World Journal on Educational Technology: Current Issues

Volume 14, Issue 5, (2022) 1549-1563

Integrating Camtasia, YouTube, and Google Classroom to create asynchronous learning environments

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Suggested Citation:

Pratama, M. R. A., Dewi, M. K. & Susilowati, E. (2022). Integrating Camtasia, Youtube, and Google Classroom to create asynchronous learning environments. *World Journal on Educational Technology: Current Issues. 14*(5), 1549-1563. https://doi.org/10.18844/wjet.v14i5.7671

Received from March 13, 2022; revised from May 21, 2022; accepted from July 15, 2022.
Selection and peer-review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey.

Abstract

Due to the COVID-19 pandemic, face-to-face interactions are still not permitted for the teaching and learning process. This condition has led to changes to the existing learning method to willy-nilly switch from conventional classes to what is called distance learning. Distance learning is referred to as online learning as its implementation requires Internet media that accommodate lecturers to interact with students online. The success of implementing online learning contributes to the learner's satisfaction within the process of teaching and learning. This study used three applications—Camtasia video creator, YouTube, and Google Classroom—to assess how learners perceive the synchronous and asynchronous learning they have received. This study used a hybrid technique, combining a Google Form online survey with qualitative analysis of the respondents' answers. 52 students from the English Literature Department's Intermediate English Grammar Class served as the research participants. The findings indicate that the majority of students react well to the adoption of asynchronous learning when those three programs are used. The flexibility of access and timing is the most important and beneficial benefit. The integration between those three applications in conducting asynchronous learning is expected to provide a new perspective on implementing technology in English language teaching.

Keywords: English teaching, COVID-19 pandemic, asynchronous learning, Camtasia, YouTube, Google Classroom.

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1. Introduction

The pandemic of COVID-19 has made quite an impact on the teaching and learning process at educational institutions such as schools, non-formal education and universities. Face-to-face meetings between teachers and students are currently prohibited to decrease the number of COVID-19 sufferers in Indonesia. As stated by Sama et al. (2020), the Ministry of Education and Culture decided to close schools and universities in March 2020. Schools and colleges have shifted to online learning-based classrooms as a result of the recent COVID-19 pandemic (social distancing suggestion) and the adoption of computer-aided teaching and learning methodologies (Dos Santos, 2022; Hablo & Gorospe, 2021).

This condition has led to changes to the existing learning method to willy-nilly switch from conventional class to what is called distance learning. Distance learning is referred to as online learning as its implementation requires Internet media that accommodate lecturers to interact with students online (Saib, 2000). At the same time, it has become a new challenge for the entire supporting parties, including the lecturers and students (Tîrziu & Vrabie, 2015). This circumstance has led the teachers to employ both synchronous and asynchronous online learning.

Synchronous online learning is one of the best ways to establish effective interaction between teachers and students. Additionally, real-time engagement that is collaborative in character and incorporates e-activities like an instructor's lecture with a facility for a question-and-answer session is made possible by synchronous learning environments (Salmon, 2013). It, however, can only be conducted when both teachers and students have adequate supporting media and mutual time availability to be directly connected online. A synchronous session requires a simultaneous teacher–student presence (Perveen, 2016). Moreover, the option to conduct online learning also requires the readiness of Internet data balance, as well as supporting devices managed independently (Mustofa et al., 2019). It is confirmed by Bhuasiri et al. (2012) that successful implementation of e-learning relies on technology, motivation and changes in student behaviour. Such condition is sometimes quite hard to achieve since the teachers and students face various situations and experience different conditions.

According to the recent report, below 50% of the Indonesian students are not ready for the online learning because of various aspects (Giatman et al., 2020). One of the aspects is the readiness of the university which must change or switch to an online learning (Makruf et al., 2022). The ability of a university to deploy fully online lectures depends on the infrastructure, human resources, and e-learning tools that are available (Makruf et al., 2022).

