# Development of Asynchronous and Synchronous Learning in Bawean Elementary School

Ribeh Najib Muhammad, Riska Widyanita Batubara Universitas Muhammadiyah Gresik, East Java, Indonesia, *ribeh@umg.ac.id* 

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#### Abstract

English is one of the most important languages for students, especially at the elementary and middle school levels. Currently, learning activities focus on E-learning. During the COVID19 pandemic, the focus of teachers is teaching students using learning platforms such as synchronous and asynchronous learning. Synchronous learning here focuses on the Zoom and asynchronous platforms using video material. The researcher used two strategies to measure which strategy was more effective to assist students in facilitating the E-learning learning process. The process also aims to reach students and teach them from home during quarantine. This service proposal tries to improve the quality of e-learning learning materials using synchronous (zoom) and asynchronous (video materials), at an Elementary School in Bawean Island Gresik. The students have experience during the COVID-19 pandemic quarantine period using e-learning. Learning English including e-learning is needed to improve four language skills, including listening, speaking, reading, and writing. In learning English students can use an easy alternative by utilizing technology.

Keywords: synchronous, asynchronous, learning, technology

#### 1. Introduction

Learning in the classroom has several supporting features that function for the success of students and teachers in learning, as well as direct interaction, direct feedback, and training students' social skills. This is called F2F (Face to Face) learning. (Altiner, 2015; Stewart, Harlow, & DeBacco, 2011). However, students do not always enjoy this opportunity. For example, when there is a problem such as a world pandemic or a natural disaster that causes schools to close and classes stop functioning, students will find it difficult to carry out face-to-face learning as usual. (White, Ramirez, Smith, & Plonowski, 2010). As a real example, currently the world is experiencing a joint disaster, namely Covid19 that has an impact on several human activities, such as examples of the teaching and learning process. To reduce the spread of the virus, many schools were closed for several months. Changes in the teaching and learning system are forcing schools to implement distance learning or online learning, e-learning, distance learning, correspondence tutoring, external studies, flexible learning, and massive open online courses.

Over the years, advances in computer-mediated communication technology have made expanding classrooms for online students more affordable and functioning very well (Wang & Wiesemes, 2012). Learning in such an environment is often called mixed synchronous learning (Bower, Dalgarno, Kennedy, Lee, & Kenney, 2015; Hastie, Hung, Chen, & Kinshuk, 2010; Szeto, 2015); or synchronous learning in a distributed environment (Warden et al., 2013) (2010) piloted a study in Greece with two primary schools connected via interactive video conferencing.

The students worked on collaborative activities, and both intergroup (from two schools) and intragroup (from the same school) were involved. It should be noted that all of these studies were conducted with students at two fixed locations only (i.e., a local classroom and a distance learning center), and some of the existing studies have explored how to engage online students located at multiple sites. (Summary Qiyun Wang, Changqin Huang, Choon Lang Quek (2018)) Studying on multiple sites inevitably presents online students with varied learning experiences and challenges. Therefore, the teacher uses a new method, namely uploading learning materials to the learning management system and letting students download and study on their own asynchronously. This method can be said to be good and effective if it is applied temporarily,

Online learning emphasizes internet-based courses offered synchronously and asynchronously. Where Synchronous learning is a form of learning with direct interaction between students and teachers using online forms such as conferences and online chat. Likewise, researchers use synchronous learning by conducting distance learning F2F activities that utilize online platforms such as zoom and massager. Here students can interact directly with the teacher even though they are not face-to-face offline and students can receive the material clearly, because the teacher takes the time to share and interact with students about the material presented.

While asynchronous learning is a form of learning indirectly (not simultaneously) using an independent learning approach. In asynchronous learning, the process is facilitated by streaming media, social media, email, discussion boards, and here critical thinking is encouraged as the learner has more time to reflect, interact with content, and process information (Hrastinski, 2008). Asynchronous learning allows students to enter and listen to material at any time depending on the time and conditions that are most convenient for them. They can utilize activities in various ways such as individually, in pairs, teams or groups. Asynchronous learning, on the other hand,

In its development, technology has become the foundation in the world of teaching in obtaining information and communication in the learning process, therefore students can acquire language knowledge on a large scale. The importance of English teachers in providing an effective learning model of technology for their students. Moreover, when students apply technology as a medium in doing their work, they will be able to broaden their horizons, fulfill cognitive, cognitive and effective work. For this reason, in increasing student interest in learning, researchers try to see the current era, both synchronous and a-synchronous e-learning has attracted public attention. The school in this asynchronous and synchronous e-learning development assistance program is an Elementary School in Bawean Island Gresik. In the activities of the teaching and learning process,

Synchronous and asynchronous learning in this context refers to digital learning that takes place directly and in real time; teachers use video and audio to deliver lessons and concepts, hold live class discussions, and do small group work. This can include teacher or student led lessons, virtual games, student presentations, small group work, or peer-to-peer collaboration. To extend this into asynchronous learning, teachers can record synchronous learning sessions and post them so learners and families at times more conducive to learning can access them later.

