THE SYNCHRONOUS AND ASYNCHRONOUS LEARNING AT ENGLISH DEPARTMENT OF UNIVERSITIES IN SOUTH KALIMANTAN: PRACTICES AND CHALLENGES

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Abstract: The purposes of this research are to describe types, practices of Synchronous and Asynchronous learning and to explore the challenges faced by the lecturers at English Departments in South Kalimantan. The researchers employed mixed-methods sequential explanatory design which consist of two distinct phases, quantitative (numeric data) by using questionnaire followed by qualitative by using observation and interview in order to elaborate the results obtained from quantitative data. This research was undertaken in nine English Departments in South Kalimantan. The participants were 53 English lecturers who teach at those universities. The types of synchronous used by the lecturers were Text-based chat / Instant Messaging / Online Chat (WhatsApp), Web Conferencing / Virtual Classroom (Zoom and Google Meet), Whiteboards, Real-time and Non real time document sharing (Google documents). The asynchronous types were Email, WhatsApp Group, Google Classroom, YouTube Link, PDF Files, MS Words Files, Learning Management System (LMS)/e-learning. The lecturers used direct feedback, real time classroom interaction and communication during synchronous learning. On the other hand, they provided delayed feedback, practiced not real time classroom interaction and communication in asynchronous learning. They facilitated individual and group collaboration for both learnings. The lecturers faced a number of challenges in implementing Synchronous and Asynchronous learning such as Technological Problems / Internet Connection, Students' Motivation, Classroom Management, Lack of technological supports, Students' Participation, Interaction, Time Management, Feedback, Materials Development, Monitoring, Instructional Method, Flexibility, and Cost Effectiveness.
Keywords: *asynchronous; challenges; practices, South Kalimantan; synchronous*

INTRODUCTION

The Covid-19 has changed education significantly. This pandemic situation required lecturers and teachers to build in new approaches in teaching including adapting teaching styles, techniques and materials. This condition has accelerated them and their students' reliance on digital tools. The incorporation of technology in the digital realm is encouraged for lecturers. To improve the quality of education, the use of the internet, mobile devices, online videos, and other media is required. (Vendityaningtyas & Styati, 2018) The usage of digital communication technologies and networked online applications, as well as teacher and student characteristics, expectations, and obstacles, have modified and shaped the global learning environments of the twenty-first century (Naidoo, 2020).

The favorable outlook on the existing imposed reliance on education technology, on the other hand, may accelerate some already underway developments in synchronous and asynchronous

learning. It may cause educators to reflect more deeply on present educational methods and to discover more rapidly which technical applications are successful and which are not (Thomas & Rogers, 2020). And this is the reality that educational conditions must deal with. This is a circumstance in which e-learning is related with accessibility, affordability, flexibility, and learning pedagogy (Dhawan, 2020).

During the past decade, the Internet has had an indelible impact on higher education, allowing for the phenomenal growth of online education. The vast majority of colleges and universities in the United States now offer fully online (asynchronous) and hybrid (synchronous) courses (Romero-Hall & Vicentini, 2017; Otte, 2019). In asynchronous interactivity, participants are geographically separated and do not interact simultaneously, as they would in a face-to-face or phone conversation. Rather, communication is conducted primarily via e-mail, with significant delays between messages. In a synchronous method, online and face-to-face learning are combined (Mayadas & Picciano, 2019). Web-based technologies not only eliminate time, geography, and learning style barriers, allowing more people to access higher education, but they also pose a challenge to our traditional teaching and learning techniques.

Synchronous learning is defined as live, real-time (and typically scheduled), facilitated instruction, and learning-focused interaction in which all participants are present at the same time. This form of education takes place at the same time but not in the same location. This highlighted "learning-oriented interaction" to distinguish synchronous learning from lectures, product demonstrations, and other "knowledge dissemination" activities. Real-time learning is a type of synchronous learning that takes place through electronic means. This signifies that students and instructors communicate in a specific virtual location at a specific time via a specific online medium.