The most crucial problems faced by the majority of students are dealt with the availability of supporting media such as Internet connections and balance, laptop or computer and electricity. The other influential thing is the time availability. Several students experience bad Internet connections in their hometown as the Internet signal is considered very weak. It forces them to find areas where they can get good Internet connections to

access the Internet. The areas can be more than 10 km in distance. It, willy-nilly, makes them unable to access the Internet at any time they need.

The other students experience a lack of supporting media such as laptops or computers. Some students do not own their laptops or computers so they have to borrow them from their brothers, sisters or even their neighbours. For sure, it also makes them unable to access the Internet whenever they need it. Some students also come across obstacles dealing with electricity. When face-to-face meetings are prohibited at the campus, willy-nilly the students have to go home to avoid the pandemic and save living costs. Unfortunately, some students live in quite isolated are so that the electricity frequently goes off. It consistently hinders the online teaching and learning process as the power of electronic media such as hand phones and laptops is from electricity.

Several reasons above have led to a notion that asynchronous learning is still needed amid advancing synchronous learning supported by several popular platforms such as Zoom, Google Meet and other online platforms. This is because asynchronous learning requires both teachers and students to be connected online at the same time whereas not all of the students are available within the time due to the above-mentioned obstacles. Furthermore, According to Perveen (2016), asynchronous settings are not time-restricted, allowing students to complete e-activities at their own leisure. As a result, asynchronous learning is an option that gives students more opportunities and time to access the learning materials and become familiar with the teaching and learning procedures.

The learners' pleasure is influenced by how well online learning is implemented. Swan's (2002) study examines learners' perceptions of asynchronous learning and their satisfaction with it. She stated that the essential components of students' pleasure and perceived learning are the clarity of the learning design, the learner's connection with instructors, and active conversation among course participants. Additionally, the other factors influencing learners' satisfaction are technology, educational content, motivation and attitudes, student readiness level, conformity of information with needs, learning design, quality of information and experience (Deshwal et al., 2017; Pereira et al., 2015; Yilmaz, 2017).

This study proposes an alternative in conducting asynchronous learning by integrating Camtasia, YouTube and Google Classroom. Asynchronous learning is the bridge that connects instructors and learners when simultaneous online presence cannot be achieved. Since learners are not constrained by a schedule and may answer whenever they have time and are available, asynchronous learning has grown to be the most popular approach for online education (Parsad et al., 2008). This method is somehow very appropriate because the learners' availability to be connected online simultaneously like what synchronous learning requires depends not only on time but also other supporting factors such as Internet connections, electronic media and, even the most crucial thing, electricity.

Hrastinski (2008) supports this idea by noting that because to its adaptable manner of operation, asynchronous learning and teaching has historically been the most popular method of online instruction. Asynchronous learning systems can give students access to

quickly available materials including PowerPoint presentations, handouts, articles, and audio/video lectures (Perveen, 2016).

Because they may keep thinking about the issue for a longer amount of time and they may develop what is known as divergent thinking, the option for delayed response helps the students to engage their higher-order learning abilities. A prepared answer is used in place of the learners' natural expression like they do in synchronous learning. As a result, asynchronous space promotes independent, self-directed, and student-centered learning (Murphy et al., 2011). It results in the students' ability to scaffold previous knowledge with new concepts (Lin et al., 2012). Furthermore, less reliance on memory and notes and more opportunity for discussions with peers groups help build critical thinking and deep learning (Silvie, Huang & Hsiao, 2012)

Therefore, the present study aims to answer the following research questions:

1. How are the students' perceptions of using Camtasia Video Maker, Youtube, and Google Classroom as integrated tool to create asynchronous learning environments?
2. What are the benefits of using Camtasia Video Maker, Youtube, and Google Classroom as an integrated tools to create asynchronous learning environments?

