION OF THE IMPLEMENTATION OF SYNCHRONOUS AND ASYNCHRONOUS LEARNING MODES

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**Abstract:** This research aimed to determine students' perceptions on the implementation of synchronous and asynchronous e-learning mode in the learning process at the second semester students at the Civil Engineering study program ITPA Pagar Alam. This research was a descriptive research involving students in academic year of 2022/2023 from one class consisting of 19 students. The data were taken using a triangulation technique. The data obtained were analysed qualitatively. The results of this research indicate that the students have perception of the implementation of the synchronous and asynchronous e-learning mode. The synchronous online learning mode has been implemented by using Zoom Meeting, Asynchronous online learning has been implemented by using an Email. The data obtained from the documentation, observation and interview showed that most students gave the responses to synchronous and asynchronous and advantages both two learning modes. This researched was conducted at the second semester students at the civil engineering study program Pagar Alam Institute of Technology. These findings were expected to be taken into consideration to know the advantages of synchronous and asynchronous e-learning mode, especially at the second semester students at the civil engineering study program Pagar Alam Institute of Technology.

**Keywords:** *Hybrid, Synchronous, Asynchronous*

**Abstrak.** Penelitian ini bertujuan untuk mengetahui persepsi mahasiswa terhadap implementasi mode e-learning sinkronus dan asinkron dalam proses pembelajaran pada mahasiswa semester II di program studi Teknik Sipil ITPA Pagar Alam. Penelitian ini merupakan penelitian deskriptif yang melibatkan mahasiswa tahun akademik 2022/2023 dari satu kelas yang terdiri dari 19 mahasiswa. Data diambil dengan menggunakan teknik triangulasi. Data yang diperoleh dianalisis secara kualitatif. Hasil penelitian ini menunjukkan bahwa siswa memiliki persepsi terhadap implementasi mode e-learning sinkron dan asinkron. Mode pembelajaran daring sinkron telah dilaksanakan dengan menggunakan Zoom Meeting, pembelajaran daring Asinkron telah dilaksanakan dengan menggunakan Email. Data yang diperoleh dari dokumentasi, observasi dan wawancara menunjukkan bahwa sebagian besar siswa memberikan respon sinkron dan asinkron dan keunggulan kedua mode pembelajaran tersebut. Penelitian ini dilakukan pada mahasiswa semester II di program studi teknik sipil Institut Teknologi Pagar Alam. Temuan ini diharapkan dapat dijadikan bahan pertimbangan untuk mengetahui keunggulan mode e-learning sinkronus dan asinkron, khususnya pada mahasiswa semester II di program studi teknik sipil Institut Teknologi Pagar Alam.

**Kata Kunci:** *Hybrid, Synchronous, Asynchronous*

### INTRODUCTION

The advancement of technology has had a profound impact on education, leading to the adoption of various innovative teaching and learning methods. One such approach that has gained

prominence in recent years is hybrid learning, which combines face-to-face instruction with online components According to Smith. Two kinds of Applications can be used in teaching and learning for hybrid learning class<sup>1</sup>. They are synchronous and asynchronous E-Learning mode. Synchronous is commonly known as web-conferencing or e-conferencing systems. The system allows real-time communications two or more people can interact on the internet while conduct meeting, teaching, and learning process even through seminars, presentations and demonstrations, and many others. The teacher and students can communicate synchronously some apps can be used such as Zoom Meeting, YouTube, Telegram, Live chat. The advantage of utilizing synchronous communication tools it facilitates real-time collaboration, just like in the traditional classroom the student and the teacher may interact spontaneously and the participants can have immediate feedback from each other. Whereas the second way is using the asynchronous E-learning method, Asynchronous instruction occurs in delayed time and does not require the simultaneous participation of students and teacher. Learning events are independently experienced by students and learning is not synchronized in time or space. This type of communication is very useful even if there are too many students in the online classroom.