Synchronous online learning methods include direct input, increased incentive, and the obligation to engage and be present (Kebritchi *et al.*, 2017). The classroom, the media, and conferences were influential factors in the development of synchronous e-learning. Three components comprise synchronous learning, which is defined as "real-time Web-based interaction between participants and a teacher." Synchronous e-learning is real-time, computer-assisted instruction and learning-focused interaction (and is usually scheduled). This style of education features lives and real-time learning experiences.

Amiti (2020), Riwayatiningsih & Sulistyani (2020), Serdyukov (2020), Dorsah & Alhassan (2021) classified a number of synchronous learning types such as an online whiteboard, Online chat, WhatsApp, Telegram, Voice based chat, Virtual Classroom, Web conferencing, Zoom, Google Meet, Real-time document sharing (e.g., Google documents, Live webcasting, Webex, Microsoft Teams, Virtual world, and Augmented reality (AR).

In short, synchronous learning is a process of teaching and learning that happens in real time, live and scheduled in a specific virtual place, through a specific online medium (teleconferencing, video conferencing, live streaming lectures and live chatting), at a definite time.

Asynchronous learning refers to modes of education, instruction, and learning that do not occur at the same time or place. Asynchronous e-learning is influenced by distinct conditions and causes; another element defines this method. "Asynchronous learning refers to training that is not limited by location or time," Singh & Thurman (2019) explained asynchronous online learning is defined in a variety of ways due to some components, its nature, and capabilities that are shared by particular features. One of the most prominent definitions of asynchronous e-learning, however, focuses on its components. This strategy promotes learning by combining self-study and asynchronous interactions, and it applies to traditional on-campus or regular education, distance education, and continuing education. Asynchronous e-learning networks consist of a network of students and the electronic network through which they communicate.

The conditions and causes that drive asynchronous e-learning are distinct; another element defines this methodology. Asynchronous learning refers to instruction that is not constrained by location or time (Singh & Thurman, 2019). Asynchronous online learning can be defined in a variety of ways due to its nature, components, and capabilities that are shared among specific features. On the other hand, one of the most prominent definitions of asynchronous e-learning, which focuses on its components, describes it as an engaged learning community that is not limited by time, place, or the boundaries of the classroom (Pimmer *et al.*, 2019).

Mougiakou *et al.* (2020) assume that asynchronous learning is way to do learning process anytime, anyway via internet. Many kinds of distance education models are presently in use, such as video or audio teleconference, social media and so on. This system use to this system is used to facilitate teaching and learning activities that must be carried out remotely.

The examples of asynchronous devices are Email (Lotfi & Pozveh, 2019), Social media (Ferraro, *et al.*, 2020), Facebook, Instagram, Blogs, WhatsApp groups (Lutviana & Mafulah, 2021), Telegram (Alakrash *et al.*, 2020), Google classroom (Harjanto & Sumarni, 2019), Streaming audio or Streaming video (Lapitan Jr, *et al.*, 2021), Wikis, YouTube, Ms. Words file, LMS (Picciano, 2019) Web-based Learning, Web Based Training (WBT), and Computer-based Learning (CBT).

In brief, asynchronous learning is a method of teaching and learning that can be done at any time and from any location, without regard for time, place or the constraints of a classroom. It can be used to help students learn in traditional on-campus or regular education, distance education, and continuing education settings.

Myers (2018) suggested that the combination of synchronous and asynchronous devices in a problem-based learning environment could provide students with a wider range of learning and interaction opportunities with their peers and instructors. Certain synchronous and asynchronous devices may be more effective at supporting problem-based learning in an online training environment, as suggested by the findings of the study. It is also suggested that synchronous and asynchronous problem-based learning support tools presented obstacles.