2. Method

This study employed a mixed method through integrating survey which provides quantification equipped with the qualitative justification of the learners' response. As the pandemic situation is still occurring in Indonesia and the students are still staying at their homes to avoid the pandemic, the online survey questionnaire was chosen as the best way to collect the learners' perceptions in experiencing the asynchronous teaching and learning process using Camtasia, YouTube and Google Classroom.

Participants

The subjects were 52 students of the English Literature Department taking the Intermediate English Grammar Course. This course is randomly taken as the sample among 10 courses in the fourth semester. The research subjects consist of 38 female students and 14 male students. Most of them come from families with low income and some of them get scholarship to live and study.

Data Collection and Analysis

The participants were required to answer several survey questions to obtain their perceptions that became the data of this study. The data were taken using online survey questionnaire in the form of Google Form. It aimed to mitigate the contact between the researcher and the participants. They were then analysed using the pie diagram to

understand the percentage of the responses.

The Scale

The survey questions had been validated by experts before they were answered by the participants. Those questions were driven to elicit students' perceptions when experiencing asynchronous online learning using Camtasia, YouTube and Google Classroom.

Procedure and Materials

Camtasia is one of the most useful applications to record the screen of our computer. This application enables us to record both audio and visual on our laptop screen. Therefore, instructors can directly record their presentation and their oral explanation at the same time. Additionally, it is software that allows instructors to produce interactive learning videos that can be published and accessed by learners through e-learning (Nuari & Ardi, 2014). Figure 1 shows the use of Camtasia Application.

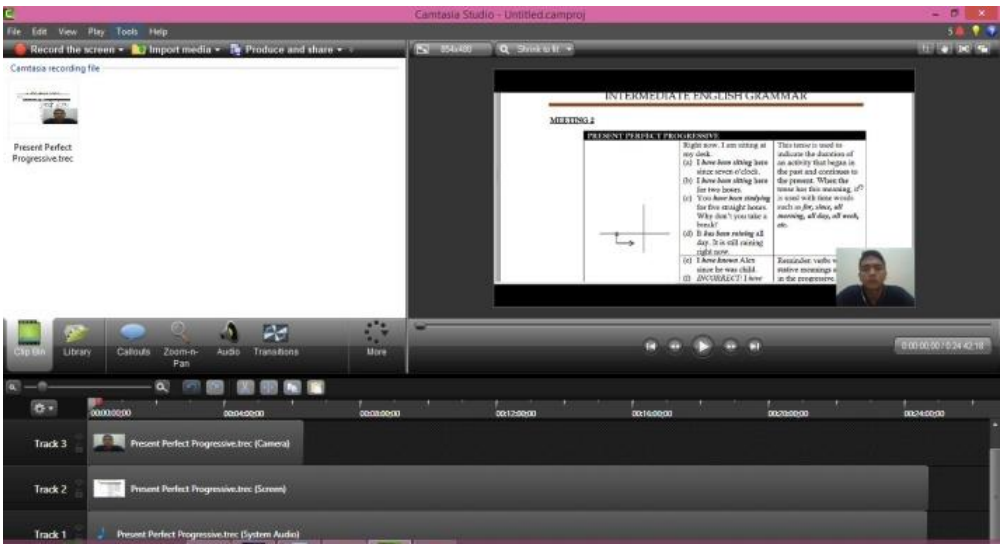

Figure 1

Camtasia Application Used to Record the Oral and Visual Presentation

After going through the production process, the videos are then uploaded to the teachers' YouTube channels. The use of YouTube in online learning has been consistently investigated by researchers. Almurashi (2018) came to the conclusion that YouTube might be a useful resource for incorporating English courses and can also aid in comprehension. YouTube as one of the most popular video-sharing applications provides various types of useful features such as unlimited access and storage, views, likes, comments, live chats and so on. Unlimited access enables the students to watch the uploaded videos at any time they are available. Additionally, unlimited storage enables the teachers to upload unlimited size of videos. The number of views, likes and comments can also be directly seen in the videos shown in Figure 2.

