# Chapter Ten

# Exploring asynchronous and synchronous e-Learning of management-business' students in the independentcampus program, Indonesia

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#### Abstract

Because of the COVID-19 pandemic storm, it has implications for changing lectures carried out in a face-to-face manner into distance teaching. This distance lecture or e-learning uses various types of applications as a medium of communication. The application has advantages and disadvantages. This study explores the advantages and disadvantages of each application for supporting distance teaching. As well as, student opinion and comprehension or understanding in the lecture system. This study uses the mix mode method and purposive research.

Keywords: Communication media, E-learning, Applications, Learning systems

### Introduction

Because of the COVID-19 pandemic, many schools and colleges had been closing. As in the United States' UNICEF tweet, dated March 9, 2020, nearly 300 million students were affected by the closure of these educational institutions. Several regions in Indonesia, namely Jakarta and Surakarta, have also been prepared to face COVID-19 by closing schools in the two areas. Several universities in Indonesia have also implemented a similar policy. This policy is to prevent the spread of COVID-19 infection, in line with the appeal that all elements of society need to participate in preventing and minimizing the impact of the disease. However, this policy did not discourage these educational institutions from conducting learning, not face-to-face learning but distance learning. No doubt, the shift in learning modes from face-to-face. Perhaps, it has implemented blended-learning to distance learning raises many questions. So, the discussion is in line with the free learning program launched by the Ministry of Education and Culture of the Republic of Indonesia, the discussion packaged as an action of the call to action program. Therefore, a brief explanation of the idea of independent learning reviewed as follows.

The outbreak of the corona pandemic has led to changes in the teaching or lecture system in order to avoid the spread of the COVID-19 disease. Along with the development of the digital

era, there are many changes occurring in people's lives, as well as about education. In the past, we had to study face-to-face and bring many books. Now college is done anywhere and anytime and with gadgets and the internet. Universities with e-learning systems are in great demand by millennials, the internet generation that is very tech savvy. To study at a university with the system. It uses electronic and internet based media. This kind of learning system is considered more attractive by millennials because it is more practical, eye-catching in a visual form and is more flexible. This study is exploring the most suitable e-learning models that support e-learning in supporting distance learning.

## Literature review

E-learning is an educational system structured and able combines the principles of the learning process. In addition, this system is accessed by Chinese musicians. Furthermore, it makes use of the learning process. It can be viewed at any time on the computer. (Aljawarneh, 2020; Tawafak, Romli, Arshah & Malik, 2020; Teo, Kim & Jiang, 2020). The presentation of web-based e-learning can be more interactive. Information about lectures can also be real-time. Likewise, lecture-discussion forums are done online with communication (not face-to-face) in real-time that allows lectures to be carried out more time. As long as there is an internet network, students can access it (Al-Fraihat, Joy, Masa'deh, & Sinclair, 2020; Aljawarneh, 2020; Cerezo, Bogarín, Esteban & Romero, 2020).

The development of the world of digital technology has an impact on the world of education in the world, including in Indonesia. One of them is the emergence of e-learning learning methods or online-based electronic learning. The application of e-learning itself has been popular with recent years and has begun to be applied to several institutions and companies in the country. Basically, e-learning is a concept or learning method that utilizes digital technology. In addition, education experts define e-learning as a distance learning process by combining learning principles combined with technology. In other words, the learning system does not focus on face-to-face meetings between trainees and teachers in the classroom. Instead, it can be accessed anywhere and anytime (Al-Fraihat et al., 2020; Hayashi, Chen, Ryan & Wu, 2004; Lin et al., 2020).

In its implementation, there are several things that are the main characteristics of e-learning. The first characteristic, we refer to epistemology or language literally from e-learning itself that means electronic or online learning. It can be said that this method utilizes electronic and digital technology services. The next characteristic of e-learning is its teaching materials. Teaching materials in e-learning are usually in the form of independent teaching materials in digital form. Then, the material is stored in a computing system. This means it can be accessed by teachers and trainees anywhere and anytime. Not only that, the characteristics of e-learning can take advantage of the learning schedule, create a curriculum and educational administration system that can be accessed at any time via a computer network (Choudhury & Pattnaik, 2020; Hasan & Bao, 2020; Mpungose, 2020; Nahid & Sanaee, 2020; Valverde-Berrocoso, Garrido-Arroyo, Burgos-Videla & Morales-Cevallos, 2020).

#### Media e-learning

E-learning media is a learning process aid. This media is anything that can be used to stimulate students' thoughts, feelings, attention and abilities or skills so that they can encourage the learning process. This learning media makes the learning process clearer and more interesting and helps students concentrate on the learning material. In addition, this media fosters positive attitudes to students towards material and learning processes that are efficient in time and energy. E-learning media can increase student absorption of the material taught and increase student active participation. Furthermore, e-learning also improves students' self-learning abilities. This media is available 24 hours / day - 7 days / weeks. Mastery of the material depends on the enthusiasm and absorption of students, can be monitored, can be tested by e-test (Blaschke, 2014; Greene et al., 2020; Putri, Jumadi & Ariswan, 2020; Risniawati, Serevina & Delina, 2020; Sefriani & Sepriana, 2020; Situmorang, Hutasuhut & Maipita, 2019; Zaharah & Kirilova, 2020).

This system is a learning process using the internet. It can connect lecturers and students. This method has been around since 1970. However, it just began to be applied to certain schools in Indonesia. However, all elementary schools to tertiary institutions are required to use this E-Learning method due to the pandemic. Based on its use, E-Learning is divided into 2, namely synchronous and asynchronous (Przymuszala et al., 2020; Weiser, Blau & Eshet-Alkalai, 2018).

