# THE INFLUENCE OF TECHNOLOGY USE, LEARNING INDEPENDENCE, AND STUDENT ACTIVITY ON ECONOMIC LEARNING OUTCOMES IN THE COVID-19 PANDEMIC ERA

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## Article Info

## Abstract

This study aims to determine the effect of the use of technology, independent learning, and the activeness of students on learning outcomes both partially and simultaneously. In particular, this study uses a quantitative research method with a survey method using a questionnaire. The data analysis technique used in this study is multiple regression analysis. The research sample was 179 students, Based on the results of the study, the use of technology, independent learning, and student activity have an influence on learning outcomes. In the t-test the use of technology in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor with a tcount of 8.349 . greater than t table which is equal to 1.973 (tcount > ttable ), learning independence in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor with a tcount of 7.696. is greater than ttable which is equal to 1.973 (tcount > ttable ), and student activity in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor by having tcount 6.647. greater than t table which is equal to 1.973 (tcount > ttable ).

### *Abstrak*

Penelitian ini bertujuan untuk mengetahui pengaruh pemanfaatan teknologi, kemandirian belajar, dan keaktifan siswa terhadap hasil belajar baik secara parsial maupun simultan. Secara khusus penelitian ini menggunakan metode penelitian kuantitatif dengan metode survei dengan menggunakan kuesioner. Teknik analisis data yang digunakan dalam penelitian ini adalah analisis regresi berganda. Sampel penelitian berjumlah 179 siswa. Berdasarkan hasil penelitian, pemanfaatan teknologi, kemandirian belajar, dan aktivitas siswa berpengaruh terhadap hasil belajar. Pada uji t penggunaan teknologi dalam pembelajaran secara parsial berpengaruh positif dan signifikan terhadap hasil belajar ekonomi siswa kelas XI IPS SMA Negeri 9 Bogor dengan nilai thitung sebesar 8,349. lebih besar dari t tabel yaitu sebesar 1,973 (thitung > ttabel), kemandirian belajar dalam pembelajaran secara parsial berpengaruh positif dan signifikan terhadap hasil belajar ekonomi siswa kelas XI IPS SMA Negeri 9 Bogor dengan nilai thitung sebesar 7,696. lebih besar dari ttabel yaitu sebesar 1,973 (thitung > ttabel), dan aktivitas siswa dalam pembelajaran secara parsial berpengaruh positif dan signifikan terhadap hasil belajar ekonomi siswa kelas XI IPS SMA Negeri 9 Bogor dengan nilai thitung 6,647. lebih besar dari t tabel yaitu sebesar 1,973 (thitung > ttabel).

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## INTRODUCTION

The COVID-19 pandemic that has occurred in the last 2 years or so has brought major changes to Indonesia and the whole world. The policies issued to limit the spread of the corona virus have an impact on various fields around the world, especially in education. UNESCO stated that the COVID-19 pandemic threatened 577.305.660 students from pre-primary to high school education and 86.034.287 students from higher education worldwide. This makes the government and related institutions present an alternative learning process for students that should be done face-to-face to switch to online learning.

There are several problems with online learning, first there are problems in terms of readiness on the part of the school, teachers and students in dealing with online learning, second there are problems in the learning process, namely in the form of perceived constraints such as unstable internet fingers, lack of knowledge in using the platform online learning and inadequate facilities, third, changes in student learning outcomes during the online learning period.

Based on a preliminary study conducted in class XI Social Sciences at SMA Negeri 9 Bogor, it was found that the results of students' economics studies were still relatively low. This can be proven by the Odd Semester Final Examination Scores for Economics Subjects in table as follows.