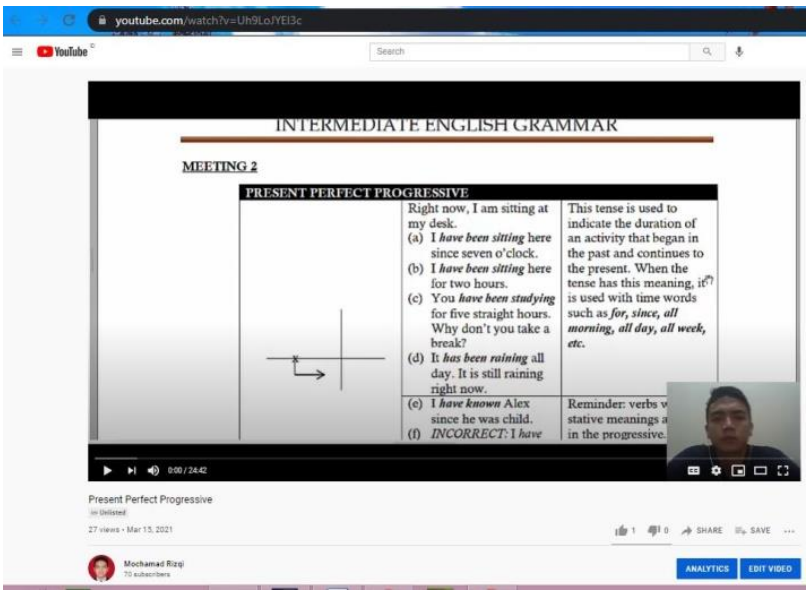

Figure 2

The Example of Uploaded Teaching Video in YouTube

The third application is Google Classroom. It has become a popular online learning application since it was launched by Google in May 2014. It is used as the media to manage a virtual classroom started from creating a class, posting materials and assignments, submitting the assignment and class discussions. Google Classroom offers various advantages such as that stated by Janzen (2014) as cited in Iftakhar (2016).

2.1. Easy to use

The instructional interface and choices for distributing and monitoring assignments are purposely made simpler in Google Classroom. Announcements, emails, and push notifications make it easier to communicate with the entire course or specific students. (Janzen, 2014 as cited in Iftakhar, 2016).

2.2. Saves time

It connects and automates the usage of other Google apps, such as documents, presentations, and spreadsheets, simplifying and streamlining the administration of document distribution, grading, formative assessment, and feedback. (Iftakhar, 2016).

2.3. Cloud-based

As Google applications make up "a large share of cloud-based workplace communications tools utilized throughout the professional workforce," Google Classroom offers more authentic and professional technologies to employ in the classroom environment. (Janzen, 2014 as cited in Iftakhar, 2016).

2.4. Flexible

In both completely online and face-to-face learning situations, teachers and students

may simply access and use this software. This makes it easier for teachers to experiment with and have an impact on "flipped instructional approaches as well as automate and organize the distribution and collecting of assignments and communications in different educational milieus," according to research (Janzen, 2014 as cited in Iftakhar, 2016).

2.5. Free

Google Classroom itself may not always be accessible to students who may not have access to a formal educational setting. However, anyone with a Google account may use all the other applications, including Drive, Docs, Spreadsheets, and Slides, for free (Iftakhar, 2016).

2.6. Mobile friendly

Google Classroom was created with responsiveness in mind. Any mobile device may easily utilize it. In today's web-connected learning environments, having mobile access to engaging and user-friendly learning resources is essential (Janzen, 2014 as cited in Iftakhar, 2016).

All benefits of using Google Classroom can enhance the learners' online teaching and learning process. They are especially aimed to solve the learners' problems such as limited time and connection to the Internet because it can be accessed anytime the students are able, lack of supporting tools like a laptop because it can be accessed via smartphones. Furthermore, it is free of charge so that the learners and teachers are not required to pay any cost.