## Synchronous e-learning

The notion of e-learning has a lot of meaning because of the various uses of e-learning today. Basically, e-learning has two types, namely synchronous and asynchronous. First Synchronous means at the same time. The learning process occurs at the same time to lecturers and students. This allows direct interaction between educators and students online. In its implementation, synchronous learning requires lecturers and students to access the internet simultaneously. Lecturers provide learning material in the form of papers or presentation slides and students can listen to presentations directly via the internet. Students can also ask questions or comments directly or via chat to the lecturer. Synchronous training is a description of a real class, but is virtual (virtual) and all students are connected. Synchronous learning is often referred to as virtual classrooms. This can also be combined with a live video that can be accessed by many students. At the same time, a synchronous learning system means that lecturers and students are connecting simultaneously. In synchronous, face-to-face meetings, the lecturer will later provide material in the form of words or presentation slides. So that students only listen and discuss. They can ask questions or respond directly. Nevertheless, the class become more alive (Amiti, 2020; Nieuwoudt, 2020; Plank & Niemann, 2020; Raes, Detienne, Windey & Depaepe, 2020; Shoepe et al., 2020; Weiser et al., 2018).

# Asynchronous e-learning

Asynchronous e-learning is an independent learning system where students interact with course material and with each other at the time they choose. A trend of student discussion is that they

can post their thoughts freely without being bound by time. Meanwhile, other students can comment on posts. Traditionally, students need to be physically present to engage in learning with other students. In this learning system, students can engage with each other, students who follow the end of the course work still benefit from the ability to read discussion posts. (Alqahtani & Rajkhan, 2020; Brady & Pradhan, 2020; Brierton, 2016; Burns, Holford & Andronicos, 2020; Calderon & Sood, 2020; Gal & Israel-Fishelson, 2020; Marmon, Gordesky & Vanscoder, 2013; Przymuszala et al., 2020).

### **Research methods**

The research method used in this mix mode research is about research on classroom learning activities using e-learning (EL) with virtual face-to-face. The data collection technique is in the form of a questionnaire. The 100 Questionnaire was distributed purposive (Cardia & Jones, 2017; Datar, 2017; Pérez, Guerrero, González, Pérez & Caballero, 2013). Data tabulation and data analysis using Content analysis (K). K>0,6 qualified (Cavazos-Rehg et al., 2016; Collins et al., 2018; Eisenberg, Carlson-McGuire, Gollust & Neumark-Sztainer, 2015; Hengky & Kikvidze, 2018; Lucero et al., 2018; Ruhanen, Weiler, Moyle & McLennan, 2015; SAS Institute, 2016).

#### **Result and discussion**

The tabulation shows the EL learning system fulfills the teaching requirements of the pandemic period (Table 1). Of the two types of e-learning learning models, synchronous systems are preferred which can be a medium for distance learning (60.7%). Meanwhile, asynchronous e-learning is the second choice (39.3%).

The selection of E-learning	Value	% Freq				
Synchronous	34	60.7				
Asynchronous	22	39.3				
K = 0,6222						

Table 1:	Tabulation	of synchro	nous and	asynchronous	e-learning
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The opinion of some students through Google Form, 80% stated that they prefer virtual faceto-face lectures, because they think asynchronous e-learning courses are not effective. Based on these data, 60% complained about inadequate facilities for asynchronous EL. They like it to be more relaxed, you can do anything, anywhere, and they do not have to wear formal clothes. Furthermore, the students complained about irregular learning hours. Various obstacles are also felt and confused by the system being created. Such as lecturers only provide teaching materials without being given an explanation, especially regarding attendance that is not going well. We have to have a laptop and quota along with a good network. Students think that online lectures using the Zoom Meeting application are better than other applications. This is because students can ask the lecturer directly about material they do not understand. However, the application is fixed in a very short time so it is often not conducive. He also complained about lectures that were not on schedule and sometimes suddenly, so he was responsible if he wanted to do something else. Students prefer face-to-face lectures. Because of online learning, the material presented by the lecturer was not fully understood, and internet facilities must be sufficient. This EL policy reaps pros and cons. There are those who think that the implementation of EL during this pandemic can be used as experimental material for the future. Synchronous EL is considered more efficient because students and lecturers can carry out the learning process anywhere and anytime. Then EL can make students become independent by finding out the material taught by the lecturer via the Internet.

In this asynchronous EL system, students and lecturers determine applications that are useful as learning spaces, one of which is the Zoom us application. This application is an application that can connect lecturers and students with a video. However, recently word got out that Zoom us was being questioned. This is because there are foreigners who enter a class meeting. There is news that the Zoom us user data was compromised by irresponsible people. This was immediately denied by Zoom, saying that they never gave user data to other parties. Due to this incident, Zoom also received a negative stigma among the community. Until finally many decided to switch media to Line, WhatsApp, Google Classroom, and others. Apart from these worries, there are other complaints such as learning to use the EL method using quite a lot of internet data packages. Some people think that using the EL system is very wasteful and burdensome for students. With this protest, several campus parties also assisted their students. EL also requires a stable internet signal. If the signal is unstable, they will have difficulty joining online classes that will disrupt the learning process. Based on the explanation, the current EL has not been effective, this is due to the lack of preparation so that there are still some shortcomings. This can be a lesson for the future education system in Indonesia. Indonesia can learn from the current use of e learning, improve the system. So that there are no more obstacles and can prepare this EL program carefully.