| CLASS | Average | Amount | Total Value | Total Value |
|---|---|---|---|---|
| | UAS score | Student | Student < | Student > |
| XI IPS 1 | 67 | 36 | 21 | 15 |
| XI IPS 2 | 65 | 36 | 23 | 13 |
| XI IPS 3 | 64 | 36 | 29 | 7 |
| XI MIPA 1 | 65 | 36 | 25 | 11 |
| XI MIPA 2 | 66 | 36 | 23 | 13 |
| XI MIPA 3 | 64 | 36 | 28 | 8 |
| XI MIPA 4 | 65 | 36 | 24 | 12 |
| XI MIPA 5 | 64 | 34 | 28 | 8 |
| XI MIPA 6 | 64 | 36 | 27 | 9 |
| Total students | | 322 | 228 | 94 |
| Percentage | | 100 | 70.8% | 29.2% |

Source: School Documentation (processed by the Author)

From Table 1.1 it can be seen that the score for the End of Odd Semester Deuteronomy Class XI IPS & MIPA at SMA Negeri 9 Bogor is still relatively low. The data shows that 94 or 29,2% of students achieve KKM (Minimum Completeness Criteria) scores, while 228 or 70,8% of students have not reached the KKM that has been set.

After conducting a preliminary study on the results of studying economics at a high school in Bogor City during the pandemic, it is known that online economics learning provides a challenge for educators, students, and for parents. The challenge is in the form of readiness to adapt and keep up with changes, especially for those who do not have facilities and lack proficiency in using online learning technology. Apart from that, the independence of learning has decreased and the activeness of students with online learning has decreased. Technology is a medium to facilitate all needs in the teaching and learning process, especially again in time pandemic this . Digital technology in educational institutions as a means of supporting learning, both as a means of accessing information on learning resources or as a means of supporting learning activities and related assignments (Tondeur et al, 2017) .

The use of technology is highly considered in the online teaching and learning process. Delivery of material through virtual classes tends to influence the development and activeness of students in the teaching and learning process. Therefore, the use of technology effectively can help students to receive material. Technology can play a role in connecting educators with students and with learning resources by interacting and collaborating both directly and indirectly.

According to Goetsch (2002) says that: " *People tools, resources, to solve problems or to extend their capabilities* ". (Technology can be understood as an "effort" to obtain a "product" made by humans by utilizing equipment, processes and resources). In addition, technology is something that cannot be

avoided, because technological advances will go hand in hand with advances in science (Khanagha et al., 2018) .Research by Susanto et al. (2020) entitled " *Technological and Pedagogical Models: Analysis of Factors and Measurement of Learning Outcomes in Education* " aims to explain the effect of using technology on learning outcomes. The results of the study shows that the higher the technological capability, the higher the learning performance. The higher the pedagogical ability, the higher the learning outcomes.

The online learning system slightly shifts the teacher's role as the sole source of learning in the learning process. Online learning causing restrictions on interaction between fellow students and between students and teachers. In process online learning, students are required to be more independent in using and exploring knowledge with technological media. The problem that arises when students are faced with learning that demands a high level of independence is that students are required to be active both during and in learning outside of learning.

Independent students will prepare the material to be learned or repeat the material that has been studied. This certainly affects students' understanding of economic subject matter, which is generally both computational and conceptual in economic theory. If students do not have an independent attitude, it will be difficult to understand the economic material being studied, especially the basic economic concepts. Learning independence was one of the obstacles that occurred to students during the pandemic and affected a decrease in learning outcomes, especially in economics subjects.

Independent learning with the term *Self Regulated Learning* is given by Pintrich (2000) *Self Regulated Learning is defined as an "active, constructive process whereby learners set goals for their learning and attempt to monitor, regulate and control their cognition, motivation, and behavior, guided and constrained by their goals and contextual features in the environment"* . It means that independent learning is an active constructive process in which students try to monitor, regulate and control their cognition, motivation and behavior in accordance with the learning objectives.

Research by Faizah & Subroto (2021) explains the effect of independent learning on economic learning outcomes. The results of the study show that student learning independence in online learning has a positive effect on economic learning outcomes. Independent learning contributes to learning outcomes by 57,5%.

