



Study of Learning Outcomes Sociology Class 10 Online and Offline at SMA Negeri 1 Gondanglegi

Erica Anden Wibowo Santoso¹, Dian Ferry Dharmanto¹, Nida Khoirunisa¹,
Alan Sigit Fibrianto¹(✉), and Sabita Aulawiyatus Sifa²

¹ State University of Malang, Malang, East Java 65145, Indonesia
alan.sigitt.fis@um.ac.id

² SMA Negeri 1 Gondanglegi, Malang, East Java, Indonesia

Abstract. Researchers are interested in knowing the comparison of the learning outcomes of grade 10 students in sociology subjects conducted online in semester 1 and offline in semester 2 so that the effectiveness and shortcomings of each learning method both online and offline can be used as input for educators to improve. Methods and learning media used so that student learning outcomes are maximized. It is important to study this research in order to fix learning methods and media that are deemed less effective to be more interactive so that they affect student learning outcomes both in online and offline learning methods. This research can also be a reference for research with similar topics to conduct further research. This research is a research with a quantitative approach with a comparative method, namely a framework of thought in research that is useful for identifying and analyzing differences and similarities in the characteristics and facts of the research object. So it can be concluded that H_a Rejected: There is a significant difference in students' Sociology PAT scores between online learning and offline learning. H_0 Accepted: There is no significant difference in students' Sociology PAT scores between online learning and offline learning. Regarding the comparative analysis of Sociology learning outcomes, although there is an increase in the average PAT value of offline learning compared to online, based on the results of the paired sample t-test, the sig. (2-tailed) value is 0.236 and 0.935, which means that there is no significant difference between PAT Sociology scores for odd semesters (online learning) compared to PAT Sociology scores for even semesters (offline learning).

Keywords: Online Learning · Offline Learning · Comparative Study

1 Introduction

The Covid-19 pandemic has changed interaction patterns and educational habits in schools or madrasas. The risk of Covid-19 transmission makes face-to-face learning require adjustments to ensure the safety of school or madrasah residents (Ekantini, 2020). The COVID-19 pandemic spreads quickly with a transmission period of approximately 5–6 days with a maximum transmission period of 14 days (Yurianto & Bambang,

2020). This spread can only stop with social distancing. But the world of education must continue because we do not know when this will end. So that this online and offline learning system must inevitably continue to be implemented because before this pandemic ends, it is impossible for students to be left without learning, because learning is everyone's human right.

As we all know, online learning means that teachers and students communicate digitally, using learning platforms and social media that are connected to an internet connection. While offline learning is face-to-face learning, meaning that there is a direct meeting between teachers and students. This adjustment occurs in the 2021/2022 academic year. Most of the education began to adapt using this model combined which is called blended learning. If the pandemic is under control, offline is carried out, but if the pandemic is 'smoldering' it switches to online, so learning during a pandemic uses a pandemic curriculum, which makes learning very flexible. Likewise with the learning implemented at SMAN 1 Gondanglegi which applies online learning in semester 2 of the 2021/2022 academic year and offline learning in even semesters.

SMAN 1 Gondanglegi is one of the educational units with a high school level which is located at Jl. Ketawang 2 Gondanglegi, Ketawang, Kec. Gondanglegi, Kab. Malang, East Java, with postal code 65174. SMAN 1 Gondanglegi. This school was established on December 22, 1986 by the Minister of Education and Culture. Decree of School Establishment: 0887/O/1986, Decree of Operational Permit: 366/I04/I/86/SK. Until now, with the age of 35 years, he has contributed a lot to produce a superior generation. With an A-accredited predicate, SMAN 1 Gondanglegi is an excellent, reputable school in Malang Regency in various fields. With a beautiful school atmosphere, away from busy roads and green open spaces, it supports a conducive and comfortable learning atmosphere. In addition, various academic and non-academic facilities are adequate to support learning activities and self-development of students. Seeing that the school has a good capacity, the desire to continue to produce a superior generation is certainly expected by educators at SMAN 1 Gondanglegi (Agustina, 2022).

In showing the novelty of the research, the researcher includes several previous studies with similar topics. The first comparison is the research, researchers are interested in knowing the comparison of the learning outcomes of grade 10 students in sociology subjects which are carried out online in semester 1 and offline in semester 2 so that the effectiveness and shortcomings of each learning method both online and offline can be used as input in the future. To educators to improve the methods and learning media used so that student learning outcomes are maximized. Astuti and Sari in 2021 discussed the comparison of the effectiveness between online and offline learning on student learning outcomes in elementary schools for thematic subjects. The study used a quantitative approach with experimental methods. The results of this study indicate that learning outcomes by using online learning are significantly superior to offline learning for class II SD Gugus Palagan. These results are supported by the data on the average post-test score in online learning, which is 90.51 and the post-test average value in offline learning, which is 83.77.

