
STUDENTS' SELF-REGULATED LEARNING DURING ONLINE LEARNING IN VOCATIONAL HIGH SCHOOL BANDUNG

Rizal Aminulloh¹, Al Jupri², Dadang Juandi³

¹Pendidikan Matematika, Universitas Pendidikan Indonesia, Jl. Dr. Setiabudi No.229, Isola, Kec. Sukasari, Kota Bandung, Jawa Barat 40154, Indonesia
rizal.aminulloh95@student.upi.edu

²Pendidikan Matematika, Universitas Pendidikan Indonesia, Jl. Dr. Setiabudi No.229, Isola, Kec. Sukasari, Kota Bandung, Jawa Barat 40154, Indonesia
aljupri@upi.edu

³Pendidikan Matematika, Universitas Pendidikan Indonesia, Jl. Dr. Setiabudi No.229, Isola, Kec. Sukasari, Kota Bandung, Jawa Barat 40154, Indonesia
dadang.juandi@upi.edu

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ABSTRACT

This study aims to obtain student responses and opinions regarding self-regulated learning of students during the Covid 19 pandemic in online learning at SMK Negeri 1 Bandung seen by grade level and also by major. This study used descriptive quantitative research methods. The population in this study were all students of SMKN 1 Bandung from tenth to twelve grade. Sample selection using snowball sampling technique. The results shows that the average score of respondents on the learning independence of SMKN 1 Bandung students during the Covid 19 pandemic was 3.78. Based on the results, we can concludes that the level of independence of SMKN 1 Bandung students in online learning during the pandemic is in the criteria of being quite independent.

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Corresponding Author:

Rizal Aminulloh,
Department of Mathematics Education,
Institut Keguruan dan Ilmu Pendidikan Siliwangi,
Jl. Dr. Setiabudhi No. 229, Bandung, Indonesia
Email: rizal.aminulloh95@student.upi.edu

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INTRODUCTION

Education is very important for the life of a nation, because education is a long-term investment for the nation to produce quality human resources in order to compete globally. In this regard, Indonesia as a developing country must be able to create quality education, in accordance with the ideals of the Indonesian nation as contained in the preamble of the 1945 Constitution, namely "to educate the life of the nation". One of the ways to do this is through education. However, at this time in Indonesia and even throughout the world, education is not carried out normally as usual due to the Covid-19 Pandemic.

The 2019 Corona Virus Disease (Covid-19) pandemic first appeared at the end of 2019, which then very quickly spread to almost all countries in the world including Indonesia. Where on March 2, 2020 Indonesia confirmed there were 2 positive cases of covid 19, until March 16, 2020 there were confirmed as many as 10 positive cases of covid 19 (indonesia.go.id). These cases continue to increase until now there are as many as 1.4 million confirmed cases of COVID-19 in Indonesia, of which 1.3 million people have recovered and 39,711 people have died from COVID-19. This information shows that the COVID-19 pandemic has had a negative impact not only in the health sector, but also in the education sector.

Education is one of the sectors that has been significantly affected by the COVID-19 pandemic. With the issuance of Government Regulation (PP) No. 2 of 2020 concerning Large-Scale Social Restrictions in the context of accelerating the handling of Covid 19 and Presidential Decree of the Republic of Indonesia No. 11 of 2020 concerning the Determination of Public Health Emergency of Corona Virus Disease 2019. The Ministry of Education and Culture issued two circulars related to the prevention and handling of Covid 19. First, circular letter number 2 of 2020 regarding the prevention and handling of covid 19 in the Ministry of Education and Culture, the second circular letter number 3 of 2020 concerning prevention of covid 19 in education units (kemendikbud.go.id).

The Indonesian Ministry of Education and Culture then issued circular letter no 4 of 2020 regarding the implementation of education policies in the emergency period of the spread of COVID-19. The circular contains the cancellation of the National Examination for Middle and High School, as well as implementing a study from home policy where students are no longer required to come to school, and learning is carried out online. This is a challenge for the world of education, especially in Indonesia, where learning is usually done in the classroom, then during this pandemic it must be done online. According to (Ali Sadikin, 2019) online learning is learning that uses the internet network with accessibility, connectivity, flexibility, and the ability to bring up various types of learning interactions.