In porting materials in the form of YouTube videos, teachers are only required to input the link of the videos. Figure 3 shows an example of the materials in Google Classroom integrating YouTube videos.

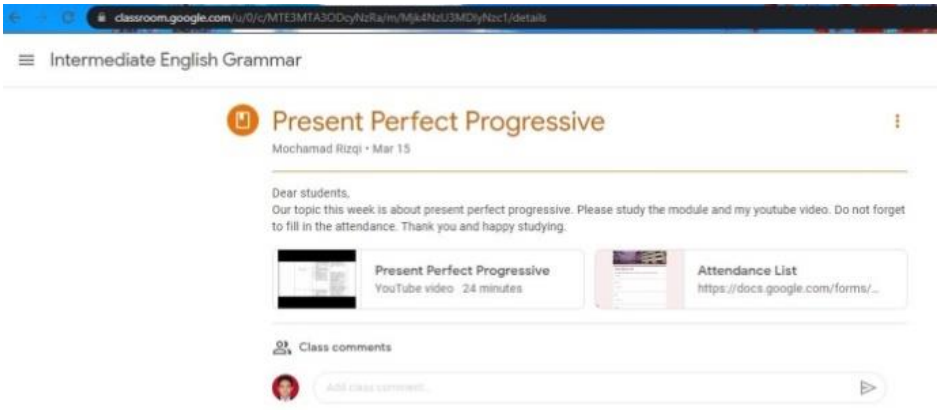

Figure 3

A Material in Google Classroom İntegrating YouTube Video

3. Results and discussion

3.1. Results

In order to answer the first research question, the researcher conducted an online survey using Google Forms to reveal the students' perceptions. At that time, an online survey was the most applicable one because the number of COVID 19 patients was getting higher and higher and face-to-face meetings were prohibited. There were many benefits of using Google Forms as the media to collect data. Firstly, the surveys were easily distributed in the form of links, and the learners easily opened and fill them using their smartphones. Secondly, the application is very simple and easy to operate. Thirdly, the results can be easily analyzed using the pie diagram provided by the application. Furthermore, it is free of charge.

The results of the online survey show that the students positively respond to the application of Camtasia, YouTube and Google Classroom in online learning. It can be seen in Figures 4 and 5 that almost all students answer 'yes'. It means that they have found the usefulness of the three applications within the teaching and learning process. In Figures 4–6, the pie diagrams show the percentage of the students' answers.

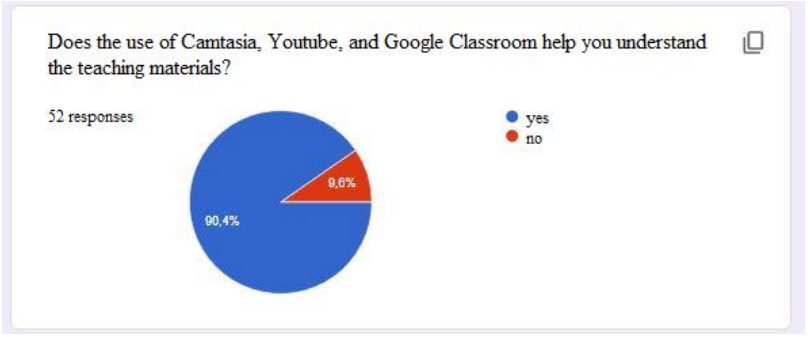

Figure 4

The Percentage of the Students' Answers to the First Question

The first question asked the students whether or not the integrated use of Camtasia, YouTube and Google Classroom help the process of teaching and learning process. The results revealed that more than 90% of the students feel that the integration is helpful to understand the teaching materials.