The second comparison in this study is the research of Sari, et al., in 2021 with the title "Effectiveness of Online and Offline Learning at SMP Negeri 3 Pleret". The study used a qualitative approach with a descriptive method. The results of this study have

shown that there are 69.2% of students who think that offline learning is more effective, while 30.1% of students think otherwise. Likewise with the opinion of teachers, as many as 62% stated that offline learning was more effective than online learning.

The difference between the above research and this research lies in the research method and approach. This study uses a quantitative method with a comparative method, while the previous research used a descriptive qualitative approach and an experimental quantitative approach. In addition, this research was conducted at SMAN 1 Gondanglegi, while previous research was conducted at SD Gugus Palagan and SMP Negeri 3 Pleret.

According to Thorndike, learning is a process of interaction between stimulus and response. Stimulus is what stimulates the occurrence of learning activities such as thoughts, feelings, or other things that can be captured through the senses or a change from the external environment which is a sign to activate the organism to react or act. While the response is a reaction that is raised by students when learning, which can also be in the form of thoughts, feelings, or movements/actions (due to stimulation). So changes in behavior due to learning activities can be concrete, namely those that can be observed, or non-concrete, namely those that cannot be observed (Amsari, 2018; Anwar, 2017; Halim, 2008; Nugroho, 2016; Suryoputro, et al., 2007).

It is important to study this research in order to understand the less effective learning methods and media so that they become more interactive so that they affect student learning outcomes in both online and offline learning methods. This research can also be a reference for research with similar topics to conduct further research.

2 Method

This research is a research with a quantitative approach with a comparative method, namely a framework of thought in research that is useful for identifying and analyzing differences and similarities in the characteristics and facts of the research object. In this case the researcher uses the same variable, the same sample, the same population but in a different time period (Sugiyono, 2012; Creswell, 2016). In this study, the author wants to compare the learning outcomes of class X students in the Sociology subject during the Covid-19 pandemic (online) compared to the learning outcomes of Sociology subjects after the Covid-19 pandemic (offline). The subjects in this study were students of class X IPS 2, and 4, SMAN 1 Gondanglegi. The analysis of student learning outcomes for class X IPS is carried out on the PAT scores of students, namely when learning is carried out online (PAT scores of odd semester students) and learning is carried out offline (PAT scores of even semester students).

This analysis uses the Paired Sample t-Test, where the subjects are students in the same class who are given two different learning treatments, namely online and offline learning. Paired Sample t-Test was conducted using the SPSS 20 application by testing the difference in the PAT value between offline learning and online learning with a significance value (Sig.) < 0.05 . The basis for decision making in the paired sample t-test is if the value of sig (2-tailed) < 0.05 indicates a significant difference between the initial variable and the final variable. This shows that there is a significant effect on the treatment differences carried out on each variable. If the value of sig (2-tailed) > 0.05 , it indicates that there is no significant difference between the initial variable

and the final variable. The hypothesis of this research is as follows. H₀: There is no significant difference in students' Sociology PAT scores between online learning and offline learning. H_a: There is a significant difference in students' Sociology PAT scores between online learning and offline learning.

3 Results and Discussion

3.1 Differences in Online and Offline Learning Media

Based on the results of interviews with the class X sociology subject teacher, during online learning, the learning media used is to use learning videos that have been uploaded on Youtube, Zoom, Google classroom, and use the quiziz application for learning evaluation. Based on the narrative of the class teacher, there are several obstacles when learning online, including when using Youtube as a learning medium, not all students access the material provided. During meetings via Zoom, many students do not activate their cameras so that learning is less interactive or only goes one way. In this case, the teacher provides a strategy that attendance will be done at any time during Zoom so that if students do not activate the camera, they are considered absent. In addition, in online learning the teacher only uses the lecture method, because cooperative learning is considered less effective due to distance learning. Another obstacle faced by teachers when learning online is network and quota problems which are the reasons students are not present when Zoom is carried out. At the time of online learning the teacher uses a pandemic curriculum by sorting and teaching only essential material so that student activity in independent learning is really needed, this is still a minus point for class X who is still adapting to the offline learning climate in junior high school and online in high school, as a result. Many students lack discipline in submitting assignments.

During offline learning in semester 2, teaching and learning activities are carried out by teachers accompanied by AM (Teaching Assistance) students at SMAN 1 Gondanglegi. In one week, each class is allocated 3 x 35 min of lessons. Then at the 7th and 8th meetings the time allocation was extended to 3 x 45 min of lessons in one week. Students use PPT (Powerpoint) which is displayed through a projector in front of the class, interactive learning videos, and google forms. In addition to using the lecture method, students also use cooperative learning methods so that learning becomes student-centred. Student activity is emphasized both when asking, answering, and responding. Group discussion was emphasized especially on KD 3.4 and KD 4.4 class X Social Research materials. Students are trained to design simple research in groups, so that the activeness and cooperation of each group becomes an important assessment in addition to test scores and PAT (End of Year Assessment). The obstacles faced by students were some students who were not disciplined in collecting assignments, students were less interactive during group discussions, and students who were not present during learning due to participating in non-academic field exercises which incidentally became superior at SMAN 1 Gondanglegi.

