# THE EFFECT OF SYNCHRONOUS AND ASYNCHRONOUS EFL CLASS ON STUDENTS' ACHIEVEMENT AT ELEVENTH GRADE OF SMAN TERPADU UNGGULAN 1 TANA TIDUNG

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## ABSTRACT

*The purpose of this study was to find out if synchronous and asynchronous could improve the student's English achievement in the eleventh grade of SMAN Terpadu Unggulan 1 Tana Tidung. This research used a quasi- experimental research method to find out the differences before and after being taught using the approach. The subject of this study were the students of class XI at MIPA 1 and MIPA 3 with the total number of 52 students of SMAN Terpadu Unggulan 1 Tana Tidung in academic year of 2021/2022. The instrument was an essay of writing a paragraph. The result of this study indicated that there was no significant differences between the pretest and posttest both in synchronous and asynchronous class and it was proven by the result of students' average score. The average score of the pretest in synchronous class was 62.68 and the average score of posttest was 62.86. The average score of pretest in asynchronous class was 61.67 and the average score of posttest was 63.96. The average score in posttest was relatively similar with the pretest score. It showed that there was no significant difference in student English achievement on pretest and posttest. The test result from the independent sample test showed that t-test (0.458) was lower than the t- table (1.676). Therefore, it can be concluded that synchronous and asynchronous was less effective in impoving the student English achievement at eleventh grade of SMAN Terpadu Unggulan 1 Tana Tidung.*

*Keywords: Synchronous, Asynchronous, Students' Achievement*

## INTRODUCTION

The pandemic coronavirus disease (COVID-19) is an issue for the education system in Indonesia. The government released social distancing and physical distancing policies. In accordance with Circular No 4 of 2020 on the enforcement of education policies in the emergency phase of the outbreak of coronavirus diseases (COVID-19). It encourages the learning process from home online. The education sector, such as schools, must switch the face-to-face learning process through this policy. Replaced with learning which can be carried out from home and used by online. Synchronous and asynchronous online learning is a learning model that can be used in implementing online learning. When communicating synchronously, the perceived size of participation is higher because it involves several elements such as

increased motivation and increased convergence of meaning (Hrastinski et al., 2010). Chauhan (2017) mention that there are five advantages and disadvantages of synchronous online learning, which are Cost-effective, Convenient, Provides Immediate Feedback, Highly motivating and Fosters a sense of community.

Besides that, disadvantages of synchronous online learning which are the discussion is time-limited - the participants must ensure that they do what is required for the scheduled hour (Hrastinski, 2008) and it is genuinely technology-based: the lack of technological knowledge, weak computing skills, the inability to cope with the various technologies involved in synchronous learning can be very frustrating and online learners may talk, so dropout rates may be expected (Chauhan, 2017). One of the online tools that support synchronous online learning is zoom meeting. Real and virtual synchronous classes were compared, aiming at providing scholars, professors, teachers, instructors, with a new perspective on the pros and cons of the virtual classes via Zoom, sharing experiences helpful to the academic community, and ultimately discussing the future of the classroom teaching (De Oliveira Dias, M. et al, 2020).

The application of the zoom meeting application in online learning makes it easier for students and lecturers to implement teach (Gunawan et al, 2021). While, asynchronous learning encourages the development of learning in the presence of cognitive, social, and teaching presence (Oztok et al., 2013). Asynchronous has many advantages. According to (Chauhan, 2017) some advantages of asynchronous are Offers employees complete control over their learning, Respectful to one's own learning, Convenient, Less Social obstacles, Interactive regardless of location and time barriers Moreover, there are some disadvantages of asynchronous learning which are lack instant, according to Marble et al (2016) because the information is presented without the opportunity to clarify, provide additional explanations, or answer questions immediately, as would be the case for live classes, content must be carefully prepared and checked, as well as images and text on each slide that are explicit and accompanied by a narrative, leaving no room for unclearness or misinterpretation.

