# CHAPTER 2 LITERATURE REVIEW

# 2.1 Online Learning

Online learning is a subset of distance education and embraces a wide set of technology applications and learning processes including, computer-based learning, web-based learning, virtual classrooms, and digital collaborations (Urdan & Weggen, 2000). This is in line with Agarwal and Pandey (2013) about the benefit of online learning that provides a more flexible environment for students, and personalization means that the training material in e-learning is not chosen by the teacher or any organization that can assist students in obtaining their knowledge requirements. It has become the alternative way to study during pandemic because students and teachers have to protect themselves from the virus. On the other hand, online learning takes the method of completing courses with access to content "just in time" learning, access (Hall, 2000). The use of computers and gadgets is needed in online learning.

In contrast to traditional learning, the use of platforms or applications is needed in online learning. Traditional learning occurs in class but in online learning, they do not meet in class so they learn virtually through a platform or just have some materials and assignments to learn in it. Moreover, online learning includes a full range of computer-based learning platforms and delivery methods, genres, formats, and media such as multimedia, educational programming, simulations, games, and the use of new media on fixed and mobile platforms across all disciplines areas, so it is focused not only on the online contexts (Keengwe, 2010). In addition, in online learning, teachers and students collaborate on the Electronic Learning (E-Learning) platform they use. Furthermore, some teachers were so familiar with E-Learning platforms, for example, Google Classroom or Moodle. But after all, some teachers will have different decisions on the use of the platform.

# 2.2 Google Classroom and Its Practice in an Online Learning Environment

Google Classroom was introduced on May 6, 2014. It was launched to the public on August 12, 2014. Then, in 2017, Google opened a classroom with Google Apps for Education (GAFE). Additionally, in 2018, Google announced many features for teachers and students to make the teaching-learning process easier. 78 pictures, themes, and interesting options were added for the topic and task in classwork in 2019. This platform is designed for educational purposes to promote an interactive learning environment and it is easy to use.

The previous study by Harjanto and Sumarni (2019) analyzed that Google Classroom is effective for uploading assignments, classroom management, and communication with students. It occurred in three different universities in Karachi, Pakistan that took teachers' perceptions on the effectiveness of Google Classroom including familiarity, awareness, impact, efficacy, and reflection on its use. Besides, Google Classroom was used to facilitate the interaction between a teacher with a student or students in the virtual world (Liu & Chuang, 2016). Moreover, online learning serves as a place for teachers to create and post materials (such as pictures, videos, and links), invite students, assign students, conduct quizzes, and manage administrative needs (Harjanto & Sumarni, 2019).

According to Janzen. M (2014), one of the benefits of Google Classroom is a free platform. Both teachers and students can use the platform. Furthermore, the accessibility is easy because it can access many other apps, such as Drive, Docs, Spreadsheets, Slides, etc. simply by signing up for a Google account. So it is not necessarily available to learners without access to an educational institution. Students and teachers can use their mobile phones to interact on the platform. With Google Classroom, teachers will spend more time with their students and less time on the paperwork, and it is now even better (Iftakhar, 2016).

## 2.2.1 Features on Google Classroom

In the use of Google Classroom, there are two options for signing in. First, the teacher can start with the easier way by Google Classroom website: classroom.google.com, then typing the e-mail address and password (Keeler & Miller, 2016). Second, teachers can open their Gmail accounts then they can automatically access Google Classroom in the provided menu (Ginanjar, n.dt). Then, if they signed in, they will find joining or creating a class. Furthermore, the teacher and students will see three pages available on Google Classroom, they are stream, classwork, and people (Harjanto & Sumarni, 2019).

#### 1) Stream

Teachers can concentrate on announcements and posts by visiting the stream page.

#### 2) Classwork

The main page for classwork is where teachers can divide assignments into modules and units. The teachers can use it to make questions, tests, assignments, and upload materials for the students. Additionally, teachers can separate the area according to the subject, making it simpler for students to locate their assignments.

#### 3) People

In this menu of Google Classroom, teachers can see a list of teachers and students who enrolled in the class. Teachers can invite other students to join the class.

#### 2.2.3 Advantages of Google Classroom

According to Mafa (2018), these are advantages of using Google Classroom to support the learning process:

#### 1) Classroom management

Google Classroom allows teachers the authority to simply create and post materials for students. Documents, images, audio files, file attachments, and videos can all be used as the actual content. Additionally, it offers a message board where students may simply

converse or communicate. Additionally, it empowers other features like alerts, impending assignments, deadlines, and feedback so that students can control their own learning.