Some studies were conducted by Hudha *et al.* (2018), Karaaslan *et al.* (2018), Dada, *et al.* (2019), Kutnick & Joyner (2019), Olshine & Austin (2019), Gazan (2020), Careaga-Butter *et al.* (2020), Chau, *et al.* (2021), Farmer *et al.* (2021), Cahyani, *et al.* (2021), Vidhiasi, *et al.* (2021), and Lee *et al.* (2022) explored the implementation synchronous and asynchronous learning. From the researchers' pre observations, it was found that the lecturers in English Departments in South Kalimantan have some difficulties in implementing synchronous and asynchronous learning completely in the classroom such as lack of direct communication, students' response, flexibility and attention. In addition, the difficulties are also found in some previous studies such as students' speaking

anxiety due to lack of vocabularies and confidences (Nurwahyuni, 2020), limited knowledge of using technology (Oktaviana, 2021), lack of real-time interaction and visual contact with either the teacher or peers and insufficient to none opportunities to practice oral production (Rigo & Mikus, 2021).

From those previous studies and pre observation done by the researchers, it is necessary to conduct the research about the types of Synchronous and Asynchronous learning used by the lecturers at English Departments in South Kalimantan, the practices and the challenges faced by those lecturers.

The objectives of this study are to find out the types of Synchronous and Asynchronous learning used by the lecturers, to describe the practices, and to explore the challenges of Synchronous and Asynchronous learning faced by the lecturers at English Departments in South Kalimantan.

METHOD

In this study, the researchers relied on the opinions of participants, posed broad questions, gathered data consisting primarily of the participants' words, and then described and analyzed these words to form themes (Alam, 2021).

This study employed a qualitative approach for its research design. According to Alam (2021), qualitative research is a method that can investigate and interpret the meaning of responses from individuals or groups regarding a social or human problem. As a result, qualitative research is appropriate for this study, as the researchers wish to gain a comprehensive understanding of the findings about the research questions.

In addition, the descriptive method aided the researchers in analyzing and interpreting the data, as it is a technique for recording, describing, analyzing, and interpreting empirically existing conditions.

The researchers employed mixed-method sequential explanatory design. According to Vivek & Nanthagopan (2021) the mixed- method sequential explanatory design, consist of two distinct phases, which is quantitative followed by qualitative. In this design, the researchers first collected and analyzed the quantitative (numeric data), followed by qualitative (text) to elaborate the results obtained from quantitative data. The qualitative and their analysis refined those statistical results by exploring participants' view in more depth. This design was used to describe the practices of Synchronous and Asynchronous

learning used by the lecturers at English Departments in South Kalimantan and the challenges of Synchronous and Asynchronous learning faced by those lecturers.

This research was undertaken in English Department in South Kalimantan consist of UIN Antasari, Universitas Lambung Mangkurat, UNISKA, STKIP PGRI Banjarmasin, Universitas Muhammadiyah Banjarmasin, Universitas Nahdlatul Ulama Kalimantan Selatan, Universitas Sari Mulia Banjarmasin, STKIP Islam Sabilal Muhtadin Banjarmasin, and STAI Rakha Amuntai. The participants were 53 English lecturers who teach at those universities.

This study employed systematic sampling to simplify the procedure of selecting a sample and to ensure the optimal distribution of sample units throughout the population. The first unit is chosen using a random number generator, and the remaining units are chosen automatically based on a predetermined pattern. In the case of a larger population, the method is simple to implement, inexpensive, and convenient to use (Etikan & Bala, 2017).

This study adopted embedded mixed research design that utilized questionnaires, interview and checklist as instruments for data collection. The questionnaires were to gather data on the types of Synchronous and Asynchronous learning used by the lecturers at English Departments in South Kalimantan. It was designed as closed-ended questionnaire. The observations were to gather data about the practices of the lecturers and focus on the types of Synchronous and Asynchronous learning in the online classroom. Interview to the English lecturers were conducted to find their challenges of Synchronous and Asynchronous learning related to preferences, flexibility, internet connection, cost effectiveness, technical support, instructional methods, course content, students' independent learning, and feedback during synchronous and asynchronous learning.

The data for the interview was analyzed using the technique proposed by Kilicoglu (2018) which consisted of collecting and obtaining the data in the form of recordings, and then transcribing, displaying, and drawing conclusions from the data.