Asynchronous online learning is a flexible way of learning because it facilitates access to learning materials anytime, anywhere. Synchronous and asynchronous learning, the possible ways in online learning, have a different basic procedure in practice. Asynchronous has less restriction more media are flexibly used such as reading article, Those media combined with other online learning activities can be accessed freely and at many times. It is different from synchronous learning that should be done directly at present. Moreover, synchronous learning is similar to a face-to-face meeting, only the technology separates the two. Some learners find the technical problem on internet connection and sound quality. During the teaching and learning process the students' perceptions of this learning process were vary. This is due to several inhibiting factors that may occur, including internet connections. Perception is a process of individual assessment of an object. According to perception has two definitions, namely perception in a broad sense and a narrow sense. In a narrow sense, perception was a seeing how each individual seen an object, while in a broad sense perception was defined as a view or understanding, namely how the persons perceive particular object. The attitude that a person take was influenced by the person's perception of the object was seen. It meant the perceptions of these students may be a factor that affects the understanding of the material presented<sup>2</sup>.

## METODE

This research applied qualitative method. Qualitative study can also be defined as an efficient model that takes place in a natural environment that helps the researcher to establish a degree of detail by being highly active in real experiences. The social problem from the perspective of the participants is one identifier of a qualitative analysis. In order to define, illustrate, and interpret collected data, what constitutes qualitative research requires purposeful use. Leedy and Ormrod believed that qualitative research is less formal since it formulates new ideas and constructs them. The respondents of this research were 10 students ( 10 of males) at the second semester students at the civil engineering study program Pagar Alam Institute of Technology. and the researcher give the questions to the 10 students by interview . In validating the data, the

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<sup>1</sup> Akbar, R. F. (2015) 'Analisis Persepsi Pelajar Tingkat Menengah Pada Sekolah Tinggi Agama Islam Negeri Kudus', *Edukasia : Jurnal Penelitian Pendidikan Islam*, 10(1), pp. 189–210. doi: 10.21043/edukasia.v10i1.791.

<sup>2</sup> *Metode Pembelajaran Kitab Kuning Di MMA Pondok Pesantren Sunan Drajat Lamongan*, STAI DR. KHES. Muttaqien Purwakarta



researcher applied triangulation technique. According to “Validation is the process of collecting and analyzing evidence to support such inference claimed that validating findings means that the researcher determines the accuracy or credibility of the findings through strategies such as member checking or triangulation<sup>3</sup>.

Based on some experts’ opinions above, triangulation is the best method used to validate the data. To make sure that the findings and interpretations are accurate, the researcher applied documentation, observation and interview techniques to find out the implementation of synchronous and asynchronous and the advantages both of modes. They were as. Data Reduction, To analyze the data the researcher used data reduction. In this section researcher presents the process of the data through the selecting, focusing, simplifying, and transforming the data. The data was gathered from the interview, observation, and documents. Therefore data reduction was needed to make the data clear and easy to use. Furthermore, to reduce the data, the researcher focused on research questions, which were about students’ perception of implementation of synchronous and asynchronous e-learning mode at the second semester students’ civil engineering study program Pagar Alam Institute of Technology. The data which was not related to it was set apart. Then, Data Display, After the data was reduced the researcher used the next step, the researcher used display the data, presented data by simplifying the data in the form of narrative text. It was easier to understand what happened, plan the next work based on the data that has been obtained.

## RESULT AND DISCUSSION

The purpose of the study was to know The Implementation of Synchronous and Asynchronous Learning Modes at the second semester students’ civil engineering study program Pagar Alam Institute of Technology, South Sumatera province, Indonesia. In the following section, the researcher discussed the findings by each student to provide how the implementation of synchronous and asynchronous e-learning mode on learning and the advantages both of two modes. To begin, the researcher described triangulation technique. Finally, the researcher presented an analysis of how the implementing of synchronous and asynchronous e-learning mode on learning. In triangulation findings, the researcher discussed about document analysis, findings for observation, and findings for interview<sup>4</sup>. They are presented as followed. In term of documentation technique, the documents were been collected for synchronous e-learning mode from zoom meeting, screenshot activity, students’ assignment, recording. To collect data for asynchronous e-learning mode, were email, screenshot activity, students’ assignment. These documentation tools are used to obtain documents which are related to this research and also as a support for the main data. The document analysis is used to check and confirm previous primary data from interview and observation. In this section the researcher described the of the observation above, during the teacher presentation almost students were paid attention. From the opening the teacher open the online class by saying greeting and then she motivated them and try to give the brainstorming before the class was begin and she open the lesson, gave the material and explained. All students paid attention and after that if the students still did not understand or they have any questions, they raised their hands and asked and the teacher responded directly, even the teacher