Active learning is a process of teaching and learning activities whose subjects are educated intellectually and emotionally so that students are able to participate actively in carrying out learning activities (Sudjana, 2012) . Active learning is defined as an activity that is both physical and mental, a series that cannot be separated between doing and thinking (Sadirman, 2014) .Research by Ningsih (2018) explains the effect of active learning on economic learning outcomes. The results of the study show that student activity has a positive or significant effect on learning outcomes . This can be seen in the $r_{count}$ of 5,441 which is greater than the $r_{table}$ of 1,665. From the results of calculating the coefficient of determinant it is known that student contributes 42,7% to learning outcomes in economics class X students at SMAN 2 Gunung Sahilan.

# METHOD

## 1) Data

The data in this study is to provide an overview in determining the results of data processing carried out in the research process in the field. Data processing in this study uses primary data on the four variables. These variables consist of three independent variables, namely Use of Technology (X1), Independent Learning (X2), and Active Learning (X3) and one dependent variable, namely Learning Outcomes (Y). To obtain the data needed in the research process, researchers used research instruments in the form of questionnaires or questionnaires.

This questionnaire consists of 36 statement items with five alternative answers, the questionnaire was created and distributed via Google form with the link https://bit.ly/KUESIONER_HASILBELAJAR_SMAN9BGR to 179 respondents consisting of class 11 students at SMA Negeri 9 Bogor. 30 respondents were used to test the research instrument, while the results of the answers of 179 respondents were used to test the research that was the sample of this study.

The population is the whole of the object to be studied. In this research, the population in question is all students of SMA Negeri 9 Bogor for the 2021/2022 Academic Year. The reachable population of this study included all 11th graders of SMA Negeri 9 Bogor, totaling 322 students consisting of 9 classes, with the following details:

**Table Affordable Population of Students at SMA Negeri 9 Bogor**

| NO | CLASS DESCRIPTION | POPULATION |
|---|---|---|
| 1 | CLASS 11 IPS 1 | 36 |
| 2 | CLASS 11 IPS 2 | 36 |
| 3 | CLASS 11 IPS 3 | 36 |
| 4 | CLASS 11 MIPA 1 | 36 |
| 5 | CLASS 11 MIPA 2 | 36 |
| 6 | CLASS 11 MIPA 3 | 36 |
| 7 | CLASS 11 MIPA 4 | 36 |
| 8 | CLASS 11 MIPA 5 | 34 |
| 9 | CLASS 11 MIPA 6 | 36 |
| | **TOTAL** | **322** |

Source: Primary Education Data of SMAN 9 Bogor (data processed)

Based on the calculations in the sample who became respondents in this study was adjusted to as many as 179 students who were sampled in the study. With the calculation of the sample distribution which can be seen in the following table:

**Table of Student Sample Distribution at SMA Negeri 9 Bogor**

| AFFORDABLE POPULATION | AMOUNT | SAMPLE |
|---|---|---|
| **CLASS 11 IPS 1** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 IPS 2** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 IPS 3** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 MIPA 1** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 MIPA 2** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 MIPA 3** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 MIPA 4** | 36 | 36/322 x 179 = 20.01 |
| **CLASS 11 MIPA 5** | 34 | 34/322 x 179 = 18.90 |
| **CLASS 11 MIPA 6** | 36 | 36/322 x 179 = 20.01 |
| **TOTAL** | **322** | **179** |

Source: Basic Education Data of SMAN 9 Bogor (data processed)

In this study the samples were taken using *Proportional Random Sampling* . According to Sugiyono (2013) it is said that Proportional Random Sampling is carried out by taking samples in a balanced proportion *.* With sample details from 8 classes (11 IPS 1,2,3 & 11 MIPA 1,2,3,4,6) each took 20 students, and class 11 MIPA 5 took 19 students.

## 2) Methodology

This study used a quantitative research method with a survey method using a questionnaire. The approach in this study uses a correlational approach. Correlational research is research that aims to find the influence or relationship of one or more independent variables with one or more dependent variables (Bungin, 2017) . The data analysis technique used in this study is multiple regression analysis. Multiple linear analysis is used to determine how much influence the independent variables (Use of Technology, Independent Learning, and Active Learning) have on the dependent variable (Learning Outcomes).