RESULTS AND DISCUSSION
The types of synchronous and asynchronous learning used by the lecturers at English departments in South Kalimantan
There are various types of Synchronous and Asynchronous learning used by the lecturers at

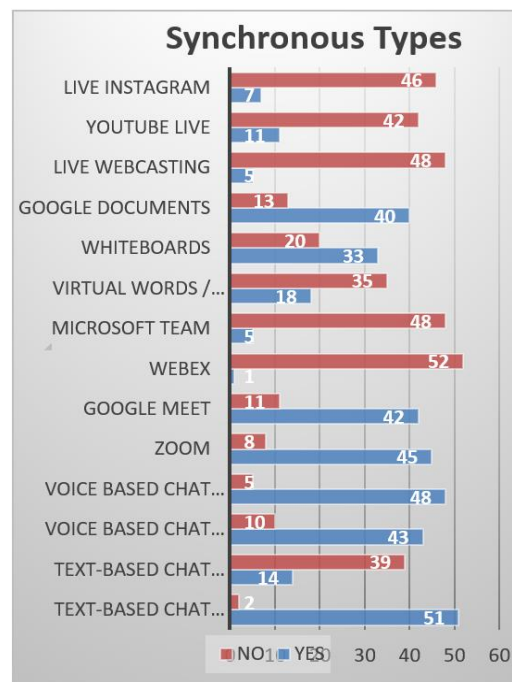English Departments in South Kalimantan.

Figure 1. *Synchronous devices used by the lecturers*

For synchronous learning, there are some types that are used by the English Department lecturers in South Kalimantan based on figure 1. Text-based chat / Instant Messaging / Online Chat (WhatsApp) was the most common device used by the lecturers since for about 96.2% or 51 lecturers choose it for teaching. 90.6% (48 lecturers) applied Voice Based Chat (Telegram), In addition, Zoom is used by 84.9% (45 lecturers), Voice Based Chat (WhatsApp) for about 81.1% (43 lecturers), 79.2% (42 lecturers) used Google Meet and the last one for Real-time document sharing (e.g., Google documents), there are 75.5% (40 lecturers).

These findings were supported by previous researches from Alqahtani *et al*. (2018), Kohnke & Moorhouse (2022), and Irshad (2021), who discovered the importance of replicating language courses associated with WhatsApp and Telegram, how Zoom and Google Meet help teachers to utilize authentic language instruction in interactive synchronous classes and can be operated effectively in remote locations, and how to interact, collaborate, share, and edit documents, while teachers can monitor the collaborative learning of students in real time using Google Docs. Therefore, these devices really support the process of online teaching learning.
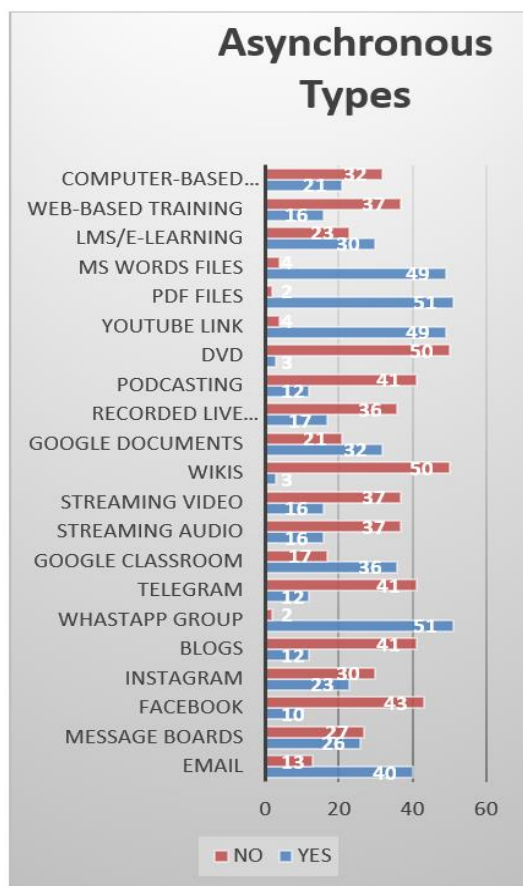
Figure 2. *Asynchronous devices used by the lecturers*

Based on the figure 2 above, the Asynchronous learning that used by the lecturers dominantly is PDF Files and WhastApp Group for about 96.2% (51 lecturers). For about 92.5% (49 lecturers) used YouTube Link and Ms Words Files. For Email is 75.5% (40 lecturers) and the last one is 67.9% (36 lecturers) for Google Classroom.