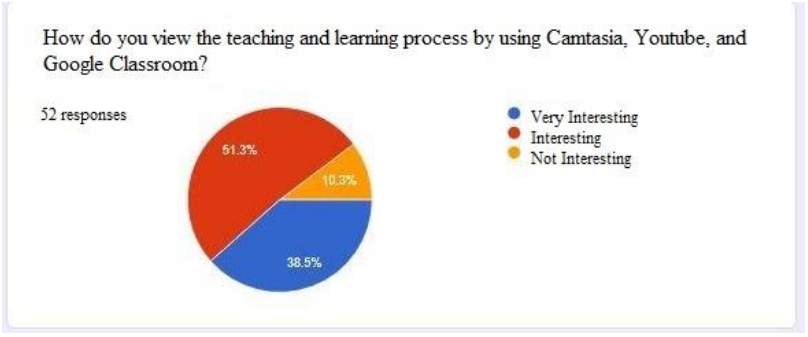

Figure 5

The Percentage of the Students' Answers to the Third Question

The second question revealed the level of students' interest in joining the class. Only a few students viewed the class as a not interesting class. Almost all students viewed the class as a very interesting class.

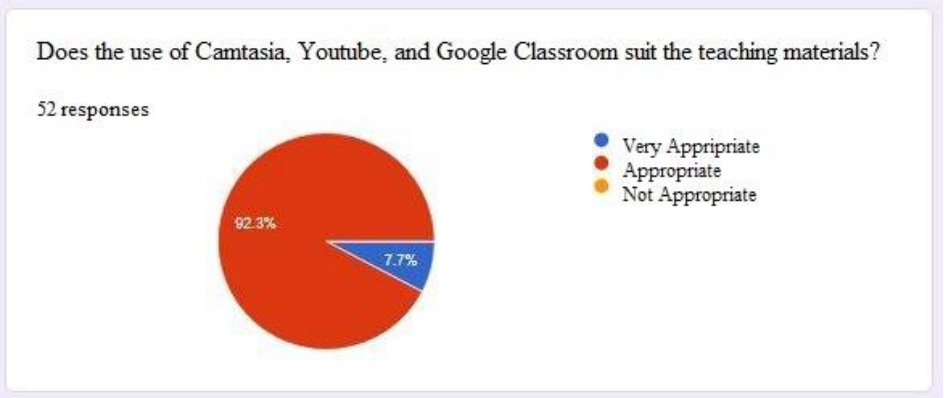

Figure 6

The Percentage of the Students' Answers to the Third Question

The appropriateness of the teaching and learning media is assessed in the third question. The entire students agreed that the media is appropriate with the teaching and learning materials. The above closed questions were then followed by several open questions in order to reveal the reasons for choosing that choice. The questions are as follows:

1. Is it easy for you to access the materials? Please explain!
2. What problems do you find in accessing the materials? Please explain!
3. Is it easy for you to understand the teacher's explanation provided in the video? Please explain!
4. What do you think of the learning video created in Camtasia? Please explain!
5. What do you think of Camtasia video uploaded to Youtube? Please explain!
6. What do you think of Youtube videos uploaded in Google Classroom? Please explain!
7. What do you think of the integration between Camtasia Video Maker, Youtube, and Google Classroom in learning Intermediate English Grammar?

According to the student's answers, the following conclusion could be drawn:

1. The materials were easy to access as long as the internet connections are stable and available. It is revealed that Google Classroom is very simple and easy to operate so there were not any significant problems when the learners accessed the materials. Opening the Youtube video is also very easy because the students were just required to click the picture showing the Youtube icon and they were directly directed to Youtube video.
2. The problems appear when the learners ran out of internet balance, experience unstable

even lost internet connections such as when heavy rain. The problem also appeared when black out. Some of the students' gadgets (laptops or smartphones) need charging.