## EMPIRICAL RESULTS

## 1) Multiple Linear Regression Analysis

According to Sugiyono (2013) multiple linear analysis is used to determine how much influence the independent variables (Use of Technology, Independent Learning, and Active Learning) have on the dependent variable (Learning Outcomes).

**Table Multiple Linear Regression Test Results**

| Model | | Unstandardized Coefficients | | Standardized Coefficients |
|---|---|---|---|---|
| | | B | Std. Error | Beta |
| **1** | (Constant) | ,574 | ,737 | |
| | Penggunaan Teknologi | ,357 | ,043 | ,350 |
| | Kemandirian Belajar | ,361 | ,047 | ,370 |
| | Keaktifan Belajar | ,279 | ,042 | ,287 |

Coefficients[a]

**a. Dependent Variable: Hasil Belajar**

$$Y = 0{,}574 + 0{,}357X1 + 0{,}361X2 + 0{,}279X3 + e$$

Constant value ( $\beta 0$ ) is negative = 0,574 If all independent variables show a zero ( 0 ) or none , then the variable  independent X1, X2 and X3 have a value of 0,574

- X1: The coefficient value for the variable $X_1$ is 0,357 with a positive value. It illustrates that X1 has a positive influence on Y. This means that if X1 is increased and repaired by one unit, it will affect the increase in Y by 0,357.
- X2: The coefficient value for the variable $X_2$ is 0,361 with a positive value. Illustrate that X2 has a positive influence on Y. This means that if X2 is increased and repaired by one unit, it will affect the increase in Y by 0,361.
- X3: The coefficient value for the variable $X_3$ is 0,279 with a positive value. It illustrates that X3 has a positive influence on Y. This means that if X3 is increased and repaired by one unit, it will affect the increase in Y by 0,279.

**Hypothesis testing**

**1) Partial Significance Test (T-Test)**

Testing this conducted for know is variable free consisting from Use technology ($X_1$), Independent Learning ($X_2$) , and liveliness Study ($X_3$) respectively Partial have significant influence to variable bound that is Results Study (Y). Study this conducted with level significant by 5 % or 0,05

**Table of T Test Results**

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| **1** | (Constant) | ,574 | ,737 | | ,779 | ,437 |
| | Penggunaan Teknologi | ,357 | ,043 | ,350 | 8,349 | ,000 |
| | Kemandirian Belajar | ,361 | ,047 | ,370 | 7,696 | ,000 |

| | | | | | |
|---|---|---|---|---|---|
| Keaktifan Belajar | ,279 | ,042 | ,287 | 6,647 | ,000 |

**a. Dependent Variable: Hasil Belajar**

Based on the t-test table, the use of technology in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor as evidenced by a significance value of 0,000 <0,05 with a $t_{count}$ of 8,349. greater than $t_{table}$ which is equal to 1,973 ($t_{count} > t_{table}$), learning independence in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor as evidenced by a significance value of 0,002 <0,05 with has a $t_{count}$ of 7,696. is greater than $t_{table}$ which is equal to 1.973 ($t_{count} > t_{table}$), and student activity in learning partially has a positive and significant effect on the economics learning outcomes of class XI IPS students at SMA Negeri 9 Bogor as evidenced by a significance value of 0,000 <0,05 by having $t_{count}$ 6,647. greater than $t_{table}$ which is equal to 1,973 ($t_{count} > t_{table}$).

## 2) Concurrent Significance Test (F-Test)

This test is conducted to find out whether all the independent variables together or simultaneously have a significant influence on the dependent variable.

**Table of F Test Results**

| | ANOVAa | | | | |
|---|---|---|---|---|---|
| **Model** | Sum of Squares | df | Mean Square | F | Sig. |
| **1** Regression | 4128,442 | 3 | 1376,147 | 1370,991 | ,000b |
| Residual | 175,658 | 175 | 1,004 | | |
| Total | 4304,101 | 178 | | | |

**a. Dependent Variable: Hasil Belajar**

**b. Predictors: (Constant), Keaktifan Belajar, Penggunaan Teknologi, Kemandirian Belajar**

Based on results analysis that has been shown in table on score significance (Sig) 0,000 < 0,05 and score $F_{table}$ 2,66 < 1370,991 values $F_{count}$. Based on results the could concluded that when each variable is used as size for determine Results Learn , that is variable Use Technology , Independence Study and Activity Study capable influence in a manner simultaneous to Results Study.