Sela *et al*. (2022) asserted that the implementation of Google Classroom using an asynchronous model has a positive effect on students, particularly in terms of their independence, awareness of technology, and responsibility in completing assignments. In addition, Google Classroom, as demonstrated by Johnson (2019), is an e-learning application that includes lessons, videos, solutions, and a personalized learning plan. The term is pertinent to promoting blended learning programs implemented by classroom teachers as objectives of learning programs.

The practices of synchronous and asynchronous learning at English departments in South Kalimantan
The pandemic situation in South Kalimantan has changed English education significantly nowadays, the lecturers and students have accelerated their reliance on digital tools. In general, the lecturers of English Education Department in South Kalimantan combined synchronous and asynchronous learning during online teaching. They were familiar with the classroom models and used various types of synchronous and asynchronous devices. They used the internet, mobile phones, online videos and other digital communication tools in engaging their students. By using appropriate devices, they expected that learning objectives can be achieved properly.

Most of the lecturers used synchronous learning at the first meeting in the beginning of the semester. The lecturers used this opportunity to get to know their students, introduced the topics, the schedules, study contracts, and the assignments or projects. They also preferred real-time learning when the topics or materials were needed to demonstrate and they should explain or present some important key terms and aspects in their subjects. Furthermore, synchronous learning was chosen when the students did individual or group presentations at definite time. Although the students were not in the same place, they could participate simultaneously.

One of the lecturers said:

*"*Generally, I apply both for teaching, because they support the teaching and learning process. I prefer synchronous to asynchronous because teaching through video call or virtual me eases me controlling the students by turning on the camera. Moreover, at the end of teaching I always ask the student to answer quiz or conclude the material to check whether they focus on my explanation or not. Therefore, they should turn on the camera. Furthermore, I sometimes conduct a discussion through live chat, like chat on WhatsApp group.*"*

On the other hand, asynchronous learning became a preference for the lecturers as they can engage their students with the course content at their own pace, on their own time. The lecturers provided their students with a sequence of materials which the students moved through as their unit outline permit. Asynchronous learning is also good for students' self-discipline.

Another said:

"I prefer asynchronous than synchronous learning because it is more flexible. I can access the materials and arrange the class anytime. Students can also do self-learning."

The practices of feedback

Feedback is key to learning as it allows students to assess their progress and promotes self - reflection and improvement (Carless & Boud, 2018); Jensen *et al.,* 2021). This research found that the lecturers provided direct feedback in synchronous learning and delayed feedback in asynchronous learning. In synchronous learning, the students received feedbacks after they performed the tasks. During the observations, the lecturer gave direct feedback when the student made a mistake in pronouncing English words. It was also found in Grammar class when students used wrong forms in writing sentences. These feedbacks were given after the students completed the tasks, so the lecturers recognized students' difficulties in understanding the materials immediately.

> "I give feedback by delivering some comments or suggestion directly when I teach through zoom meeting and video call."

By giving quick responses, it is expected that the students could learn from their mistakes and eliminate the possibilities of repeating the mistakes in the future.

In contrast, the lecturers who preferred asynchronous learning gave indirect feedback to their students. When the students submitted their assignments, the lecturers evaluated and gave written comments on tasks. Especially in writing class where the lecturers need extra time to check students' compositions, giving delayed feedback is very helpful.

> "In essay writing class, I taught my students to have corrective feedback from their peers, I provided then with some checklist so they were easy to identify the organization of essay, a thesis statement, topic sentences in body paragraphs and conclusion. They also learnt how to recognize unity and coherence in an essay"

In this case, the lecturers could provide timely and detailed responses to the students on their submitted tasks, so they could see their mastery or they still had gaps in their understanding. So, the students can improve their writing.

In asynchronous learning, the form of feedback also can be seen on the statement of the respondents.

