

The Effect of Online Learning on Student Learning Outcomes and Interests in Islamic Education Subjects at Senior High School

Khairial¹, Syamsu Nahar², Siti Halimah³

¹ State Islamic University of North Sumatera, Indonesia; khairial@gmail.com

² State Islamic University of North Sumatera, Indonesia; sitihalimah@uinsu.ac.id

³ State Islamic University of North Sumatera, Indonesia; syamsunahar@uinsu.ac.id

ARTICLE INFO

Keywords:

Online Learning;
Student Interest in learning;
Learning Outcomes of IRE

Article history:

Received 2021-07-16

Revised 2021-12-19

Accepted 2022-11-21

ABSTRACT

The purpose of this study is to see: 1) The influence of online learning on the learning outcomes of Islamic Religious Education students in the Senior High School of the Kedai Sianam Family Education Foundation; 2) The influence of online learning on students' interest in learning Islamic Religious Education in the Kedai Sianam Family Education Foundation High School; 3) The interaction between online learning and students' interest in learning in influencing the learning outcomes of Islamic Religious Education in the Senior High School of the Kedai Sianam Family Education Foundation. This research uses quantitative research type of experiment with the design used is True Experimental using the form of The Randomized Pretest-Posttest Control Group Design. The study sample was 64 students with details that the experimental class was 31 people and the control class was 33 people. There is an influence of online learning on the learning outcomes of students of SMA YPK Kedai Sianam. Then there is the influence of online learning on the learning interests of students of SMA YPK Kedai Sianam. This can be seen from the average score of high student interest in learning through online learning (\bar{X} = 21.12) as a whole higher than the average interest in learning Islamic Religious Education (IRE) of YPK Kedai Sianam High School students with low interest in learning (\bar{X} = 17.81). There is an interaction between online learning and interest in learning in influencing the learning outcomes of IRE students of SMA YPK Kedai Sianam. This is evidenced by $F_{count} = 18.307$ and Significance of 0.001. Sig Value. 0.001 is known to be smaller than 0.05 ($0.001 < 0.05$), so the hypothesis can be accepted and empirically proven in this study.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Khairial

State Islamic University of North Sumatera, Indonesia; khairial@gmail.com

1. INTRODUCTION

Religious education is an effort to strengthen faith and devotion to God Almighty in accordance with the religion adopted by the students concerned by paying attention to the guidance to respect other religions in the relationship of harmony between religious groups in society to realize national unity (Muhaimin, 2012).

In the Industrial Era 4.0 and during the COVID-19 pandemic, the situation and conditions of society have changed drastically, education should not only be oriented towards the past and present but must be oriented toward the future. In practice, Indonesia is required to participate in facing future changes in the world from various sectors. According to Minister of Education and Culture Nadiem Makarim when he was a speaker at a public lecture at the 5th National Deliberation of the Indonesian Islamic University Alumni Association, which can be seen 4 things: (1) Changes in the organizational side; (2) The concept of ownership; (3) The concept works; and (4) Cultural concepts, all of which have dramatic changes (LPMP Jatim, 2019). Moreover, religious education must anticipate and talk about a glorious future, where religious education looks far ahead and thinks about what will happen and what students will face in the future.

In particular, the learning competencies in the field of Islamic Religious Education for the High School level as stated in the Regulation of the Minister of Education and Culture Number 24 of 2016 concerning Core Competencies and Basic Competencies, contain: (1) Core Competencies 1 (spiritual attitudes) are to live and practice the religious teachings they adhere to; (2) Core Competence 2 (social attitude) is to show honest, disciplined, responsible behavior, show honest behavior, discipline, responsible, caring (mutual aid, cooperation, tolerance, peace), polite, responsive, and proactive as part of the solution to various problems in interacting effectively with the social and natural environment and placing oneself as a reflection of the nation in the world's associations; (3) Core Competency 3 (knowledge) is to understand, apply, and analyze factual, conceptual, procedural, and metacognitive knowledge based on his curiosity about science, technology, art, culture, and humanities with insights into humanity, nationality, statehood, and civilization related to the causes of phenomena and events, as well as apply procedural knowledge to a specific field of study in accordance with his talent and interest in solving problems; and (4) Core Competencies 4 (skills) are processing, reasoning, and examining in the concrete realm and abstract realm related to the development of what he learned in school independently, and being able to use methods according to scientific rules.