The advantage of the EL learning system or what is usually called online learning is that students can study anywhere. They do not need to migrate outside the region or city which requires additional transportation costs to go to campus. They only need a laptop or gadget that is connected to the internet. In fact, they can study. While they are drinking at the cafe. Students who are currently working or have their own business can now study using the EL system. They can arrange their own study time for disturbing the work they are currently working on. This independent learning system is considered to be more profitable. This college adopts an EL system which requires students to learn independently. Students majoring in business management can study individually or in groups in several ways, namely, online tutorials, dry-lab labs, independent training, course enrichment materials, and virtual reading rooms. The advantages of the Open University also lie in the flexibility in taking higher education, namely universities with affordable prices, easy to take undergraduate exam paths, no dropout system. There are exams outside the city. It can be done at the university location in the student area. Well, students that are abroad can also study at university without being constrained by space

and time. Universities provide many options for students to be able to study and get education without time restrictions.

The passion for innovation is at the core of the first part of the learning program launched by the ministry of education. With this spirit, educators are required to explore and apply various theories, approaches and principles of learning design to create an innovative learning environment for their students. In addition, educators also need to optimize the devices that students already have, or have provided for them, to create innovative, active, and in-depth learning. Therefore, educators need to reflect continuously on their practice, and apply and develop the latest learning models, such as flipped classrooms, blended learning, and bold learning.

## E-learning learning models:

# Flipped classroom

There are many challenges faced by lecturers and students in learning business management today. Several alternative solutions to these challenges can be found in the literature, one of which is by implementing a flipped classroom. In a flipped classroom, learning activities that are usually carried out in the classroom are carried out outside the classroom. Thus, activities in the classroom can be focused on activities that can stimulate students to think at a higher level. Although it looks promising, learning like this does not always have a positive impact on student learning. Therefore, this flipped classroom needs to be designed in such a way that it has more value in terms of the learning design.

# Blended learning

The use of the internet in learning or what we usually call EL is increasingly in demand by many students. The existence of EL helps anyone to learn regardless of time and place. However, some students still need face-to-face meetings in class to discuss and complete the learning process that has been through the internet. This is called Blended Learning. So that the meaning of Blended Learning itself is a learning method where the face-to-class learning process combines with the EL process of harmony. Classroom learning and EL each have their own advantages and disadvantages that is what underlies the formation of this Blended Learning method. For example, learning deficiencies in the classroom tend to be limited by place and time, but the advantage is that by meeting a lecturer, students can immediately get feedback from the teacher on the achievements they have made. Likewise, learning to use the internet is indeed not limited to place and time, but without a teacher to accompany it, participants do not immediately receive feedback and tend to experience misunderstanding. So that, by combining the two methods, blended learning can be the answer to learning methods that are becoming trends in the future. Dilansir dari beberapa sumber, Blended learning dapat memberikan keuntungan dalam belajar, berikut penjelasannya:

- 1. Flexibility, by using the blended learning method, students do not have to come to class every day. Learning can be done via the internet, then one day a week there is a meeting with lecturers in the classroom to get feedback on what has been learned.
- 2. Save Cost & Time, the Blended Learning method saves more money and time. Learning to use the internet does not have to have a physical book because the material is available online and participants only need to download. In addition, students can also save time because they do not need to pay to come to campus by studying the blended learning method, you can save on transportation costs to go to campus several days a week.
- **3.** Interactive Material, subject matter presented via the internet is made into interactive media to make it more detailed and attract participants' attention. The learning media can be used according to the way each participant learns. All this is coupled with various live sessions, online chat with lecturers and various other technological supports.
- 4. Effective and Efficient, every student has a different way of learning from one another. There are participants that are comfortable studying in the morning, evening or even studying at night while relaxing and listening to music. There are also students that are more comfortable studying in their own room, in a coffee shop or in a classroom. That way, using this blended learning method, students can manage their own learning time and place.

### **Online learning**

During this pandemic, distance learning is an option. All subjects are delivered to students using the help of technology. Of course, business management does not escape from that. In fact, this one subject requires a deeper explanation and understanding. It doesn't mean with distance learning like this, teaching can't be as effective as direct learning. There are many choices of learning ideas that can be applied for the help of technology, one of which is by using learning videos. The development of education today is influenced by the rapid progress of information and communication technology. One of the information technologies that play a role in the world of education is online learning. Online learning functions as a link between educators and students with an internet network that can be accessed anytime and anywhere. The online media used by the research subjects were various communication media WhatsApp, Google Classroom, and ZOOM.

The second core of the independent learning program is a learning culture. In providing quality learning for their students, educators are required to always learn from and with other educators. Furthermore, educators should not be afraid to explore and experiment with promising and proven effective learning methods in an effort to improve their teaching practices. To realize this learning culture, educators need to be actively involved in their professional networks, both locally and globally, and always update their knowledge related to research results from the field of education. The two cores of the independent learning program above remind educators of the spirit of dedication, namely the spirit of innovation and continuous learning to prepare their students for their future. The spirit of innovation and learning must be helding in designing and facilitating learning for students, including distance learning.

Distance learning needs to be designed carefully. So, it can facilitate the learning of students optimally. Many teaching design principles are available in the literature to do this. Here we offer the principles of teaching as interaction as a framework in designing distance learning. Why is this principle? This principle recognizes that teaching involves a complex process of learning actors. The actors of this learning depend on each other. Furthermore, this principle can provide an overview of the interactions between learning actors that occur in the distance learned. Finally, this principle also provides opportunities for modern learning approaches that require interaction between learners in an online learning environment, for example, computer-supported collaborative learning (CSCL). The principle of teaching as interaction has an axiom that teaching is the interaction between educators and students around learning content. In other words, this principle interprets teaching as a guideline for what educators do, say, and think together with their students about learning. It is necessary to think about and design various strategies to facilitate interaction between educators and learning content, students with learning content, students with educators, and students with other students.