> "I give feedback through WhatsApp Group anonymously and generally to all the students so that they realized their own mistakes and can improve next time". One of the lecturers also stated that "The feedback depends on the assignments and I usually do the feedback at the end of the classes to give the chance to the students to complete all their assignments."

The practices of communication and interaction

Educators believe that communication and interaction are influential factors for students' achievement in language classrooms. In online learning, communication takes a various form not only as a tool for exchanging information and knowledge but also for establishing classroom relationship (Lasfeto & Ulfa, 2020; Leo *et al.,* 2021; Moorhouse *et al.,* 2021). In synchronous learning, communication occurs in real time. Lecturers and students are able to communicate at the same time either in a face-to-face situation using live web casting and video conferencing, or voice/text-based chat. During the observations, two-way communications among lectures and students were found as communicative way of language learning. In language Assessment class, after the lecturers explained about the concept of evaluation, he invited his students to discuss about the topic a discussion via zoom. Students also did more communicative activities with their peers in speaking class. Furthermore, there were some oral presentations from students found. These online classroom activities were the examples how communication occurred in synchronous learning.

Nevertheless, communication happens not in real-time through asynchronous learning. The lecturers send out the information to the students who are going to receive a response at a later time than right now. One of the lecturers said that she used discussion forum as asynchronous communication to give her students plenty of time to formulate thoughts. She asked her students to give opinion on the topic given and the others would give some comments in period of time. Communication either synchronous or asynchronous allows students to develop their learning community in online forums or in social networks and encourages team work, cooperation and social interaction group.

As like communication, interaction plays an important role to the success of online learning. Interaction will occur in any learning environment. Good interaction allows students to share their ideas on various subjects with each other. This research found that there were more interactions occurred in synchronous than asynchronous learning mode. From some

observations, the researchers noticed that the lecturer were able to implement traditional classroom-based interactions such as class discussions, role playing, and question -answer sessions during synchronous learning. This real time interaction is really beneficial to stimulate students' motivation as they can participate in the classroom directly.

> "Through synchronous learning, I can guide and instruct my students right away. I use zoom meeting application, so I can interact with my students directly and give the instructions clearly. I also write some notes and do interaction and discussion with students through WhatsApp or live chat. These really support my teaching as my students could understand and participate well."

When the lecturers did asynchronous learning, interaction occurred in different time so students have opportunities to participate when and if they want to. Interaction quality improves as students have time to reflect on and examine their ideas before responding.

> "I usually post some questions or discussion topics on WhatsApp's group, then I give time to my students to talk before the next meeting. I require them to respond or ask questions. From their responses, I suppose that not only our interaction but also students' attention is increased'."

As they have flexible time to interact, lecturers get a clearer idea of what their students understand and how the learners approach a lesson

The practices of collaboration
In e-learning environments, synchronous and asynchronous communication tools are employed to facilitate collaboration between individuals and groups. For example, the zoom meeting application has a break-out room feature that lecturers can use to ask students to work in groups of five and respond to the questions provided.

According to studies, learner satisfaction with e-learning increases proportionally with their perception of collaboration (Pham *et al.*, 2019; Yekefallah *et al.*, 2021). Interaction and collaboration are identified as significant contributors to successful learning outcomes in both traditional and online classroom settings (Hurlbut, 2018; Albiladi & Alshareef, 2019). The teacher's role in an online learning environment

entails more facilitating, guiding, and motivating the learner (Archambault *et al.*, 2022), which can be accomplished through feedback and collaboration in synchronous learning.

On the other hand, studies demonstrate that collaboration in asynchronous learning increases overall student learning (Peterson *et al.*, 2018; Lin & Gao, 2020). A sense of community is necessary to sustain the educational experience over time, and collaborative learning communities foster this (Antinluoma *et al.*, 2018). In this learning environment, the teacher is still responsible for fostering and facilitating students' educational experiences (Boggu & Sundarsingh, 2019). This facilitation can be effectively achieved through asynchronous collaboration, which allows students to thoughtfully consider learning objectives because they have time to critically synthesize their learning (Itow, 2020; Martin & Borup, 2022).