There are indeed many factors that cause low learning outcomes of Islamic Religious Education at the high school level including internal and external factors. Internal factors include interest in learning, attention, and readiness, while external factors include facilities and infrastructure to support the learning process, family factors, schools, how teachers teach (learning methods), community environment, and so on. Likewise, the high low interest in student learning in learning the field of study (subject) of Islamic Religious Education (IRE) is largely determined by the factors of education and learning itself such as teachers, students, subject matter, and other environments that can affect students' interest and enthusiasm for learning both at school and outside school (Saondi, O., & Suherman, 2012).

In addition, research conducted by Zainuri Abrar regarding student learning outcomes and factors that influence it for the IRE field of study, namely the Qur'an Hadith, Hadith, and Fiqih showed results where the motivation factor for learning was 12%, the intelligence factor was 18%, the interest factor was 8%, the attitude factor was 2%, the teacher's ability to teach factor was 12%, the learning facility factor was 18%, the method factor used by the teacher was 25%, and an environmental factor of 5%. Another research in the scientific journal Sinus entitled "The Effect of E-learning Utilization on Student Learning Achievement (Case Study of STMIK Sinar Nusantara Surakarta)" also revealed that the use of e-learning affects learning motivation, e-learning has a positive influence on student performance, learning motivation has a positive influence on learning outcomes. Readiness has a positive influence on learning outcomes, and e-learning has a positive influence on student learning outcomes (Tomo & Widada, 2014).

Based on the facts above, Islamic religious learning will take place well if teachers and students communicate well even through social media, online, or electronically. Because each student has a different point of view in capturing the material presented by the teacher. Whether or not there is an interest in learning and the motivation of these students towards learning Islamic Religious Education can be known if the teacher communicates more intensely for the delivery of material.

Interests include intrinsic factors that can affect a person's learning outcomes. Interest is an attraction to something, without anyone telling. Interest is also considered as a relationship between oneself and something outside of oneself. The stronger and closer the relationship, the greater the interest that arises. Interest is not carried from birth, but is acquired at any time. According to Slameto, interest in what is learned can affect subsequent learning as well as influence the acceptance of new interests (Slameto, 2003). Students' interest in learning is one of the important things, which determines success in the learning process. The low interest in learning Islam causes low achievement in learning Islamic religious education (Khairani, 2014).

Kedai Sianam Family Education Foundation High School has gone to great lengths in improving Islamic Religious Education, but the results have not been 100% as expected. Student learning outcomes are shown on various occasions, both daily, from semester exams to final school exams which show mediocre and even low learning outcomes. More specifically, the achievements of Islamic religious education from year to year there is still no change in improvement, this can be proven from the average score of Islamic Religious Education subjects in the report on the learning outcomes of each student in the last three years for consecutive even semesters can be seen in table 1 below.

Table 1. Achievement of Learning Outcomes in the Field of Islamic Religious Education Studies, SMA YPK Kedai Sianam

No	School Year	Exam Grade Point Average	
		Lowest Value	Top Rated
1	2016/2017	68	74
2	2017/2018	69	74
3	2018/2019	71	75

¹IRE Teacher's Document on Student Learning Outcomes.

Based on table 1 above, it can be stated that quantitatively, the average score of student learning outcomes in the Kedai Sianam Family Education Foundation High School can be categorized as not passing the standard value / KKM. However, qualitatively, the implications of the PAI learning outcomes reflect that students have not been able to make religious values a basis for attitude and have not been able to practice the knowledge gained in daily life, especially in schools.