### **E-Learning content**

The first role of educators in implementing distance learning is to develop learning content. To do so, educators, of course, have to think that the learning content will be delivered online. This assumption is crucial to content development for distance learning. Then, educators also need to determine the components of the learning content, consider and pay attention to existing learning content, and finally develop it. As previously mentioned, the assumption that learning with content is delivering online is important to developing content distance learning. With this assumption, educators must be aware that the purpose of distance learning is to replace face-to-face learning experiences in the classroom. Students in this learning system assumed independence or not too dependent on direct teacher assistance.

After paying attention to the assumptions of distance learning, the educator is ready to develop the learning content. The components in learning content that needed to be developed are teaching materials, assessments, and information about online classroom management. The teaching materials referred to here are learning content used by students to achieve predetermined learning objectives. Some examples of teaching materials include modules, computer simulations, computer-based interactive activities, lists of references or reading material for students, and so on. An assessment instrument that refers to the competency achievement indicators and accommodates the needs of students then accompanies the teaching materials. In designing assessments, educators should provide ways for students to demonstrate their knowledge, skills, and dispositions, for example, the use of an e-portfolio system that can store all work results and reflections, and allow students to choose their own learning path and pace. Finally yet importantly, educators also need to prepare information about online classroom management for students. Examples of this kind of information can be found easily on the internet. For example is the course management information about Statistical Methods that I have developed some time ago. After the list of learning content components has been completed, the educator then determines whether there is learning content that matches the predetermined learning outcomes. The learning content can be found in the institution's own repository or on the internet. Currently, a lot of learning content in the form of learning objects is widely circulated on the internet, for example OER and OpenStax. Additionally, online courses can also be found widely on the internet. Educators can try Khan Academy, for example, as a support for students to achieve predetermined learning outcomes. In fact, Coursera is providing assistance to universities affected by the coronavirus disease by providing free access to its online courses. With so much learning content available in abundance out there, educators need to choose and sort it wisely. Educators need to check whether the content is in accordance with the learning outcomes, students, and the learning process that has been planned and targeted previously.

- 1. OER is learning, teaching and research material in media and format published with an open license. While respecting the copyright contained, the public can access, reuse, re-adapt and distribute the material. Generally, individuals or organizations develop OER content with Indonesia independently so that the growth of OER content is slow. For this reason, Rumah Belajar is developing a prototype application that becomes a forum for developers to share OER digital content.
- 2. OpenStax is a non-profit organization based on Rice University, a university located in Houston, Texas, United States. On this site anyone can download a variety of books or lecture dictates from various majors, ranging from Business Management, Economics, Social, Humanities. The main mission of OpenStax is to increase public access to education by providing college books or textbooks that can be downloaded or downloaded and used for free. OpenStax first published free books five years ago. Now, OpenStax has provided hundreds of free textbooks on its website.
- **3.** Khan Academy is a non-profit organization with a mission to provide education to anyone free, world-class, and can be used anytime and anywhere. Based on observations made by the author of the Khan Academy web, there are many business management questions such as business management questions so that students are expecting to get more business management insights from these learning resources. Every learning tool / media must have weaknesses and weaknesses, as well as Khan Academy. Learning business management requires good command of English. Without these things, it will be difficult to study business management at Khan Academy.

All of the predetermined learning content can be found. The educators need to compile it themselves (with the help of other professionals). Artistic and technical skills are required to compose this kind of learning content yourself. These skills range from simple skills in using word processing software to converting them into web-friendly content. Moodle (which is used in learning.usd.ac.id), Google Classroom, Edmodo, and Schoology can be used to build a learning management system (LMS). Martin Gougiamas developed Moodle. He is a software package. Moodle is used to hold or create training, practice questions and others with internet-based. Actuall, Moodle stands for Modular object oriented dynamic learning environment. This means creating dynamic learning but still prioritizing object orientation. Moodle uses computer assisted learning and computer assisted teaching models. Two models are in moodle. So, they

are called LSM (Learning Management System). Moodle already has an open source license, meaning that Moodle already has the copyright but other people, not even just copying it, can still copy it but anyone can modify it.

The following are the advantages of the Moodle learning platform that must be known.

- Suitable for application in online classes. Online classes can provide learning on Moodle devices that can be accessed by anyone. In fact, this platform can be accessed by more than 1000 learning materials. So that online classes are more efficient and flexible.
- Moodle security has been guaranteed, this is because Moodle has security features that can protect users' personal data. In fact, when students fill out the registration form, the data is checked until it is valid because Moodle has been completed by the application.
- Provide various languages for its users. Each user can use the language they want. There are 45 languages available in Moodle, choose the language according to your learning needs.
- Open Source software, aka free and easily accessible to anyone.
- Has user management, commonly called course management, course changes, subtractions, and course types additions.
- Provide a chat bot module, journal module, quiz module, survey module, workshop, polling and many other modules.
- Simple, compatible, lightweight and efficient device.

Those are the advantages possessed by the Moodle learning platform. After reading the advantages above, it makes lecturers and students interested in using moodle in learning. Just use Moodle, because it can make it easier for lecturers to teach.