The challenges of synchronous and asynchronous learning at English departments in South Kalimantan
The research found some challenges faced by English Department lecturers during Synchronous and Asynchronous learning as shown in figure 3 below.
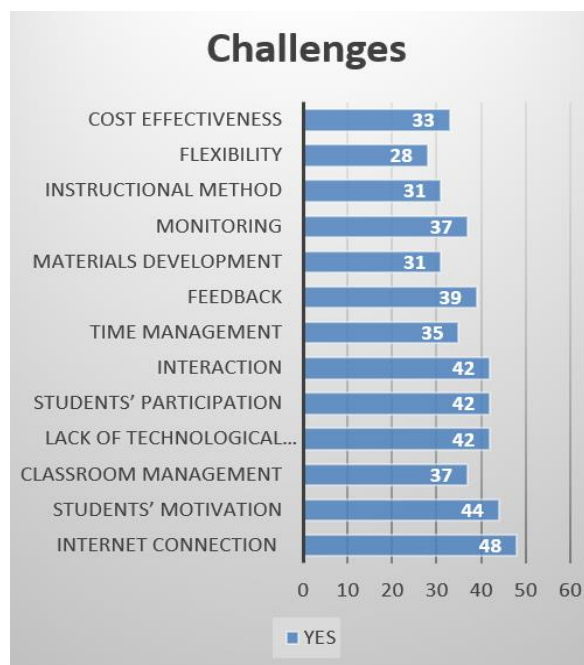

Figure 3. *The challenges of synchronous and asynchronous learning*

Technological problems and Internet connection became the most common challenges faced by the lecturers as 90.6% of the respondents (48 lecturers) mentioned about it.

Another challenge is students' motivation as 44 lecturers or 83 % of the respondents stated this matter, followed by students' participation and interaction 79.2% (42 lecturers. 73.6% of the participants (39 lecturers) indicated feedback as the next challenge. They also mentioned challenges in classroom management and monitoring as other issues in online classes. In addition, the lecturers considered the issues of time management, cost effectiveness, flexibility, and instructional methods as the other challenges.

> "When I started online teaching, majority of my students did not feel comfortable with online learning and preferred to learn in conventional method. We just did synchronous mode once a few times with a limited hour. There was not enough time to talk and discuss about the topic. Moreover, some students did not have internet access and supportive tools for their learning. They had difficulties to understand the lesson and became less motivated to join the meeting."

> "My students told me that they were not comfortable in online discussion since their internet connection was really bad. This situation influenced their participation during online discussion learning. As they lived in remote areas, it was harder for them to follow online class. They felt stressed and often missed the lesson because the internet connection was awful"

> "These days, we are familiar with this situation but motivating the students is still challenging. We still find that there are students who feel lazy and not interested with the topic, some of them easily get distracted and hard to concentrate during online class, we should have different plan to keep the class interesting"

> "I teach a big heterogeneous class, some students have high enthusiasm to learn while the some of them do not participate well and have less interaction. They turn off their camera and sound. Other students are not ready to join the class on time. Managing virtual classroom is really challenging for me."

These challenges are very common for lecturers in both synchronous and asynchronous online classrooms (Gillett-swan, 2017; Yusuf & Ahmad, 2020; Simamora, 2020). Therefore, they need to create more dynamic online classes, include more activities for students' interaction and engagement, and implement various media

and teaching technique so their students are interested and motivated to join the classes.

CONCLUSION

The types of synchronous learning used by the English Department lecturers were using What's app, telegram, zoom, Google meet and Google docs. The asynchronous learning applied by the lecturers were PDF files, YouTube Link, Ms Words Files, email, and Google classroom.

The practice of synchronous and asynchronous learning included giving feedback, communication, interaction, collaboration, input, and context.

The challenges faced by the lecturers in applying synchronous and asynchronous learning in their classrooms were technological problems, internet connection, students' motivation, students' participation, interaction, feedback, classroom management, monitoring, time management, cost effectiveness, flexibility and instructional methods.

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