During the Covid-19 pandemic, the education system must be ready to leap to transform online learning for all students and all teachers. We are entering a new era to build creativity, hone student skills, and improve self-quality with changing systems, perspectives, and patterns of interaction with technology.

Teachers should at least be able to use tools and media that are cheap and efficient even though they are simple but do not forget the necessity of achieving the expected teaching goals. Therefore, teachers must have sufficient knowledge and experience to carry out the online learning process.

The results of the study conducted by Nindita Astri (Astri, 2011) concluded that the attitude of respondents to assess reading interest in internal factors was very high while external factors were also high, where there was an influence between the use of the internet on students' reading interest of 0.548. Through online learning, parents have difficulty in controlling children's learning at home so that children are lazy to learn and as a result achievement decreases (Akmalia, 2021), the assessment and evaluation process in online learning has difficulties because they cannot assess students objectively (Elvira, Amaliya, Dalimunthe, Putri, & Akmalia, 2022), Online Learning in The Middle Of The Covid-

19 Pandemic (Sadikin, 2020), the use of online media has a positive impact on learning interest student (P Value = 0.000) (Ulfaida, U; Pahlevi, 2021).

From some of the studies above, no research has been found that examines the influence of online learning on student learning outcomes and interest in IRE subjects. This is a novelty in this research, considering the importance of developing learning media to welcome the Era of Society 5.0. The purpose of this study is to determine the interaction between online learning and students' interest in learning whether it affects the learning outcomes of Islamic Religious Education which has been carried out online or via Zoom at the Kedai Sianam Family Education Foundation High School.

2. METHODS

This research will be conducted using a quantitative approach to the type of experiment. Quantitative research is research that uses a deductive-inductive approach, meaning an approach that departs from a theoretical framework, the ideas of experts, and the understanding of researchers based on their experience, then developed into a problem along with solutions proposed to obtain justification (verification) in the form of empirical data support in the field (Tanzeh, 2009). Meanwhile, quantitative experimental research according to Sugiyono can be interpreted as a research method used to find the influence of certain treatments on others under controlled conditions (Sugiyono, 2013).

In this study, the design used was True Experimental with the form of The Randomized Pretest-Posttest Control Group Design. A feature of this design is that the samples used for both the experimental group and the control group were randomly taken from the population. So the characteristic is that there are two randomly selected groups, for example, specifically men for the experimental class and specifically for the control class.

Observations were made in both groups that were the subject of the study, then both were given post-test. The research design diagram of The Randomized Pretest-Posttest Control Group Design is as follows:

Treatment Group	R	O	X	O
Control Group	R	O	C	O

Keterangan:

R = Random

O = Prates

O = Pascates

X = Experimental Treatment

C = Control Treatment

The population in this study was all students of class XI SMA YPK Kedai Sianam which amounted to 90 students, with details were class XI IPA1 as many as 31 students, XI IPA2 as many as 33 students and XI social studies as many as 26 students. On the basis of the above description, the number of populations in this study can be described as follows:

Table 2. The total population of class XI students of SMA YPK Kedai Sianam

No.	Class XI	Gender		Number of Students
		Man	Woman	
1	XI IPA-1	14	17	31
2	XI IPA-2	16	17	33
3	XI IPS	17	9	26
Sum				90 Student

Administration of SMA YPK Kedai Sianam.

The samples in this study were:

Table 3. Sampling Details

No.	Class XI	Number of Classes	Information
1	Experimental Class	XI IPA-1	31
2	Kelas Kontrol	XI IPA-2	33
	Sum		64 Student