3. Most of the students revealed that the video is easy to understand. The teacher's PowerPoint or the other presentation media were clearly presented in the video. The teacher's face is presented in the small box in the bottom right corner of the video. It makes the video more interactive. The teacher's voice was also clearly recorded and listened. The students also revealed that it was very helpful when they missed a part of the video, and they can easily replay the part so that they can better understand. When a review, mid-term test, or final test were coming, they can re-open their Google classroom and re-study the video to recall their understanding.
4. It is revealed that the learning video produced using Camtasia Video Maker was interactive, easy to study, and clear. The quality of the video and audio is also good because it was produced in MP4 format. It was suggested that the instructor enclose the microphone so that the audio produced was louder.
5. The Camtasia videos uploaded to Youtube make the video easier to open and watch. The video player provided by Youtube helps the learners play, pause, stop, or replay the video. The learners also revealed that it was very helpful because they could buy the internet balance from an internet provider which offers unlimited access to Youtube. It means that they can save money to buy internet balance.
6. Almost all students reveal that Google Classroom is very simple and easy to operate. They do not find any significant problems operating the application. They found it easy to access the material and submit the assignment. It was also easy to give comments or questions related to the uploaded materials.
7. The students revealed that the integration of Camtasia as the video maker, Youtube as the video player, and Google Classroom as the learning platform was really helpful. They can easily access the materials, study the explanations, and submit the assignment.

3.2. Discussion

The Learners' Perception of Synchronous Learning

The next question given to the learners is dealt with what they experience when attending a course using synchronous learning. Most lecturers used video conference meetings such as Zoom and Google Meet. However, some hindering problems frequently appear during the class. The most frequent problem is the technical barriers which usually experience by both lecturers and students. Many times the class is late to begin because of a certain problem in starting the applications. It was caused by bad Internet bandwidth and the connections of the lecturers.

Even after the application has been started by the lecturers, the class cannot be started soon as some students also faced the same problem to join the virtual meeting. It almost takes a half hour to wait for the late students. The bad Internet connection can be caused by various types of problems such as the Internet provider, the learners' Internet balance and the learners' location that restricts us from getting a good connection. The

technical barrier faced by the students might result in frustration prior to the teaching and learning process. Perveen (2016) confirmed that learners can feel frustrated and thwarted due to technical problems. Difficulties and complicated problem may results in the dynamic condition of the students' body called stress. Stress is an individual condition that is influenced by the environment (Lazarus & Folkman as cited in Perveen, 2016).

During the virtual meeting, the same technical barrier might also be a hindrance. Immediately while explaining the materials, the lecturer signed out from the application due to an unstable Internet connection. It takes time for the lecturer to re-sign to the application. This problem willy-nilly influences the learners' focus and mood. A simple thing like turning on the camera during the meeting also sometimes disturbs the learning process. Most students are reluctant to turn on the camera because they tend to keep their privacy while attending an online meeting. Some of them revealed that they are doing something else while attending the meeting such as eating snacks, watching TV or even they left their gadget to take a bath or help parents do household chores.

Some female students revealed that they tend to turn off the camera while attending class because they are not confident with their facial and dress performance. When attending class, female students do not use makeup like they usually do when attending a face-to-face class. Some of the female Muslim students stated that they are not wearing veils at home and good outfits. It gives an impact on the less interactive communication between the lecturers and the students.

Synchronous learning is also seen as teacher-oriented (Murphy et al., 2011) as mostly the discussion between peers does not occur. The learning process frequently occurs through the lecturer's presentations by sharing screen and ended with a question–answer session. Students revealed that they often feel bored listening to the lecturer's explanation. They usually do other activities while their lecturer is explaining such as listening to music, watching a movie on their laptop or even left their gadget to do other activities.

Boredom might result in less focus of the students in understanding the lecturer's explanation. Hence, frequently the students do not get what the lecturers try to explain. Unfortunately, the students feel reluctant to ask. As it is synchronous, the meeting is limited by time so that the lecturers sometimes cannot repeat their unclear explanation. It is less beneficial when compared to asynchronous learning in which the learners can re-access the materials for any time they need. It is reinforced by Wannapiroon et al. (2022), who claimed that with the aid of Internet networks, video clips may be captured and then used for modifying the courses or enhancing the instructor's performance without any restrictions on time or location.