# Google classroom

Google classroom is a free online blended learning application platform. Educators can create their own class and share the class code or invite students. Google Classroom is intended to help all spheres of education that helps students to find or solve learning difficulties, share lessons and create assignments without having to attend class. Google Classroom's main goal is to streamline the process of sharing files between teachers and students. Google Classroom combines Google Drive for assignment creation and distribution, Google Docs, Sheets, Slides for writing, Gmail for communication, and Google Calendar for scheduling. Students can be invited to join classes via a private code, or be automatically imported from the school domain. Each class creates a separate folder in each user's Drive, where students can submit work for the teacher to grade. This application is available for mobile users of iOS and Android devices. Which allows users to take photos and attach assignments, share files from other applications and access information offline. The teacher can monitor progress of each student, and once assessed, the teacher can return to work together with comments

Several functions and advantages can be obtain from Google Classroom in its use as a Learning Management System (LMS), namely:

- The process of setting up class creation is fast and convenient, the class creation process of Google Classroom is very fast and comfortable when compared to having to install a local LMS or register with an LMS provider. Teachers only need to access the Google Classroom application and can start sharing assignments and teaching materials. Teachers can add a list of students or share a unique code that allows access to classes of Google Classroom. Google Classroom's interface is simpler and easier to use (user friendly), so it would be ideal for any teacher with varying levels of eLearning experience.
- Save time and efficiency, class participants or students no longer have to download assignments given by the teacher. Teachers create and distribute documents for their students online and can also rank, provide feedback on all assignments and conduct assessments using the Google Classroom application. Thus, there is the potential for time savings from both students and teachers. Everything is done in a paperless manner (paper free), so there is no time wasted distributing physical documents and students can complete their assignments correctly online, making it easier for them to meet the deadlines given and online learning can be adjusted according to their schedule everyday.
- Able to improve collaboration and communication, one of the most important benefits of using Google Classroom is efficient online collaboration. Teachers can send notifications of participants or their students to start online discussions or notify them of certain online learning activities. On the other hand, students have the opportunity to provide feedback on their peers by uploading posts directly into discussions on Google Classroom. That way, if they need help due to difficulty understanding an assignment or want to learn more about a particular topic, they can get immediate, real-time input from their virtual classmates. In essence, Google Classroom serves to enhance the social learning aspects of online education allowing students to benefit from the experiences and skills of their fellow study partners.
- Centralized data storage, only in one place, namely Google Classroom, all learning is in one central location. Students can view all their assignments in a specific folder, teachers can save eLearning materials and activities for the school year in the cloud and all grades or grades can be viewed in the app. Both parties don't have to worry about missing documents or assessments, because everything is stored in this free LMS.
- Efficient, practical and fast sharing of resources, facilitators or online teachers and trainers have the ability to share information and resources online with their participants directly. Instead of updating an eLearning course or sending individual emails to each student. This gives students the opportunity to have timely updates related to current lessons. So that, they can better understand the material and access multimedia tools that can enhance their eLearning experience.

Google Classroom has many conveniences such as Google Drive, Google Docs, Sheets and Slides, and Gmail. Which will help educational institutions more easily to teach without physical materials such as classes, whiteboards and writing tools. Here are some features that really support this online learning:

• Assignments, each downloaded task was saving and grading on Google's productivity app suite. It has made this online collaboration possible. Rather than just sharing documents

that are on students' Google Drive with the teacher, the files are hosted on student Drive and then sent for grading. The teacher can select a file as a template so that each student can edit their own copy and then come back to get a grade so all students can view, copy, or edit the same document. Students can also choose to attach additional documents from their Drive to assignments.

- Grading (Grading), Google Classroom supports many different ways of grading. Teachers have the option to monitor each student's progress of assignments where they can make comments and edit. Altered assignments can be graded by the teacher and returned with comments to allow students to revise assignments and return. Once graded, assignments can only be edited by the teacher unless the teacher returns the assignment.
- Smooth communication, the teacher to the class stream that can be commented by students that allows two-way communication between teacher and students can post announcements. Students can also post to class but it will not be as high priority as the announcement by the teacher and can be moderated. Various types of media from Google products such as YouTube videos and Google Drive files can be attached to announcements and posts for sharing content. Gmail also provides an email option of teachers to email one or more students in the Google Classroom interface. Classes can be accessed on the web or via the Android and iOS Classes mobile app.
- Originality Report, an originality report introduced into January 2020 that allows educators and students to view sections and sections of submitted works that contain words that are exactly or similar to those from other sources. For students, it highlights missing source material and quotes to help students improve their writing. Teachers can also view reports on originality, enabling them to verify the academic integrity of submitted student work. In G Suite for Education (free), teachers can turn on originality reports on 3 assignments. This restriction is lifted on Google Apps for Education (paid).
- Learning archives, Classrooms allow instructors to archive courses at the end of a semester or year. A course is archiving, it is removed from the homepage and placed in the Classroom Archives area to help teachers organize their current classes. Teachers and students can see it, but cannot modify it until it is restored.
- The mobile app, the Google Classroom mobile app, introduced in January 2015, is available for iOS and Android devices. The app lets users take photos and attach them to their tasks. They share files from other apps, and support offline access.
- Personal Security, It does not display any advertisements in the interface for students, professors and teachers. The user data is not scanning or used for advertising purposes.

### Edmodo

Edmodo is an information technology tool that helps and supports EL in the future. This social media supports an online learning system for educational activists, such as students and lecturers. For Edmodo students, this will help them to be more disciplined in learning. Usually the assignment given by the lecturer is given a deadline.