More specifically, online learning is a distance learning system that uses computer network media or devices and internet access (Winarno & Setiawan, 2013). Online learning can be carried out well if it is supported by its constituent components. Some of these components are (Winarno & Setiawan, 2013); (1) e-learning infrastructure, can be in the form of computer equipment or devices owned, internet network, and teleconference equipment; (2) e-learning systems and applications, including software systems used such as class management, materials, discussion forums, and scoring systems; and (3) e-learning content, including teaching materials in the form of multimedia or in the form of text.

Online learning has a broader view of focus on learning than traditional learning paradigms. Online learning has flexibility in processing, although it is limited by the ability of the internet network itself (Aminoto & Pathoni, 2014). Online learning delivery methods can be divided into two, namely: (1) synchronous e-learning, where teachers and students are in the same class and at the same time although in different places; (2) asynchronous e-learning, where teachers and students are in the same class (virtually) even though in different times and places (Ratnasari, 2012). Therefore, every educational unit institution competes with each other to provide ideal online learning for its students by utilizing various existing online learning platforms such as School LMS, Google Classroom, Edmodo and so on.

The Ministry of Education stated in circular letter no 4 of 2020 that the implementation of distance learning or online learning was carried out and adapted to the abilities and conditions of each educational unit institution. Based on this, the educational institution unit has full authority over the implementation of learning. So that the learning methods and online platforms used by each school are different. This causes students to be able to adapt to the

online learning methods and platforms that apply in their schools. Meanwhile, online learning at SMKN 1 Bandung is centered on the LMS owned by the school where all teacher and student activities are monitored on the application. So that learning at SMKN 1 Bandung during this pandemic applied a learning method by combining synchronous e-learning and asynchronous e-learning methods. Where synchronous e-learning occurs when teachers and students learn face-to-face on the Zoom or Google Meet application which is scheduled at the LMS. Meanwhile, asynchronous e-learning occurs when the teacher gives assignments or teaching materials to students at the LMS who are given a deadline to work on or study. From the two methods, it can be seen that through online learning, students are expected to be independent in learning. Students' self-regulated learning in online learning can be seen from the ability of students to manage time and utilize various sources (Ambiyar et al, 2020). So that student self-regulated learning is one of the important factors in the success of online learning.

Independence in the Big Indonesian Dictionary is a thing or condition that can stand alone without depending on others. Schunk and Zimmerman define self-regulated learning as a learning process that occurs due to the influence of one's own thoughts, feelings, strategies, and behaviors that are oriented towards achieving goals (Sumarmo, 2010). Many researches in the pre-covid-19 pandemic that discussed self-regulated learning were associated with online learning models or blended learning. One of them is the research conducted by Wahyuni (2019) which concluded that students have high self-regulated learning by using blended learning.

Self-Regulated Learning is one of the important things in a learning process. Self-Regulated Learning is needed for every teenager, both students and students, so that they have the responsibility to organize and discipline themselves, in addition to being able to develop the ability to learn on their own accord (Tahar & Enceng, 2006). These attitudes need to be possessed by every student, because these attitudes are a hallmark of the maturity of an educated person. According to Hapsari, Sismiyati, & Herdi (2013) the demand for independence is very large and if it is not responded properly it can have an unfavorable impact on psychological development in the future. This condition occurs because being independent is one of the main developmental tasks for adolescents. The demands of being independent in order to complete further developmental tasks are not easy for adolescents, to be independent requires opportunities, support and encouragement in order to achieve self-reliance.

Self-Regulated Learning according to Hadi & Farida (2012) is a learning activity that takes place more driven by one's own abilities, own choices and self-responsibility in learning. Adolescents are said to have been able to learn independently if they have been able to carry out learning tasks without dependence on others. Basically, independence is the behavior of individuals who are able to take the initiative, are able to overcome obstacles or problems, have self-confidence and can do things on their own without the help of others.

Self-Regulated Learning does not just appear. Self-Regulated Learning also does not depend on heredity, but there are many things that influence it. Self-regulated learning is also influenced by several factors, according to Hamalik, (2000: 159) the factors that can affect self-regulated learning include: 1) Psychological factors: Intelligence, interest, motivation; and 2) Physiological Factors: Illness, disability; 3) Environmental factors: Family, home atmosphere, school. As for the Indicators of Self-regulated learning, according to Saepullah in (Hendriana et al., 2020), there are eight points of self-regulated learning indicators, including the following: (1) Learning initiatives; (2) Diagnosing learning needs; (3) Setting learning goals and targets; (4) Seeing difficulties as challenges; (5) Utilize and seek relevant sources; (6) Selecting and implementing learning strategies; (7) Evaluating the process and learning

outcomes; and (8) Self efficacy (self concept). Based on the theory above, this research will use indicators of self-regulated learning as follows: (1) Have an independent attitude towards others; (2) Have self-confidence; (3) Have disciplinary behavior; (4) Have a sense of responsibility; (5) Have their own initiative; (6) Able to exercise self-control.