However, synchronous learning offers benefits especially in keeping the students' motivation to stay engaged in e-activities due to the presence of lecturers and class fellows (Yamagata-lynch, 2014). The direct interaction is very much like a traditional face-to-face classroom. Furthermore, compared to a face-to-face meeting in class, synchronous learning offers efficiency as the participants do not need to travel to a certain place to meet.

The Learners' Perception of Asynchronous Learning

The final question was dealt with the reasons why the students feel more comfortable when studying materials using Camtasia, YouTube and Google Classroom. 48 out of 52 students revealed that the most significant advantage of using those 3 applications is the time flexibility to access the materials. Compared to synchronous learning which requires the students and the teachers to meet virtually at the same time, the integration of the three applications can be an alternative to asynchronous learning which does not require the students to virtually attend at a certain time. Students can access the materials at any time they are available within the time limitation the teacher has decided.

For instance, on Wednesday in the third week, the students learned Present Perfect Progressive in Intermediate English Grammar Class. The lecturer posted the materials and the assignment at 8 a.m. as scheduled. Then, the lecturer decided that the assignment is due at 11:59 p.m. Within the time allocation, the students can access the materials and then did and submitted the assignment. It enabled the students who were having trouble with their media or electricity at 8 a.m. that morning to access the materials and assignment after their trouble was solved. They still had time to finish their assignment.

The next advantage is the possibility to repeat and recall the materials as many as possible. Because the materials are available online on YouTube, it enables the students to access and relearn it at any time and for many times they need. It will be very helpful if the students faced difficulties in understanding the materials if they just watched the video once. They can replay many times until the materials were understandable. Of course, it requires the ability of the lecturers to create good videos which give a comprehensive and understandable explanation.

The possibility to replay and re-access the videos at any time the students need gives further benefits if it is compared to synchronous learning using video conference applications such as Zoom or Google Meet in which the teachers' explanation can only be listened to and studied once at that time.

Furthermore, this type of asynchronous learning allows the students to have more opportunities to develop higher-order thinking skills and deep learning as they keep thinking about the problems the instructors provide so that the learners can construct the way how to solve the problems (constructivism approach) (Silvie et al., 2012). It is very suitable for many types of learning especially problem-based and project-based learning. Moreover, asynchronous language learning can further encourage the learners to ask questions that require long answers (Abuseileek & Qatawneh, 2013).

It complies with the objectives of successful learning. Effective learning, broadly speaking, relates to improving the connection between learning processes of cooperation, engagement, participation, and responsibility, as well as learning objectives and outcomes including problem-solving abilities, critical thinking, and higher-order thinking (Moreno Bernal, 2004). Asynchronous learning environments allow the learners to have the opportunity to develop those aspects.

4. Conclusion and suggestions

4.1. Conclusion

Both synchronous and asynchronous learning offer benefits which can be employed to optimise distance learning. After understanding the advantage of asynchronous learning by integrating Camtasia, YouTube and Google Classroom, it can be revealed that this alternative can be employed when synchronous learning is hindered. This alternative can also be a variation in conducting hybrid learning by employing both synchronous and asynchronous learning. This asynchronous learning also offers some advantages, namely the time flexibility to access and the possibility to repeat and re-access the teachers' explanation at any time the students need.

Suggestions

Based on the conclusion, it is suggested that further research investigate the effectiveness of the integration between those three applications to teach the other materials. Furthermore, further benefits and barriers can be investigated so that teachers and students

Acknowledgments

We would like to thank Universitas Ngudi Waluyo for funding this research through the internal scheme research funding. Special thanks are also addressed to the head of the English Literature Department, Faculty of Economics, Law, and Humanities for supporting this research.

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