## Schoology

Schoology is one of the web pages in the form of a social web that has an interesting strategy for incorporating learning with social networks, making it easy to use. With the existence of schoology, learning problems are easily accessible. I like studying in class. The function of this web page is also the same as others such as Blackboard and WebCT, which offers teachers to help understand lessons. How to access schoology can be done via a cellphone, namely by installing the Schoology Apps application, which is available free of charge for download. As with learning in the classroom, Schoology certainly consists of teachers and students. The way to enter students in the course application is by providing an access code for students being guided.

# Interaction between students - Lecturers

The next interaction in teaching is the interaction between students and educators. In face-toface learning, student interaction is usually carried out when presenting material, question and answer, and classical discussion. In distance learning, these kinds of activities can still be done via video conferencing (videoconferencing). Some of the tools you can use to do this included Skype, Google Hangouts, and Zoom.

Giving feedback from educators to students is another type of interaction. Giving this feedback should be intended. So that students as recipients of feedback are able to solve problems given. They have self-regulation, and use this feedback productively. To achieve this, educators can implement multi-stage assignments. For example, educators give assignments to students and they collect their work. After that, the educator provides written feedback on the work results. Students then revise their work based on this feedback and then collect it again. In this final collection, students must provide a description of why the revision has accommodated the feedback that has been given and why the revision makes their work better.

The interaction between educators and students can be facilitated through asynchronous and synchronous communication. Asynchronous communication, for example forums, is more suitable for discussions that demand more in-depth thinking from students about learning content, while synchronous communication, for example chatting, stimulates the social role of students in the learning community. Some things that can be effectively communicating with chatting include reminding students about the deadlines for an assignment, notifications about updates to learning content, and announcements related to class management. In these two types of communication, the role of the educator is still important, namely as a guide / moderator so that the discussion remains focused.

# Interaction

Interaction between students can be facilitated in various ways. First, asynchronous forums can be used to facilitate discussions of students regarding certain topics or problems. Social media, such as Twitter, can also be used effectively to create interactions between these students. For example, the two tweets below show that social media can be used to support learning.

#### Sharing teaching practices: Peer assessment and feedback in Moodle

In almost every subject I teach, I take advantage of peer assessment and feedback. With this strategy, I hope to develop students' abilities in giving and receiving feedback. That is, I hope that they are able to appreciate feedback, conduct evaluations, manage their attitudes to feedback, and take action or action on the feedback they receive. I personally believe that this kind of capability will be useful in their future workplace. To facilitate peer review and feedback, I use the workshop feature of my learning management system, Moodle. This workshop feature consists of five stages, namely the stages of setting, collecting, scoring, calculating the score, and closing. Two stages that need to be considered and specifically regulated by educators are the stages of setting and calculating the score, while the involvement of students is in the collection and assessment stage.

At the regulatory stage, lecturers need to provide a description of the workshop, provide assessment instructions, and make assessment tools (for example, an assessment rubric). After everything has been arranged, the stage must be transferring to the collection stage. Before being transferred to this stage, students cannot submit their work. After all students have submitted their work, still at the collection stage, educators need to allocate assessments. In other words, educators need to regulate who judges. This arrangement can be randomized. After all that is done, educators need to shift the workshop stage to the assessment stage. At this stage, students will assess the work of their friends according to the assessment rubric and the specified allocations. When the assessment is complete, the educator can move on to the stage of calculating the score. At this stage, the educator's task is to calculate and give scores of students on the work assessed by their friends and their contribution to peer assessments. After being calculated, students need to see how many scores they get and what their friends' comments are on their work. To do this, the workshop stage must be transferred to the next stage, namely the closing stage.

### Conclusion

This study has discussed several distances learning design of management business recommendations by looking at teaching as a process of interaction between synchronous EL learners. Interactions that are mediated by this technology need to be carefully designed and implemented based on the needs of students. As well as being shared here, the space for innovation is still very open to the design and implementation of distance learning. The vast space for innovation and learning is what frees educators to continue to observe, ask, try, find, and reflect on what forms of distance learning are most appropriate to the context of their students.