Sampling details table

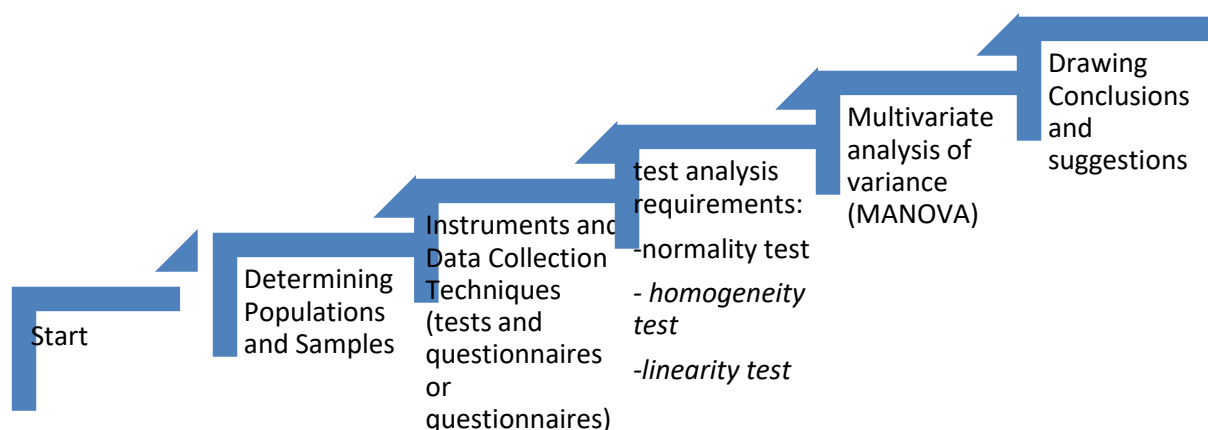
Based on the results of the lottery, XI IPA-1 was selected as the experimental class and XI IPA-2 as the control class.

In this study, questionnaires or questionnaires for variables of interest in learning are in the form of questions and statements regarding desires, feelings of pleasure, knowledge, habits, and attention where all of the above can affect student learning outcomes by the instrument grid that has been compiled and given directly to students in control classes and experimental classes to find out how much interest in learning in following the online learning process through online or via zoom Online.

The questionnaire in this study was compiled based on an attitude scale using the Likert scale. This scale is a scale that can be used to measure the attitudes, opinions, and perceptions of a person or group of people about a symptom or educational phenomenon. There are two forms of questions or statements that use the Likert scale namely positive questions or statements to measure positive attitudes and negative questions or statements to measure negative attitudes. Positive questions are scored 5, 4, 3, 2, and 1 while negative questions or statements are scored 1, 2, 3, 4, and 5. The Likert scale's answer forms are Strongly Agree, Agree, Disagree, Disagree, and Strongly Disagree. With the Likert scale, the variables to be measured are described into variable indicators. Then the indicator is used as a starting point to compile instrument items that can be in the form of questions or statements.

The next data collection technique for learning outcome variables is to use a test that aims to measure the level of mastery and ability of students individually with a scope of knowledge regarding internal factors and external factors which are compiled based on an instrument grid and given directly to students in control classes and experimental classes to find out the achievement of student learning outcomes in following the online learning process via online or via zoom Online.

Before analyzing the data, the analysis requirements are first carried out. The analysis requirements test is the normality test, homogeneity test, and linearity test. After that, the data analysis used was a multivariate analysis of variance (MANOVA) with the help of SPSS Version 16.0.



3. FINDINGS AND DISCUSSIONS

Research Results

The data presented in this study consist of scores of Learning Outcomes of Islamic Religious Education students of SMA YPK Kedai Sianam through online learning methods (Experimental class / XI IPA-1) and through the LKS learning method (Control class / XI IPA-2) which are each grouped on high learning interest and low learning interest.

The data obtained describes the average result (mean), mode, median, variance, standard deviation, maximum score, and minimum score equipped with a frequency table and a graph of its histogram.

The description of the learning outcomes of Islamic Religious Education for students of YPK Kedai Sianam High School through online learning can be seen in table 4 below:

Table 4. Description of Data on learning outcomes of IRE students of SMA YPK Kedai Sianam Through Online Learning

		Learning Outcomes
N	Valid	31
	Missing	0
Mean		20.23
Std. Error of Mean		.673
Median		22.00
Mode		24
Std. Deviation		3.739
Variance		13.981
Range		11
Minimum		13
Maximum		24
Sum		627

Table of a description of IRE learning outcomes data for students of SMA YPK Kedai Sianam through Online Learning.