#### 2. Implementation Method

In the synchronous and asynchronous e-learning improvement program, the partner who collaborates is an Elementary School in Bawean Island Gresik. In teaching and learning activities, some teachers have used synchronous learning and asynchronous learning as online learning media during the pandemic, but this has not lived up to expectations. Therefore the team wants to increase student activity in online learning with synchronous learning and asynchronous learning, after knowing whether students use and utilize this application optimally and offline learning which becomes online increases student activity and effectiveness in learning English or decreases.

Based on the problems obtained, the team tried to find out students' perceptions of student activity in online learning with synchronous and asynchronous learning during the pandemic. Similar to face-to-face classroom management plans, digital classroom management plans integrate community engagement plans; communicate clearly about the organization, its goals, feedback, and expectations; and focuses on developing and maintaining a strong classroom community. In addition, in a digital learning environment, relationships look and feel different than they do in a physical classroom. Teaching and learning from our home environment can make teachers and students feel vulnerable. Authentic and meaningful relationships are the business of our school community, and they must continue to be prioritized in digital learning environments. Things that can be done as a solution:

- Building learning partnerships and engage in culturally responsive teaching. A high-trust, low-stress environment provides a welcoming environment for marginalized students to feel accepted and take risks.
- Spending time at the beginning of class to talk to students about their lives and their well-being helps build deeper relationships with students.
- Creating learner-centered instruction that seeks student input. Include social learning to support communal learners and promote creativity, communication, collaboration, and critical thinking in digital learning environments.
- Developing organization and routines to make students and families comfortable.
- Sharing thoughts on class discussion boards and support student learning at their own pace by providing scaffolding and strategies to help students become more independent.
- Promoting digital ethics in the online space. This section contains a detailed description of the method of implementing the service activities carried out including the method of carrying out activities from preparation to the end of the service activities carried out.

### 3. Results

The target population of this research is the sixth grade students of an Elementary School in Bawean Island Gresik. After conducting observations and interviews with classroom teachers, the team assisted by students will develop synchronous and asynchronous learning. In developing synchronous and asynchronous teaching for learners, it is necessary to consider the needs of the stakeholders involved, including access to resources such as devices, Wi-Fi, and the number of family members in the household who need access to the devices for teaching. Teachers design synchronous and asynchronous instruction for students utilizing needs assessment data and virtual desks; instructions take into account the needs of all stakeholders through scheduling and agreement.



Figure 1 Habituation to Students

Appropriate synchronous instruction processing will include time for handling certain accommodations and services as listed in the learner's IEP, ELL designation (such as reading text aloud, or adding text to pictures for those with visual impairment or blindness). This includes accommodation for travel, recordings read aloud, visual acuity and color, and other accessibility features that students need on their devices. For example, whether synchronous instructions will be recorded and posted for students to review at their own pace and include written text.



Figure 2 Mentoring and Coordination with Teachers

The instructional schedule should take into account the special needs of learners' families and teachers to ensure they are provided with equitable access and capacity for instruction in both synchronous and asynchronous learning environments. Use information from the Teacher needs assessment to support this design and to provide a diverse and equitable learning experience. It's important for students and families to spend more time engaging with the learning experience rather than struggling to access technology resources.

In a distance learning environment, teachers must also balance personal and professional priorities. Teachers should prioritize their well-being and not recreate the traditional face-to-face school model, which would cause too much tension. The teacher needs to develop a schedule that takes into account the teacher's home schedule as well.

## 4. Conclusions and Recommendations

Online learning emphasizes internet-based courses offered synchronously and asynchronously. Where Synchronous learning is a form of learning with direct interaction between students and teachers using online forms such as conferences and online chat. Likewise, researchers use synchronous learning by conducting distance learning F2F activities that utilize online platforms such as zoom and whatsapp groups. Here students can interact directly with the teacher even though they are not face to face offline and students can also receive material clearly because the teacher takes the time to share and interact with students about the material presented. presented in the introduction.

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