#### References

- Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. Computers in Human Behavior, 102, 67–86. <u>https://doi.org/10.1016/j.chb.2019.08.004</u>
- Aljawarneh, S. A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. Journal of Computing in Higher Education, 32(1), 57–73. <u>https://doi.org/10.1007/s12528-019-09207-0</u>
- Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-Learning Critical Success Factors during the COVID-19 Pandemic: A Comprehensive Analysis of E-Learning Managerial Perspectives. Education Sciences, 10(9), 216. <u>https://doi.org/10.3390/educsci10090216</u>
- Amiti, F. (2020). European Journal of Open Education and E-learning Studies synchronous and asynchronous e-learning. European Journal of Open Education and E-Learning Studies, 5(2). <u>https://doi.org/10.46827/ejoe.v5i2.3313</u>
- Blaschke, L. M. (2014). Using social media to engage and develop the online learner in self-determined learning. Research in Learning Technology, 22. <u>https://doi.org/10.3402/rlt.v22.21635</u>
- 6. Brady, A. K., & Pradhan, D. (2020). Learning without Borders: Asynchronous and Distance Learning in the Age of COVID-19 and Beyond. ATS Scholar, 1(3), 233–242. https://doi.org/10.34197/ats-scholar.2020-0046ps
- Brierton, S. W. E. K. M. F. J. & J. D. (2016, March). A Comparison of Higher Order Thinking Skills Demonstrated in Synchronous and Asynchronous Online College Discussion Posts. Retrieved November 3, 2020, from JSTOR website: https://www.jstor.org/stable/nactajournal.60.1.14
- 8. Burns, A., Holford, P., & Andronicos, N. (2020). Enhancing understanding of foundation concepts in first year university STEM: evaluation of an asynchronous online interactive lesson. Interactive Learning Environments. https://doi.org/10.1080/10494820.2020.1712426
- Calderon, O., & Sood, C. (2020). Evaluating learning outcomes of an asynchronous online discussion assignment: a post-priori content analysis. Interactive Learning Environments, 28(1), 3–17. <u>https://doi.org/10.1080/10494820.2018.1510421</u>
- 10. Cardia, G., & Jones, A. (2017). PM4SD as a Methodological Framework for Sustainable Tourism. <u>https://doi.org/10.1007/978-3-319-47732-9\_19</u>
- 11. Cavazos-Rehg, P. A., Krauss, M. J., Sowles, S., Connolly, S., Rosas, C., Bharadwaj, M., & Bierut, L. J. (2016). A content analysis of depression-related tweets. Computers in Human Behavior, 54, 351–357. <u>https://doi.org/10.1016/J.CHB.2015.08.023</u>
- Cerezo, R., Bogarín, A., Esteban, M., & Romero, C. (2020). Process mining for self-regulated learning assessment in e-learning. Journal of Computing in Higher Education, 32(1), 74–88. <u>https://doi.org/10.1007/s12528-019-09225-y</u>
- 13. Choudhury, S., & Pattnaik, S. (2020). Emerging themes in e-learning: A review from the stakeholders' perspective. Computers and Education, 144, 103657. <u>https://doi.org/10.1016/j.compedu.2019.103657</u>
- 14. Collins, S. E., Taylor, E., Jones, C., Haelsig, L., Grazioli, V. S., Mackelprang, J. L., ... Clifasefi, S. L. (2018). Content Analysis of Advantages and Disadvantages of Drinking

Among Individuals With the Lived Experience of Homelessness and Alcohol Use Disorders. *Substance Use & Misuse*, 53(1), 16–25. https://doi.org/10.1080/10826084.2017.1322406

- 15. Datar, D. V. (2017). Sustainable Tourism: Significant Contributor for Sustainable Development. *International Journal of Current Trends in Science and Technology*, 7(11), 20454–20461. Available at: <a href="http://www.currentsciences.info/index.php/ctst/article/view/118">http://www.currentsciences.info/index.php/ctst/article/view/118</a>
- 16. Eisenberg, M. E., Carlson-McGuire, A., Gollust, S. E., & Neumark-Sztainer, D. (2015). A content analysis of weight stigmatization in popular television programming for adolescents. *International Journal of Eating Disorders*, 48(6), 759–766. https://doi.org/10.1002/eat.22348
- **17.** Gal, L., & Israel-Fishelson, R. (2020). Enhancing Students Virtual Engagement Using Asynchronous Workshop: COVID-19... *EdMedia* + *Innovate Learning*, 2020(1), 31–36.
- 18. Greene, K., Ray, A. E., Choi, H. J., Glenn, S. D., Lyons, R. E., & Hecht, M. L. (2020). Short term effects of the REAL media e-learning media literacy substance prevention curriculum: An RCT of adolescents disseminated through a community organization. *Drug* and Alcohol Dependence, 214, 108170. <u>https://doi.org/10.1016/j.drugalcdep.2020.108170</u>
- Hasan, N., & Bao, Y. (2020). Impact of "e-Learning crack-up" perception on psychological distress among college students during COVID-19 pandemic: A mediating role of "fear of academic year loss." *Children and Youth Services Review*, 118, 105355. <u>https://doi.org/10.1016/j.childyouth.2020.105355</u>
- 20. Hayashi, A., Chen, C., Ryan, T., & Wu, J. (2004). The Role of Social Presence and Moderating Role of Computer Self Efficacy in Predicting the Continuance Usage of E-Learning Systems. *Journal of Information Systems Education*, 15(2). Available at: <u>https://aisel.aisnet.org/jise/vol15/iss2/5</u>.
- 21. Hengky, S. H., & Kikvidze, Z. (2018). Tourism sustainability in the Bogor Botanical Gardens, Indonesia. Urban Forestry & Urban Greening, 30, 8–11. <u>https://doi.org/10.1016/J.UFUG.2018.01.007</u>
- 22. Lin, H., Lee, M., Liang, J., Chang, H., Huang, P., & Tsai, C. (2020). A review of using partial least square structural equation modeling in e-learning research. *British Journal of Educational Technology*, 51(4), 1354–1372. <u>https://doi.org/10.1111/bjet.12890</u>
- 23. Lucero, J., Wallerstein, N., Duran, B., Alegria, M., Greene-Moton, E., Israel, B., ... White Hat, E. R. (2018). Development of a Mixed Methods Investigation of Process and Outcomes of Community-Based Participatory Research. *Journal of Mixed Methods Research*, 12(1), 55–74. <u>https://doi.org/10.1177/1558689816633309</u>
- 24. Marmon, M., Gordesky, J., & Vanscoder, J. (2013). Online Student Satisfaction: An Examination of Preference, Asynchronous... *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare,...*, 2013(1), 380–386.
- 25. Mpungose, C. B. (2020). Is Moodle or WhatsApp the preferred e-learning platform at a South African university? First-year students' experiences. *Education and Information Technologies*, 25(2), 927–941. <u>https://doi.org/10.1007/s10639-019-10005-5</u>
- **26.** Nahid, D., & Sanaee, Z. (2020). Assessing the criteria for the quality and effectiveness of e-Learning in higher education. In the Interdisciplinary Journal of Virtual Learning in