Google Classroom is one of the tools that support this learning. Noah & Gbemisola (2020) states that Google Classroom will be of great help to engage students, improve their level of attention, and increase their academic achievement in all fields of study. The support tools for online learning are inseparable from applications and platforms. Vega et al., (2016) today online learning is badly needed by not only teachers as instructors but also students as leaners. Based on the explanation above, the researcher is interested in conducting research with the title The Effect of Synchronous and Asynchronous EFL Class on Students' Achievement at Eleventh Grade of SMAN Terpadu Unggulan 1 Tana Tidung.

## RESEARCH METHOD

This research used a quantitative approach. Quantitative research is an approach to the testing of the objective theory by examining the relationship between variables (Creswell, 2014). The researcher used a quasi-experimental research design to determine or to find out the effect of using synchronous and asynchronous on English online learning. The researcher provided pre-and post-test in two classes; experiment and control class.

This research was conducted in SMAN Terpadu Unggulan 1 Tana Tidung and it in five meetings which are 3 meetings for the treatments on each experimental class, then 2 meetings for pre-test and post-test also will conducted out of learning time.

The population in this research were all students of class XI SMAN Terpadu Unggulan 1 Tana Tidung. The total number of students in class XI was 157 students. This research used purposive sampling. The researcher took samples from decisions that represent the population or include items with required characteristics. This research has two independent variables and one dependent variable there are independent variable (X) and dependent variable (Y).

To collect the data, the researcher used a test to know the students' understanding and achievements. There were two types of test; pre-test and post-test. As an experimental research, the instrument that used in this research was test. The form of tests basically was writing test such as essay. Furthermore, to score by using scoring guide of writing consist five aspects which are content, organization. Vocabulary, grammar, and mechanics with a range 1 to 5 score per aspects.

In this research, the researcher used parametric statistics, and independent sample t-test. In parametric statistics, there are two assumptions must be fulfilled, which are normality and homogeneity test.

## THE FINDING AND DISCUSSION

The research objective was to find out whether there was any significant effect of synchronous and asynchronous online learning on students' achievement. In answering the research objective, the researcher gave pre-test and post-test the pre-test was done before the researcher gave the treatment on students. The researcher gave the treatment of synchronous and asynchronous approaches to students. In experimental class 1 or synchronous class, learning was conducted through the zoom application as one of the tools used in the synchronous approach. Synchronous learning refers to learning/teaching via an electronic mode that takes simultaneously and in real-time despite the time limit. While in the experimental class 2 or asynchronous class, learning was conducted through Google classroom as a support for the asynchronous approach. Asynchronous learning allows students to learn not in real-time without a limiting time limit. After treating the synchronous and asynchronous approaches for 3 meetings, the researcher gave a post- test to find out the effectiveness of the synchronous and asynchronous approaches.

From the results of the pre-test and post-test that have been analyzed, the frequency distribution that in the pre-test of the synchronous class, there was no student (0%) classified into an excellent category, there was 1 student (3.6%) in the good category, 8 students (28.6%) in the fair category, 11 students (39.3%) in the low category, and 8 students (28.6%) in the very low category. While in the posttest, there was no student (0%) in the excellent category, 1 student (3.6%) in the good category, 8 students (28.6%) in the fair category, 11 students (39.3%) in the low category, and 8 students (28.6%) in the very low category. It shows that the majority of the students in experiment 1 class belong to the low category. On the other side, based on the

scores of experiment 2 class, in pretest there was no student (0%) classified into an excellent category, there was no student (0%) in the good category, 6 students (25%) in the fair category, 12 students (50%) in the low category, and 6 students (25%) in the very low category. In post-test, there was no students (0%) in excellent category, 1 student (4.2%) in good category, 8 students (33.3%) in fair category, 9 students (37.5 %) in low category, and 6 students (25%) in very low category. It can be seen that students in experiment 2 class also belong to the low category. This low category happened because of frequent obstacles such as a bad signal for students to take part in online learning both synchronously and asynchronously.