From the table above, it can be seen that for student learning outcomes through online learning, the mean = 20.23 is obtained; mode = 24; median = 22; variance = 13.98; the highest score = 24, and the lowest score = 13.

The frequency distribution table of scores on the learning outcomes of Islamic Religious Education for students of YPK Kedai Sianam High School through online learning can be seen in table 5 below:

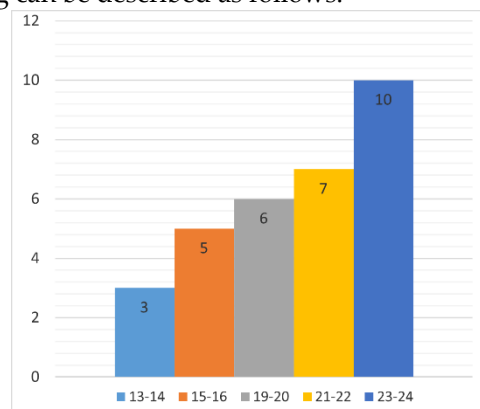
Table 5. Frequency Distribution of IRE Learning Outcomes of YPK Kedai Sianam High School Students Through Online Learning.

Interval	F _{absolut}	F _{relative}
13-14	3	9.677
15-16	5	16.129
17-18	0	0
19-20	6	19.355
21-22	7	22.581
23-24	10	32.358
Sum	31	100

Frequency Distribution Table of IRE Learning Outcomes of YPK Kedai Sianam High School Students Through Online Learning.

Based on the data from table 5 above, it can be explained that the mean score (20.23) is in the class interval 19-20, this shows that 19.36% of respondents are at the average score of the class, 25.81% are below the average score of the class and 54.84 is above the average score of the IRE learning outcomes of the students of SMA YPK Kedai Sianam.

Furthermore, a histogram chart of IRE learning outcomes of YPK Kedai Sianam High School students through online learning can be described as follows:



Picture 1. This picture is an image of a histogram chart of pai learning outcomes of YPK Kedai Sianam High School students through online learning.

Discussion of Research Results

Based on the data processing that has been carried out, it was previously known that the overall average score of IRE learning outcomes of YPK Kedai Sianam High School students through online learning (® 20.23) is higher than the average learning outcomes of IRE students through LKS (® 18.88).

This fact shows that online learning during the Covid-19 pandemic has proven effective in improving the overall IRE learning outcomes of YPK Kedai Sianam High School students for both low learning interest groups and high learning interest groups.

This is understandable and has become a necessity for teachers and school institutions to focus more on teaching through online learning in addition to the aim that education must be carried out in order to develop the abilities of cognitive, affective and psychomotor aspects of students comprehensively (thoroughly). This online learning emphasizes more on learning where students find it easier to find for themselves what has been learned before and is not only obtained from the teacher, but can also be through googling or other educational sites.

Through online learning, teachers play an active role in seeing the creativity of students and which students are active in learning. Not only that, through online learning, students can also watch firsthand, listen and observe the teacher's behavior in teaching, even teachers can also see firsthand the activities carried out by each student. The learning support materials are also very many and can be accessed anywhere by students. Therefore, through this online learning, teachers can design and plan learning anywhere and anytime. In line with the above, e-learning has the characteristic of not depending on place and time, providing knowledge sharing facilities and more attractive knowledge visualization (Herayanti, L., Fuaddunnazmi, M., 2015).

Based on the explanation above, it can be concluded that online learning is more effective in increasing the interest and learning outcomes of IRE students of SMA YPK Kedai Sianam. This can happen because, in the online learning process, students tend to be eager and active to reconstruct for themselves the knowledge they have and will gain and students will be motivated to strive to solve problems-mass in the framework of achieving the IRE learning objectives that have been set standards.