Based on this background, the researcher wants to carry out a research entitled Self-regulated learning of Students in Online Learning during the covid 19 pandemic at SMKN 1 Bandung. With the formulation of the problem as follows; (1) How is the level of self-regulated learning of SMKN 1 Bandung students with online learning during the pandemic based on majors?; (2) How is the level of self-regulated learning of SMKN 1 Bandung students with online learning during the pandemic based on grade level?

METHOD

This study uses descriptive quantitative research methods. The population in this study were all students of SMKN 1 Bandung. Sample selection using snowball sampling technique. The researcher contacted the homeroom teacher at SMKN 1 Bandung to contact his class representative to take part in the study, which then the class representative distributed to his classmates and asked his students to become participants in the study.

The instrument used in this study was a learning independence questionnaire consisting of 25 statements composed of 6 indicators. This questionnaire uses a Likert scale with five alternative answers, namely strongly agree (SS=5), agree (S=4), neutral (N=3), disagree (TS=2), and strongly disagree (STS=1). . The types of statements in this questionnaire are positive and negative statements. If the average score is less than 3, then the student's learning independence is considered negative, meaning that the learning independence of SMKN 1 Bandung students is still lacking. Conversely, if the average score is more than a neutral score, then student learning independence is considered positive, meaning that the learning independence of SMKN 1 Bandung students is said to be independent.

Table 1. Grid of Independent Learning Instruments

No.	Indikator	Nomor Item	Jumlah
1.	Have an independent attitude towards others	1(+), 2(+), 8(-), 21(-)	4
2.	Have self-confidence	7(-), 9(+), 18(+), 19(-)	4
3.	Have disciplinary behavior	4(+), 5(+), 15(+), 22(-)	4
4.	Have a sense of responsibility	6(-), 11(-), 23(+), 24(-)	4
5.	Have their own initiative	10(+), 12(+), 13(+), 14(-), 17(+)	5
6.	Able to exercise self-control	3(+), 16(-), 20(+), 25(+)	4

Data analysis was carried out on student independence and student responses as on table 1. To determine the level of student independence, researchers used percentage data analysis, namely:

$$P = \frac{n}{N} \times 100\%$$

With;

P = Percentage

N = Total maximum score

n = Total score obtained
 (Arikunto, 2006)

The collaborative percentage classification of student independence data who has an independent attitude towards others, has self-confidence, has disciplined behavior, has a sense of responsibility, has own initiative, and is able to exercise self-control, are:

- 90%-100% = Very Independent
- 70%-89% = Independent
- 60%-69% = Self-Sufficient
- 50%-59% = Less Independent
- 0%-49% = Very Less Independent

RESULTS AND DISCUSSION

Based on the results of student responses to the questionnaire that has been distributed regarding student learning independence in online learning during the Covid 19 pandemic at SMKN 1 Bandung, in general, it is presented in the table below.

Table 2. Questionnaire results based on class

No	Indicator	Class X		Class XI		Class XII	
		Average	Percentage	Average	Percentage	Average	Percentage
1	Have an attitude of not depending on others	4.03	80.60%	4.01	80.20%	4.03	80.60%
2	Have confidence	3.57	71.40%	3.51	70.20%	3.59	71.80%
3	Have a disciplined behavior	3.99	79.80%	3.89	77.80%	3.89	77.80%
4	Have a sense of responsibility	4.08	81.60%	4	80.00%	4.15	83.00%
5	Have own initiative inisiatif	3.46	69.20%	3.34	66.80%	3.38	67.60%
6	Able to exercise self control	3.82	76.40%	3.66	73.20%	3.71	74.20%
Average		3.83	76.50%	3.74	74.70%	3.79	75.83%

From the table 2, information is obtained that the average learning independence of class X students is 3.83 with a percentage of 76.5% where it can be seen that class X students are included in the group of independent students. Likewise, class XI and class XII of SMKN 1 Bandung have learning independence which is classified in the independent category, where the average value of student learning independence is 3.74 and 3.79, respectively, with a percentage of 74.7% and 75, respectively. 83%.