## 3) Determination Coefficient Test (R2 )

**Table of Determination Coefficient Test Results**

| | Model Summaryb | | | |
|---|---|---|---|---|
| **Model** | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| **1** | ,979a | ,959 | ,958 | 1,002 |

**a. Predictors: (Constant), Keaktifan Belajar, Penggunaan Teknologi, Kemandirian Belajar**

**b. Dependent Variable: Hasil Belajar**

Based on table 4.20, the Adjusted R Square value is 0.958 or 95.8%, so it can be interpreted that 95.8% of the independent variables (technology use, independent learning, and student activity) are simultaneously able to explain the dependent variable (learning outcomes), while the rest (100%- 95.8% = 4.2%) is explained by other variables. and from the table of the coefficient of determination above it can be seen that the higher the R Square value means the better the prediction model of the proposed research model.

**DISCUSSION**

There is a Positive and Significant Influence of the Use of Technology on Economic Learning Outcomes in Grade 11 Students at SMA Negeri 9 Bogor. The results of this study are in line with the

research of Naik et al., (2020) which states that technology-assisted teaching can replace traditional classroom teaching by one-third. this could said that learning use high digital technology and minimal teacher training, has a positive impact on student learning outcomes. And also in line with the research of Susanto et al., (2020) which shows that the higher the technological capability, the higher the learning performance. The higher the pedagogical ability, the higher the learning outcomes.

And also strengthened by the research of Julita et al., (2019) which shows a positive and significant effect of using the internet in learning on the economics learning outcomes of class X IPS students at SMA Negeri 1 Lubuk Basung. This means that the higher the use of the internet for learning, the higher the learning outcomes of economics class X IPS students at SMA Negei 1 Lubuk Basung. and research Legesang et al., (2021) which shows that there is a positive influence between the influence of the use of information technology on student achievement in the Covid-19 era at SMK Negeri 1 Manado.

There is a Positive and Significant Effect of Learning Independence on Economic Learning Outcomes in Grade 11 Students at SMA Negeri 9 Bogor. The results of this study are in line with research by Faizah & Subroto's (2021) which shows that student learning independence in online learning has a positive effect on economic learning outcomes. independent learning contributes to learning outcomes by 57,5%. and in line with research by Sari & Zamroni (2019) which shows that the learning independence variable has a significant and positive effect, which means that the higher the student's learning independence, the higher the learning outcomes.

And it was reinforced by research from Angga Dewi et al., (2019) which showed that there was an effect of independent learning on economic learning outcomes, with the t test results obtained $t_{count}$ of 3,163 > from $t_{table}$ 1,99 with a significant value of 0,002 <0,05 and research by Sondang Purba's (2020) which shows independent learning has a significant effect on student learning outcomes. Based on the results of data analysis it is known that the $t_{count}$ > $t_{table}$ (1,937 > 1,659).

There is a Positive and Significant Influence of Learning Activeness on Economic Learning Outcomes in Grade 11 Students at SMA Negeri 9 Bogor. The results of this study are in line with research Fernandany (2021) explaining the effect of active learning on learning outcomes. Research results There is an effect of active learning on student learning outcomes with a relative contribution of 54% and an effective contribution of 27,50%. And in line with research by Ningsih (2018) which shows the results of the study show that student activity has a positive or significant effect on learning outcomes.

And it was reinforced by the research of Saputra et al., (2021) which showed that the results of the significance test obtained a significance value (0,002) < sig. (0,05) shows that H0 is rejected and Ha has the effect of active learning on learning outcomes and research by Putri et al., (2021) shows the results of testing the research hypothesis that the t-count results of a significance value of 0,293 > 0,05 meaning that H0 is accepted and Ha is rejected . Learning activeness has an influence on learning outcomes with a value obtained 0,041 <0,05 meaning that H0 is set to be rejected and Ha is accepted. There is a positive and significant influence on the Use of Technology, Learning Independence, and Student Activeness simultaneously on economic learning outcomes in class XI students at SMA Negeri 9 Bogor.