The material taught by the teacher contains various facts, concepts, and principles that require students to learn through learning prerequisites. Based on this, to be able to understand the material that has been given, students must be able to be active and able to associate themselves with learning.

In the findings of this study, also shows that the average learning outcomes of IRE students of SMA YPK Kedai Sianam with a high interest in learning (\bar{X} 20.22) as a whole both through online learning and LKS are higher than the learning outcomes of PAI students of SMA YPK Kedai Sianam with low interest in learning (\bar{X} 19.24). This shows that interest in learning will affect learning outcomes without going through the media though.

If observed in depth that online learning obtains the average learning outcomes of IRE students of SMA YPK Kedai Sianam with a high interest in learning (\bar{X} 21.12) higher than the learning outcomes of IRE students of SMA YPK Kedai Sianam with low interest in learning (\bar{X} 17.81). this shows that high interest in learning is significant with high learning outcomes as well, where learning outcomes both through online learning and LKS will be higher than learning outcomes with low interest in learning.

The above can be understood that high interest in learning is a person's strength in doing something for himself without relying on others, which means that the planning, management, and completion of learning activities are carried out by the students themselves. It can be predicted that the higher the interest in learning a student is, the more automatically they will achieve better results than their peers.

The findings of the research results turned out to show all research hypotheses, namely: 1) the learning outcomes of IRE students of YPK Kedai Sianam High School through online learning were higher than the results of learning IRE through LKS; 2) IRE learning outcomes of YPK Kedai Sianam High School students with high learning interest are higher than IRE learning outcomes of students with low learning interest; 3) there is interaction and influence of online learning on the learning outcomes and interests of students of SMA YPK Kedai Sianam, acceptable. This result is strengthened by the results of research that has been carried out by Kristiyani that one of the strategies that can be used to accelerate student learning with better results is the e-learning learning strategy (Kristiyani, E., & Budiningsih, 2019). Not only that, Amidi and Zahid also revealed that the learning environment that uses technological media (E-learning learning model) can increase the value of students (concepts), their attitudes towards learning, and evaluation of their learning experiences (Amidi, & Zahid, 2016).

From the findings above, there are several limitations in this study, including: First, teachers' lack of understanding of the use of ITC-based online media so that the steps in using the media and learning strategies that are displayed when online learning requires help from several schools or people around at that time. To overcome this, the Principal or the foundation held a simulation and provided adequate learning facilities in accordance with the needs of the teachers for the smooth teaching and learning process.

Secondly, this study was only carried out on one experimental class and one control class, so this study has not been able to be generalized into a wider scope.

Third, to capture data on the results and interest in learning of students of SMA YPK Kedai Sianam, there may be still students who are not serious about filling out learning outcome tests and questionnaires of learning interests due to various conditions. To overcome this obstacle, the researcher gathered every 5 students and came to them in one agreed house and accompanied them during the process of filling out the learning outcomes test and the learning interest questionnaire.

4. CONCLUSION

The conclusion that can be drawn in this study is that there is an influence of online learning on the learning outcomes of students of SMA YPK Kedai Sianam. This can be seen from the average score of student learning outcomes through online learning (\bar{X} = 20.23) as a whole is higher than the average IRE learning outcomes of YPK Kedai Sianam High School students using LKS (\bar{X} = 18.88). Thus, it can be concluded that online learning is considered more effectively applied during the Covid-19 pandemic in IRE learning to improve student learning outcomes as evidenced by the price F count = 12,059 and Significance of 0.008. Sig Value. 0.008 is known to be smaller than 0.05 ($0.008 < 0.05$), meaning that this hypothesis is accepted and empirically proven.

Then, there is the influence of online learning on the learning interests of students of YPK Kedai Sianam High School. This can be seen from the average score of high student interest in learning through online learning (\bar{x} = 21.12) as a whole higher than the average IRE learning interest of YPK Kedai Sianam High School students with low interest in learning (\bar{x} = 17.81). Thus, it can be concluded that online learning is considered more effectively applied during the Covid-19 pandemic in IRE learning to improve low student learning outcomes. This is evidenced by $F_{count} = 22.764$ and Significance of 0.000. Sig Value. 0.000 is known to be smaller than 0.05 ($0.000 < 0.05$), Meaning that this hypothesis is accepted and empirically proven.