Table 1. Test Results of Paired Samples Statistics Class of X IPS 2

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Ganjil	47.3327	30	10.40878	1.90037
	Genap	51.1667	30	14.33487	2.61718

Table 2. Paired Samples Test

		t	df	Sig. (2-tailed)
Pair 1	Ganjil - Genap	-1.210	29	.236

Table 3. Paired Samples Statistics Class of X IPS 4

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Ganjil	45.7340	25	7.23452	1.44690
	Genap	45.9000	25	10.57907	2.11581

3.2 Differences in Online and Offline Learning Outcomes

Based on the PAT value data (End of Year Assessment) for class X IPS 2 and X IPS 4 in online and offline learning, then the data is processed using the Paired Sample t-Test as follows (Table 1).

Based on the results of the paired sample t-test for class X IPS 2, the results of the PAT score in the odd semester (online learning) with a mean of 47.3327 and in the even semester (offline learning) with a mean of 51.1667. Which means that the average value of PAT in even semesters is higher than the average value of PAT in odd semesters. The sig value is 0.823. The basis for decision making in the paired sample t-test is if the value of sig (2-tailed) < 0.05 indicates a significant difference between the initial variable and the final variable. This shows that there is a significant effect on the treatment differences carried out on each variable. If the value of sig (2-tailed) > 0.05, it indicates that there is no significant difference between the initial variable and the final variable. This shows that there is no significant effect on the treatment differences carried out on each variable. In Table 2, we know that the value of sig (2-tailed) is 0.236 > 0.05. Which means that there is no significant difference between the odd semester Sociology PAT scores (online learning) and the even semester Sociology PAT scores (offline learning).

In class X IPS 4, the same test was also carried out on the PAT Sociology scores for odd and even semesters through the paired sample t-test, the results obtained are as follows.

Table 4. Paired Samples Test Class of X IPS 4

		t	df	Sig. (2-tailed)
Pair 1	Ganjil - Genap	-.083	24	.935

Based on Table 3, it is known that the mean value of PAT Sociology class X IPS 4 in the odd semester is 45.7340 while in the even semester is 45.9000. So that the mean value of PAT class X IPS 4 in the even semester is higher than the mean value of PAT Sociology class X IPS 4 in the odd semester.

The basis for decision making in the paired sample t-test is if the value of sig (2 tailed) < 0.05 indicates a significant difference between the initial variable and the final variable. This shows that there is a significant effect on the treatment differences carried out on each variable. If the value of sig (2-tailed) > 0.05, it indicates that there is no significant difference between the initial variable and the final variable. This shows that there is no significant effect on the treatment differences carried out on each variable. In Table 4 we know that the value of sig. (2tailed) of 0.935 > 0.05, which means that there is no significant difference between the odd semester PAT Sociology scores (online learning) and the even semester PAT scores (offline learning).

So it can be concluded that Ha Rejected: There is a significant difference in students' Sociology PAT scores between online learning and offline learning. H0 Accepted: There is no significant difference in students' Sociology PAT scores between online learning and offline learning.

4 Conclusion

In online learning, sociology subject teachers have used learning media such as utilizing videos from Youtube, using the Zoom application, Google classroom, and quiziz for learning evaluation. There are several obstacles faced by teachers of sociology subjects in carrying out online learning such as network constraints or quotas which are the reasons students do not take part in the learning process. While in offline learning, the teaching and learning process is carried out by AM (Teaching Assistance) students. The obstacles faced by students in carrying out the teaching and learning process, such as students who are less disciplined in collecting assignments, students are less interactive during group discussions, and students who are not present during learning due to participating in non-academic field exercises which incidentally become superior at SMAN 1 Gondanglegi.

Based on the theory of behaviorism which suggests learning as a process of behavior change where reinforcement and punishment become a stimulus to stimulate students to behave. Likewise with online and offline learning that has been taking place, students need a process, after more than 2 years students experience a period of online learning, students need to adapt again to offline learning because students have experienced changes in behavior, so that the results that researchers get are related to comparative analysis of Sociology learning outcomes., although there is an increase in the average PAT value of offline learning compared to online, but based on the results of the paired

sample t-test, the sig. (2tailed) value is 0.236 and 0.935, which means that there is no significant difference between the odd semester PAT Sociology scores (online learning.) compared to the value of PAT Sociology even semester (offline learning).

The suggestions that can be given by researchers are that teachers and students can be more varied and creative in making learning media and teaching methods so that they can increase students' motivation and enthusiasm in participating in learning such as through group learning which is varied with games, padlets, learning videos, and other applications. Teachers and students should also apply student center learning (student-centered learning) or project-based learning in groups, so as to improve students' critical thinking skills and increase student activity in teaching and learning activities.

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