Medical Sciences (Vol. 1). Shiraz University of Medical Sciences, Shiraz. Available at: <u>http://mediaj.sums.ac.ir</u>

- 27. Nieuwoudt, J. E. (2020). Investigating synchronous and asynchronous class attendance as predictors of academic success in online education. Australasian *Journal of Educational Technology*, 36(3), 15–25. <u>https://doi.org/10.14742/AJET.5137</u>
- 28. Pérez, V., Guerrero, F., González, M., Pérez, F., & Caballero, R. (2013). Composite indicator for the assessment of sustainability: The case of Cuban nature-based tourism destinations. *Ecological Indicators*, 29, 316–324. https://doi.org/10.1016/J.ECOLIND.2012.12.027
- 29. Plank, F., & Niemann, A. (2020). Synchronous online-teaching on EU foreign affairs: A blended-learning project of seven universities between e-learning and live interaction. *Journal of Contemporary European Research*, 16(1), 51–64. <a href="https://doi.org/10.30950/jcer.v16i1.1154">https://doi.org/10.30950/jcer.v16i1.1154</a>
- 30. Przymuszala, P., Cerbin-Koczorowska, M., Buraczynska-Andrzejewska, B., Szczeszek, K., Dabrowski, M., & Marciniak, R. (2020). Good practices in asynchronous e-learning A short guideline document for Polish medical teachers A pilot study. *Disaster and Emergency Medicine Journal*, 5(2), 1–9. <u>https://doi.org/10.5603/DEMJ.a2020.0014</u>
- 31. Putri, R. Z., Jumadi, & Ariswan. (2020). Moodle as e-learning media in physics class. Journal of Physics: Conference Series, 1567(3), 32075. <u>https://doi.org/10.1088/1742-6596/1567/3/032075</u>
- Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020, October 1). A systematic literature review on synchronous hybrid learning: gaps identified. *Learning Environments Research*, Vol. 23, pp. 269–290. <u>https://doi.org/10.1007/s10984-019-09303-z</u>
- **33.** Risniawati, M., Serevina, V., & Delina, M. (2020). The development of E-learning media to improve students' science literacy skill in Senior High School. *Journal of Physics: Conference Series*, 1481(1), 12075. <u>https://doi.org/10.1088/1742-6596/1481/1/012075</u>
- 34. Ruhanen, L., Weiler, B., Moyle, B. D., & McLennan, C. J. (2015). Trends and patterns in sustainable tourism research: a 25-year bibliometric analysis. *Journal of Sustainable Tourism*, 23(4), 517–535. <u>https://doi.org/10.1080/09669582.2014.978790</u>
- **35.** SAS Institute. (2016). SAS Contextual Analysis Customer Product Page. Retrieved July 23, 2018, from SAS Institute Inc website. Available at: <u>http://support.sas.com/software/products/ca/index.html</u>
- **36.** Sefriani, R., & Sepriana, R. (2020). Pengembangan Media E-Learning Berbasis Schoology pada Pembelajaran Kurikulum Pendidikan Teknologi dan Kejuruan. *EDUKATIF: JURNAL ILMU PENDIDIKAN*, 2(1), 9–14. <u>https://doi.org/10.31004/edukatif.v2i1.76</u>
- 37. Shoepe, T. C., McManus, J. F., August, S. E., Mattos, N. L., Vollucci, T. C., & Sparks, P. R. (2020). Instructor Prompts and Student Engagement in Synchronous Online Nutrition Classes. *American Journal of Distance Education*, 34(3), 194–210. https://doi.org/10.1080/08923647.2020.1726166
- **38.** Situmorang, E., Hutasuhut, S., & Maipita, I. (2019). The Effect of E-Learning, Student Facilitator and Explaining Model Learning and Self-Regulated Learning on 11th Grade Students Learning Outcomes of Economic Subject in Senior High School 1 Perbaungan

School Year 2019/2020. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 2(4), 461–469. <u>https://doi.org/10.33258/birle.v2i4.537</u>

- **39.** Tawafak, R. M., Romli, A. B. T., Arshah, R. bin A., & Malik, S. I. (2020). Framework design of university communication model (UCOM) to enhance continuous intentions in teaching and e-learning process. *Education and Information Technologies*, 25(2), 817–843. https://doi.org/10.1007/s10639-019-09984-2
- 40. Teo, T. S. H., Kim, S. L., & Jiang, L. (2020). E-Learning Implementation in South Korea: Integrating Effectiveness and Legitimacy Perspectives. *Information Systems Frontiers*, 22(2), 511–528. <u>https://doi.org/10.1007/s10796-018-9874-3</u>
- 41. Valverde-Berrocoso, J., Garrido-Arroyo, M. del C., Burgos-Videla, C., & Morales-Cevallos, M. B. (2020). Trends in Educational Research about e-Learning: A Systematic Literature Review (2009–2018). Sustainability, 12(12), 5153. <a href="https://doi.org/10.3390/su12125153">https://doi.org/10.3390/su12125153</a>
- 42. Weiser, O., Blau, I., & Eshet-Alkalai, Y. (2018). How do medium naturalness, teaching-learning interactions and Students' personality traits affect participation in synchronous E-learning? *Internet and Higher Education*, 37, 40–51. <u>https://doi.org/10.1016/j.iheduc.2018.01.001</u>
- 43. Zaharah, Z., & Kirilova, G. I. (2020). Impact of Corona Virus Outbreak Towards Teaching and Learning Activities in Indonesia. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(3), 269– 282. <u>https://doi.org/10.15408/sjsbs.v7i3.15104</u>