Furthermore, there is an interaction between online learning and interest in learning in influencing the IRE learning outcomes of YPK Kedai Sianam High School students. This is evidenced by $F_{count} = 18.307$ and Significance of 0.001. Sig Value. 0.001 is known to be smaller than 0.05 ($0.001 < 0.05$), so the hypothesis can be accepted and empirically proven in this study. So that the hypothesis that states that "the IRE learning outcomes of YPK Kedai Sianam High School students through online learning are higher than the student learning outcomes through LKS" can be accepted and empirically proven.

REFERENCES

- Akmalia, R. (2021). Intensity of Motivation to Achieve Through Online Learning. *Pioneers: Journal of Education*, 10(3), 1–11. <https://doi.org/10.22373/pjp.v10i3.12174>
- Amidi, & Zahid, M. Z. (2016). Building Mathematical Creative Thinking Skills With Problem-Based Learning Models Assisted by E-Learning. *Proceedings of the National Seminar on Mathematics*, 586–594.
- Astri, N. (2011). The Effect of Internet Utilization on Students' Reading Interest in the Library of SMK Negeri Surakarta. *Library and Information Science Study Program, Faculty of Adab and Culture UIN Sunan Kalijaga*.
- Elvira, Amaliya, N. D., Dalimunthe, N. A., Princess, N. A., & Akmalia, R. (2022). The Online Learning Process of MI Teachers in the Covid-19 Era (Case Study of MIS Ujung Batu-Sosa Teachers, Padang Lawas Regency). 6(April 2020), 183–188.
- Herayanti, L., Fuaddunnazmi, M., & H. (2015). Development of Moodle-Based Learning Media in Basic Physics Courses. *Journal of Physics and Technology Education*, 1(2), 205–209. <https://doi.org/https://doi.org/http://dx.doi.org/10.29303/jpft.v1i3.260>
- Khairani, M. (2014). *Psychology of Learning*. Yogyakarta: Aswaja Grafindo.
- Kristiyani, E., & Budiningsih, I. (2019). The Effect Of ELearning Learning Strategies And Interest In Learning On Accounting Learning Outcomes. *Academics Journal of Educational Technology*, 8(1), 57–69. Retrieved from https://www.academia.edu/download/%0A61564363/06_PENGARUH_STRAT%0AEGI_PEMBE LAJARAN_ELEARNING_Eva20191219-35423-%0Apszqq3.pdf
- Muhaimin. (2012). *The Islamic Education Paradigm*. Bandung: Juvenile Rosdakarya.
- Sadikin, A. and A. H. (2020). Online Learning in the Midst of the Covid-19 Outbreak. *Scientific Journal of Biological Education (BIODIK)*, 6(2).
- Saondi, O., & Suherman, A. (2012). *Teaching Professional Ethics*. Bandung: Refika Aditama.
- Slameto. (2003). *Learning and Influencing Factors*. Jakarta: Rineka cipta.
- Sugiyono. (2013). *Educational Research Methods Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- Tanzeh, A. (2009). *Introduction to Research Methods*. Yogyakarta: Terrace.
- Tomo, S., & Widada, B. (2014). The Effect of E-Learning Utilization on Student Learning Achievement (Case Study of STMIK Sinar Nusantara Surakarta). *SINUS Scientific Journal: STMIK Sinar Nusantara Surakarta*, 12(1).
- Ulfaida, U; Pahlevi, T. (2021). The Influence of the Use of Online Learning Media on Learning Outcomes through Student Learning Interest in Class X OTKP at SMKN1 Lamongan. *Journal of Education*, 8(2), 25–31. <https://doi.org/https://doi.org/10.19184/jukasi.v8i2.26902>