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<sup>3</sup> Program Of English Education Amidst The Covid 19 Pandemic’, *Linguists: Journal of Linguistics and Language Teaching*, 6(2), pp. 107–120.

<sup>4</sup> Richards, J. C. and Schmidt, R. W. (2013) ‘Longman Dictionary of Language Teaching and Applied Linguistics’, *Longman Dictionary of Language Teaching and Applied Linguistics*. doi: 10.4324/9781315833835.



asked them and one of them could answer the question, the teacher appreciated them she gave encouragement word such as ‘great’ this e-learning mode was resemble to face to face classroom and suits and effective for the students who got school from home during pandemic covid-19.

Next the researcher observed at students at the second semester students at the civil engineering study program Pagar Alam Institute of Technology. who using asynchronous learning mode obtained the data through observation by observe the students used Email for teaching and learning process, the researcher join and observed at Mrs. Tri Rohani’s online class. It was from 10: 00 AM to 11: 40 AM. Mrs. Tri Rohani contact the students by using chat via whatsapps and infrom them that they got the teaching and learning process by using email, she allowed the students on chat to list the their name and students number instead of attendance list and she closed the chat then open an email and share the material and task.

from the data of observation above the researcher described using asynchronous e-learning mode by using email. The teacher communicate by whatsapps allowed them to list of their name and student’s number on whatsapps then give the material through email and the teacher asked them to submitted the task by email and eight of the students submitted the task were on time and ten of them were not on time.

**Tabel 4.1 Synchronous online class activity<sup>5</sup>**

Observed Aspects	
A. Pre-activities	
1.	Motivate students to start learning
2.	Creating a comfortable learning atmosphere
B. During Activities	
Material	
Ability to facilitate learning	
1.	Comprehend learning material
2.	Present material systematically
3.	Control the class well
Student involvement in learning	
1.	Encourage active student participation in learning
2.	Respond to student participation positively
3.	Encourage students’ cheerfulness or enthusiasm in learning
1.	Scientific process (Observing, Questioning, Experimenting, Reasoning, and Communicating)
C. Post-Activities	
1.	Facilitate students to summarize today’s learning materials
2.	Do reflection on the learning process and learning material

Next the researcher observed at the second semester students at the civil engineering study program Pagar Alam Institute of Technology. who using asynchronous learning mode obtained

<sup>5</sup> Instructional Approaches Concerning the Students’ Achievements and Interests in Electrical Engineering at the Niger State College of Education’, *International Journal of Engineering Pedagogy (IJEP)*, 6(3), p. 4. doi: 10.3991/ijep.v6i3.5302.



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**Tabel 4.2 Asynchronous online class activity**

<b>Observed Aspects</b>
A. Pre-activities
1. Give the information to the students participans
2. Allow the students to chat theit name and students'number via whatsapps
3. Allow the students to submit the task
B. During Activities
Ability to facilitate learning
1. Send the material via Email
C. Post-Activities
1. Facilitate students to summarize today's learning materials
2. Submit the task on email

In the section the researcher used semi-structural in-depth interview. Semi-structural interview is the question is not only which had been prepared, but can appear new questions during the question and answer. Semi structural interview was to get a detailed view of the interview and the researcher interview 19 students (16 females and 3 males in class A) at the sixth semester students at the English education study program STKIP Muhammadiyah Pagar Alam and the researcher give the questions to the 19 students by using audio recorded.

the researcher used the purposeful sampling. In purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon (Creswell, 2012). The standard used in choosing participants and sites is to enables the researcher to collect rich data information upon their perception and description about the implementation of synchronous and asynchronous e-learning mode.