Yuhanna et al, 2020 supported that there are 6 disadvantages of online learning, and two of them are about copyright and bad connection network. First, for the copyright, they state that since the information has become easy to access, it is also easy for individuals to download and exploit the information with illegal interest or purpose. Second, for the bad connection network, they said that the user must connect to the network and computers must install appropriate software to access the internet. Chauhan, 2017 also said that the lack of technical knowledge and computing skill can make the user frustrated he/she also said that online learning is eliminated personal direct interaction between participants. Based on the discussion, these were some of the things that cause the low category of students which have an impact on the results of data analysis in this research.

Therefore, the result of hypothesis testing by using an independent sample t- test showed that synchronous and asynchronous learning had no significant effect on students' achievement. From the computation of the independent sample t-test, it could be seen that there was no significant difference between the mean score from pretest and posttest on both experiment classes. The result of mean score in the experiment 1 class before the researcher gave the treatment was 62.68 and for the experiment 2 class was 61.67. Moreover, the result of the test after the researcher gave the treatment for the experiment 1 class was 62.86 and for the experiment 2 class was 63.96. It means that the result of the mean score of the posttest was not quite significant-high than the pretest, in the other words there was no significant difference. In addition, the value of significance in the pretest of both class was 0.649. It means that the value of significance (Pvalue) was higher than the level of significance ($\alpha$) which is 0.05. So, the result of t-test Pvalue < $\alpha$ (0.649 > $\alpha$0.05). Moreover, the result in post-test of both class was 0.648. It means that the value pf significance (Pvalue) was higher than the level of significance ($\alpha$). Thus, the result of Pvalue < $\alpha$ (0.648 > $\alpha$ 0.05).

The result of the comparison of both t-tests was 0.458. It means that the -t-test is higher than -t-table which is the degree of freedom (df) is 50 and the level of significance is 5% p=90%. So, the result of t-test 0.458 < t-table 1.676. The computation between the value of the t-table and the t-test at p = 90% $\alpha$ = 5% was used under this research, which it indicates that the t-test is lower than the value of the t-table, Ho is accepted and Ha is rejected. The result implied Ho hypothesis indicating that there was no significant difference in the mean score to both of experiment. The researcher concluded that there was no an effect of synchronous and asynchronous approach on students' achievement at the eleventh grade of SMAN Terpadu Unggulan 1 Tana Tidung.

While the comparison group did not the two experimental groups significantly improved from pre-test to post-test. It supported with previous study by Ismal (2018) also show the same result that there was no significant difference in the amount of hours spent on various Internet devices and attitudes towards telecommunications. While in another side, another previous study such as Duncan et al (2012) and (Arifin & Gultom (2016)had a different result, his result show that encouraging high quality and frequent participation in synchronous and asynchronous forums would help maximize student performance. This could be due to several differences, among others: different subjects, different mean scores, and different pre-test, and post-test scores and of course, also the result in data analysis was different.

## CONCLUSION AND SUGGESTION
### Conclusion
Based on the result of the effect of synchronous and asynchronous EFL class on students' achievement at eleventh grade at SMAN Terpadu Unggulan 1 Tana Tidung. The researcher investigated that there was no significance difference between asynchronous and asynchronous learning to improve the students' achievement. From that data it can be conclude the mean score of the students' achievement between the pretest and posttest both synchronous and asynchronous was not quite different. In brief, the technology supports the teachers' and students' to use of kinds platforms on online learning.

### Suggestion
The researcher would like to give some suggestions about the result of this research:
1. The English Teachers
The learning approach and platform are some of the components that affect student achievement. The teacher is expected to facilitate the student's interest and enjoyment of the learning experience. The teacher should face adversity.
2. The Students
EFL students should optimize during conducting online learning, especially in this situation where all of the students take distance learning a home. The students should make study spacer larger to expand knowledge and access the resources to help students more efficiently.
3. The Future Researchers
For future researchers, it is better to conduct the same research by integrating with other language skills and the result of this research can be used as the contribution of opinion that can be taken as references for another research in the same field in a different context.

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