#### 2) Flexibility

With Google Classroom, students and teachers may access all features with gadgets, such as personal computers or smartphones.

If they have g-mail, it is integrated and can connect to Google Classroom.

#### 3) Safety and security

Every student will enroll in the class based on the teacher's invitation through email or by entering the class code. Thus, it is only for those who are invited to join the class and get access.

#### 4) Promote collaboration

On the discussion board, students can engage in conversation with one another, which develops teamwork. Through online conversation, they can talk about the assignment or project. Then, the instructor could ask the student's parents or legal guardians to participate in class. It implies that they can always keep tabs on their kids' development. They can accept information from the class stream.

#### 2.2.4 The Effectiveness of Communication

During the pandemic, the teaching-learning process occurred at home through online learning such as Google Classroom. In addition, the communication between offline and online is different. Teachers should be able to have better communication in online learning to reach the purpose of the study. Hardjana (2003) stated communication effectiveness is measured by several components including the recipient/user (receiver), the message content (content), communication media (media), the message format (format), and the source of the message (source), and appropriateness (timing).

## 1) Recipient/user (Receiver)

A receiver of the message is said to be effective if the recipient/receiver of the message is someone who is expected to receive the message. If they correspond with the intended recipient, it needs to measure the quantity of information to find out how the recipient uses the media to meet the need for information.

#### 2) Message content (Content)

The message content or information that is expected from a media that carries messages/information effectively includes: (a) The contents of the message must be accurate and prudent, starting from the accuracy of the spelling of the name, number, date, and age, information and facts. Besides, accuracy also means the right to give a general impression, correct given the news achieved by the presentation of the details of the facts and by the pressure exerted on facts. (b) The contents of the message must be full, fair, and balanced. It means that a maker should provide information about what is going on. Fair and impartial elements in a message/information may be just as difficult to achieve as well as accuracy in presenting the facts. (c) The contents of the message must be objective. The messages created reality, not biased, and free from prejudice. Then, the objective here includes the obligation of a communicator in conveying information about an event as a whole, not cut into pieces by a subjective tendency. (d) The contents of the message should be concise and clear. In short, the message should not use a lot of words and must be direct and coherent.

# 3) Communication media

The selection of media is very important in planning the message centered on the receiver. If the media has a high credibility factor, then the media can disseminate information quickly, easily accessed, and display additional features of information to the recipient of the information.

#### 4) Message format

The format of the effective message or information areas: (a) It should be simple and short messages. (b) It should be clear so it is easy to get the point. Then it also has clear meaning and objectives. (c) It can generate interest and capture the attention of the recipients.

#### 5) Source/information

The credibility of the source is essential to know the high quality or credibility of the information. In addition, the credibility of a source of information can be seen by how the source can be trusted by the recipients.

# 6) Timing

In social media, it is important to know the right time to post anything or any information on it because the target audience as the essential thing of social media is active only during certain times. Also, two possible conditions lead to target audiences. It can be a positive thing for targeting wider market opportunities, on the other hand, if it fails to target the right type of audience. (Alim, Linda, Gunawan, & Saad, 2019)

#### 2.4 Study of Relevant Research

The previous studies enlightened teachers' perceptions of the effectiveness of the use of Google Classroom (Azhar and Iqbal, 2018). It is conducted in different universities in Kainchi, Pakistan. Several questions were asked about various aspects of Google Classroom including familiarity, awareness, impact, effectiveness, and reflection on using Google Classroom to the participants. This research showed that Google Classroom has not made a significant effect in the classroom. It is used effectively in uploading material and grading students' assignments. Besides they realized many features can be used and the cheaper cost needed in this platform. In addition, the research by Harjanto and Sumarni (2019) reveals the teacher's perception of the use of Google Classroom as a learning medium in seven high school teachers in Tangerang Selatan, Indonesia. In the findings, the researcher found that teachers use it as a

facilitation tool for managing students' tasks, organizing classrooms, and accommodating students' interactions. Besides, teachers as participants perceived that the use of Google Classroom was very helpful to conduct their virtual classroom. Although they also stated that they needed to maximize other features of Google Classroom to explore more so it brings them to be professional. On the other hand, Hardjana (2003) states that the aspects of message receiver, content, communication media, format source, and appropriateness or timing are coherent to have effective communication. Similarly, Alim et al. (2019), explained that the measurement of the effectiveness of media is timing where we know the right time to post anything and the suitability of the communication.

Furthermore, teachers' perception is needed in this study. The term communication between online learning and face-to-face learning is very different. It is why teachers should prepare everything for teaching. This study, of course, is an overview for the reader, especially student-teachers, to get ready and use the platform effectively.