Some steps that were used by the researcher to collect the data as follows :

1. The researcher was asked the students by using interviewed who was learning through synchronous and asynchronous e-learning mode.
2. The researcher was recorded the questions and answers and sent by using an whatsapp
3. The researcher was the audio recording into the transcription process, which was written all of the audio recording data into literary data. This process helped the researcher to analyze the data well.
4. The researcher was analyzed the written data.



5. After that, the researcher was analyzed every students' answer that was recorded to find out what were the perception of using of synchronous and asynchronous e-learning mode and advantages two learning mode of the students while online.<sup>6</sup>

**Tabel 4.3 Table Interview Questions**

No	Questions
1.	What is online learning?
2.	What is e-learning mode do you use during pandemic covid-19
3.	What do you think about synchronous e-learning mode?
4.	What do you think about asynchronous e-learning mode
5.	Which prepare do you like synchronous or asynchronous e-learning mode?

The section of finding interview, the researcher interviewed nineteen students at the second semester students at the civil engineering study program Pagar Alam Institute of Technology, the located in Pagar Alam Institute of Technology, South Sumatera province, Indonesia. In the following section, I discussed the findings by each students with five questions but the researcher focused on research questions. The purpose of the research was to know Implementation of synchronous and asynchronous learning mode and advantges both two modes to provide To begin, the researcher described each students's self-reported data from the interview, and describe the students's interview focus on research questions Finally, the researcher presented an analysis of how the implementing synchronous and asynchronous e-learning mode.

## CONCLUSION

This chapter present the conclusion suggestion of the study . The conclusions of this study that are based on the findings that have been analyzed in the previous chapter. Based on those findings, the implementation of synchronous, asynchronous e-learning mode and advantages of synchronous and asynchronous e-learning mode. They were as followed

Implementing of Synchronous E-learning Mode, The nineteen students participants agree to use synchronous e-learning mode. They believed synchronous e-learning mode is an effective way in teaching and learning process. They support the view that e-learning mode claims can be justified by comparing data collected from multiple sources. As discussed by Yang et al (2019), Synchronous learning allows students to get prompt feedback from the lecturer during the lesson just like how they are able to do so in face-to-face classroom. Synchronous tools let the users communicate with others which allows a spontaneous and flowing learning session in real time. Responses immediate questions maybe answered, and clarification may be given directly. Synchronous tools also lend themselves well to structured collaborative assignments. The social dimension of synchronous tools creates a learning synergy. Then, Implementing of Asynchronous E-learning Mode The five from nineteen students participants agree to use asynchronous e-learning mode. They believe synchronous e-learning mode is an effective way in teaching and learning process. They support the view that e-learning mode claims can be justified by comparing data collected from multiple sources. As discussed by asynchronous e-learning mode is an effective, Students felt more comfortable using asynchronous communicational tools in

<sup>6</sup> Simaibang, Baginda. (2017). Second Edition English Language Teaching in a Foreign Situation. Palembang: CitraBooks Indonesia. (Simaibang, 2017. )



comparison to synchronous communication tools as they could easily access those offline. (Hence, Xie, Liu, Bhairma, & Shim. The five participants' self-reported believed asynchronous e-learning mode was effective in teaching and learning process. In addition, because the result of this study was very important in the teaching learning process. They are dedicated to the teachers of English, the students of English, and the other researchers. The suggestions were presented below. It is hoped that the finding of this research could be utilized by the institutions Pagar Alam institute of technology for online learning implementation.

It is hoped to the teachers to apply the result of the study in teaching learning process to use the synchronous and asynchronous e-learning mode because it have own advantages both of two learning mode and the teacher the researchers are still divided on which learning method to use, because there will always be cons and pros in using each of them. In this case the teacher itself can decide based on the environment and the conditions met both synchronous and asynchronous and make an effective impact on learner's education process.

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