## CONCLUSION

Based on the analysis and research on the effect of the Use of Technology, Learning Independence, and Active Learning on Economic Learning Outcomes during the Covid-19 Pandemic Period at SMA Negeri 9 Bogor , the researchers can conclude that there is a positive and significant influence between the variables of Technology Use on Learning Outcomes. This is based on the calculated t value. The use of technology is 8,349, which is greater than the $t_{table}$, which is equal to 1,973 ($t_{count}$ > $t_{table}$ ). This means that the higher the level of technology use, the value of economics learning outcomes for class XI students of SMA Negeri 9 Bogor will also increase. Vice versa, the lower the level of technology use, the higher the learning outcomes.

There is a positive and significant influence between the Independent Learning variables on Learning Outcomes. This is based on the t value of learning independence of 7,696 which is greater than t $_{table}$ which is 1,973 ($t_{count}$ > $t_{table}$ ). This means that the higher the level of Learning Independence will also increase the value of Learning Outcomes for class XI students of SMA Negeri 9 Bogor. Vice

versa, the lower the level of learning independence, the lower the learning outcomes.

There is a positive and significant influence between the Active Learning variable on Learning Outcomes. This is based on the t value of learning activeness of 6,647 which is greater than t $_{table}$ which is equal to 1,973 (t$_{count}$ > t$_{table}$ ). This means that the higher the level of active learning will also increase the value of learning outcomes for class XI students of SMA Negeri 9 Bogor. Vice versa, the lower the level of active learning, the lower the learning outcomes.

There is a positive and significant influence simultaneously between the Use of Technology, Independent Learning, and Student Activity on Learning Outcomes. This is based on the results of the analysis that has been displayed in the table above the value significance (Sig) 0,000 < 0,05 and score F$_{table}$ 2,66 < 1370,991 score F$_{count}$ . Based on results the could concluded that when each variable is used as size for determine Learning Outcomes, namely the use of technology variables, independent learning and active learning can influence simultaneously on learning outcomes.

Based on the conclusions, the researcher gives advice to economics teachers to always improve and improve their professional skills in the field of technology to achieve the goal of quality learning in improving economics learning outcomes for class XI students of SMA Negeri 9 Bogor. And for the school, counseling is held for students and parents regarding the importance of using technology during the learning process and at the same time holding training for students who are still difficult to operate several online learning platforms.

**BIBLIOGRAPHY**

Angga Dewi, G., & Nyoman Murniasih, N. (2019). pengaruh kemanfaaatan lembar kerja Siswa Dan Kemandirian Belajar Terhadap Hasil Belajar Pada Mata Pelajaran Ekonomi Kelas IX IPA Di SMA 5 dENPASAR Tahun Pelajaran 219/2020. *Jurnal Publikasi*, 1–15.

Bungin, B. (2017). *Metode Penelitian Kuantitatif* (edisi kedu). jakarta: Kencana. Retrieved from https://books.google.co.id/books?id=rBVNDwAAQBAJ&printsec=frontcover&hl=id#v=onepage&q&f=false

Faizah, I. N., & Subroto, W. T. (2021). Pengaruh kemandirian belajar siswa dalam pembelajaran daring terhadap hasil belajar ekonomi. *Jurnal Education and Development*, *9*(2), 101–106.

Fernandany, K. (2021). Pengaruh Interaksi Guru Dengan Siswa Dan Keaktifan Belajar Terhadap Hasil Belajar Ekonomi Siswa Kelas XI IPS SMA Negeri 2 Cepu Pada Masa Pandemi Covid .... Retrieved from http://eprints.ums.ac.id/id/eprint/88816

Goetsch, D. L. (2002). *Pengantar manajemen mutu : manajemen mutu untuk produksi pengolahan dan pelayanan*. jakarta: Prehalindo.