If we break down the indicators for learning independence, it can be seen that almost all indicators of learning independence from class X to class XII show a percentage greater than 70%, which means that they have reached the independent category, but there is one indicator from class X to class XII whose percentage is still less than 70%, namely in indicator number

5 which shows or has its own initiative where class X gets an average of 3.46 with a percentage of 69.2% meaning that in this indicator it is known that class X has enough of its own initiative. Same as class X, class XI and class XII in indicator number 5 about having their own initiative each get an average of 3.34 and 3.38 with a percentage of 73.2% and 74.2% respectively, meaning that in this indicator it is known that class XI and XII are quite self-initiated.

Table 3. Questionnaire Results by Major

No	Indicator	Accounting Department		Tourism Department		Marketing Department		Office Department	
		Average	Percentage	Average	Percentage	Average	Percentage	Average	Percentage
1	Have an attitude of not depending on others	4.05	81.00%	3.95	79.00%	4.01	80.20%	4.05	81.00%
2	Have confidence	3.57	71.40%	3.51	70.20%	3.58	71.60%	3.53	70.60%
3	Have a disciplined behavior	4.04	80.80%	3.83	76.60%	3.87	77.40%	3.92	78.40%
4	Have a sense of responsibility	4.1	82.00%	4.03	80.60%	3.98	79.60%	4.13	82.60%
5	Have own initiative inisiatif	3.4	68.00%	3.37	67.40%	3.48	69.60%	3.36	67.20%
6	Able to exercise self control	3.78	75.60%	3.65	73.00%	3.77	75.40%	3.72	74.40%
Average		3.82	76.47%	3.72	74.47%	3.78	75.63%	3.79	75.70%

From the table 3, information is obtained that the average student learning independence of Accounting Department is 3.82 with a percentage of 76.47% where it can be seen that students majoring in accounting are included in the group of independent students. Likewise, students majoring in tourism, marketing and offices at SMKN 1 Bandung have learning independence which is classified in the independent category, where respectively the average value of student learning independence is 3.72, 3.78 and 3.79 with percentages of 74.47%, 75.63% and 75.70% respectively.

If we break down each indicator of learning independence, it can be seen that almost all indicators of learning independence from the accounting department to the office department show a percentage greater than 70% which means that it has reached the independent category, but there is one indicator whose percentage is still less than 70%, namely on indicator number 5 which shows or has its own initiative where the accounting department gets an average of 3.4 with a percentage of 68% it means that in this indicator it is known that the accounting department has enough of its own initiative. Same as accounting major. The

tourism, marketing and office departments of SMKN 1 Bandung in indicator number 5 about having their own initiative each get an average of 3.37, 3.48, and 3.36 with a percentage of 67.4%, 69.6% and 67.2%, meaning that in this indicator it is known that the Department tourism, marketing and offices at SMKN 1 Bandung have their own initiatives.

From these data, it was found that the overall average value of the learning independence of class X, XI, and XII students or majoring in accounting, tourism, marketing and offices was 3.78. So it is known that the average learning independence of SMKN 1 Bandung students exceeds a neutral score of 3. Which means that students of SMK Negeri 1 Bandung have a pretty good attitude of learning independence during learning during the covid 19 pandemic. The results of this study are in line with the results of research conducted by researchers Another issue is related to student learning independence during the pandemic, one of which is the research conducted by Handayani et al (2020). conducted at SMPN 1 Muara Taweh. Mention that students' learning independence is at a very good level. So that online learning can be an effective learning alternative during a pandemic.

The results should be clear and concise. The results should summarize (scientific) findings rather than providing data in great detail. Please highlight differences between your results or findings and the previous publications by other researchers.

CONCLUSION

The conclusion in this study is that the percentage of student questionnaire results on the implementation of online learning at SMK Negeri 1 Bandung as a result of the covid 19 pandemic, has been going quite well. This is supported by the average value of respondents' responses of 3.78 which are in the criteria of being quite independent. In addition, it can also be seen based on grade level that the average score of the student learning independence questionnaire does not show a significant difference, meaning that the level of learning independence of students at SMK Negeri 1 Bandung in Class X, Class XI and Class XII are in the same category, which is quite independent. This is shown by the average score for each level of Class X, XI, and XII, respectively, which is 3.83, 3.74, and 3.79. In line with the results of student learning independence scores based on grade level, student learning independence scores based on majors also showed the same results. Where the average score of the student learning independence questionnaire in the majors in Accounting, Tourism, Marketing, and Offices is in the criteria of being quite independent. This suggests that online learning is one of the right solutions to be used as an alternative to face-to-face learning that was usually done before this pandemic.

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