Julita, R., & Marwan, M. (2019). Pengaruh Penggunaan Internet Dalam Belajar, Minat Membaca Dan Manajemen Waktu Terhadap Hasil Belajar Ekonomi Siswa Kelas X IPS SMA Negeri 1 Lubuk Basung. *Jurnal Ecogen*, *2*(4), 842. https://doi.org/10.24036/jmpe.v2i4.7861

Khanagha, S., Ramezan Zadeh, M. T., Mihalache, O. R., & Volberda, H. W. (2018). Embracing Bewilderment: Responding to Technological Disruption in Heterogeneous Market Environments. *Journal of Management Studies*, *55*(7), 1079–1121. https://doi.org/10.1111/joms.12348

Legesang, G. C., Sumual, H., & Parinsi, M. T. (2021). Pengaruh Penggunaan Teknologi Informasi dan Kinerja Guru Terhadap Prestasi Belajar Siswa Diera Covid-19 Pada SMK Negeri 1 Manado. *YUME: Journal of Management*, *4*(3), 31–38. https://doi.org/10.37531/yume.vxix.289

Naik, G., Chitre, C., Bhalla, M., & Rajan, J. (2020). Impact of use of technology on student learning outcomes: Evidence from a large-scale experiment in India. *World Development*, *127*, 104736. https://doi.org/https://doi.org/10.1016/j.worlddev.2019.104736

Ningsih, A. (2018). Pengaruh Keaktifan Siswa Terhadap Hasil Belajar Ekonomi Kelas X di SMAN 2 Gunung Sahilan. *Jurnal Pendidikan Ekonomi Akuntansi FKIP UIR*, *6*(2), 157–163. Retrieved from https://journal.uir.ac.id/index.php/Peka/article/view/2746

Pintrich, P. R. (2000). The Role of Goal Orientation in Self-Regulated Learning. *Handbook of Self-Regulation*, 451–502. https://doi.org/10.1016/b978-012109890-2/50043-3

Putri, D. A., Surindra, B., & Arifin, Z. (2021). Pengaruh Motivasi, Keaktifan Dan Tingkat Pemahaman Terhadap Hasil Pembelajaran Daring Mata Pelajaran Kewirausahaan Siswa. *Seminar Nasional ...*, 670–676. Retrieved from https://proceeding.unpkediri.ac.id/index.php/senmea/article/view/960

Sadirman, A. M. (2014). *Interaksi & motivasi belajar mengajar*. jakarta: PT Rajagrafindo Persada.

Saputra, B. A. K. A., Akil, & Kejora, T. B. (2021). Pengaruh Keaktifan Belajar Terhadap Hasil Belajar Siswa Pada Pembelajaran Daring Pendidikan Islam. *Jurnal Pendidikan Tambusai*, *5*(3), 5840–5847.

Sari, E. N., & Zamroni, Z. (2019). The impact of independent learning on students' accounting learning outcomes at vocational high school. *Jurnal Pendidikan Vokasi*, *9*(2), 141–150. https://doi.org/10.21831/jpv.v9i2.24776

Sondang Purba, D. A. (2020). Pengaruh Penggunaan Lembar Kerja Siswa (Lks) Dan Kemandirian Belajar Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ekonomi Kelas X Ips Sma Negeri 3 Kota Jambi. *Scientific Journals of Economic Education*, *4*(2), 1689–1699. Retrieved from www.journal.uta45jakarta.ac.id

Sudjana, N. (2012). *Penelitian Hasil Proses Belajar Mengajar*. Bandung: Remaja Rosda Karya.

Sugiyono. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. jakarta: Alfabeta.

Susanto, R., Rachmadtullah, R., & Rachbini, W. (2020). Technological and pedagogical models: Analysis of factors and measurement of learning outcomes in education. *Journal of Ethnic and Cultural Studies*, *7*(2), 1–14. https://doi.org/10.29333/ejecs/311

Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational Technology Research and Development*, *65*(3), 555–575. https://doi.org/10.1007/s11423-016-9481-2