



Factors That Influence the Success of Application of Technology in Learning: Teacher Work Motivation and Organizational Support

Johny Taroreh¹, Sjeddie Watung², Cecilia Lelly Kewo^{3*}, Febriyani Maureen Lidya

Rattu⁴ 

^{1,2,3,4} Economic Education Program, Faculty of Economics and Business, Manado State University, Sulawesi Utara, Indonesia

ARTICLE INFO

Article history:

Received November 07, 2022

Revised November 09, 2022

Accepted January 12, 2023

Available online February 25, 2023

Kata Kunci:

Mock up, Pembelajaran IPA di SD, Pembelajaran Bermakna, MDLC

Keywords:

Mock up, Science Learning, Elementary School, Meaningfull Learning, MDLC

DOI:

<https://doi.org/10.23887/jet.v7i1.53812>

ABSTRAK

Penggunaan teknologi dalam pembelajaran menjadi permasalahan karena sumber daya manusia yaitu guru yang belum mampu memanfaatkan teknologi secara maksimal. Untuk mengevaluasi pengaruh motivasi kerja guru dan dukungan organisasi terhadap penerapan teknologi dalam pembelajaran merupakan tujuan yang akan dicapai dalam penelitian ini. Penelitian ini menggunakan metode kuantitatif bersifat explanatory research causal study dengan teknik simple random sampling dan responden sebanyak 115 guru. Pengumpulan data dilakukan melalui kuesioner dan wawancara. Metode pengujian dengan uji validitas dan realibilitas. Uji validitas untuk mengkorelasikan pertanyaan dengan jumlah skor untuk masing-masing variabel. Data yang sudah dikumpulkan kemudian dianalisis dengan metode analisis statistik deskriptif. Sebelum melakukan analisis jalur dilakukan uji asumsi klasik untuk memastikan apakah model tersebut terbebas dari masalah normalitas, multikolinieritas, autokorelasi dan heteroskedastisitas dan dilanjutkan ke pengujian hipotesis. Hasil menunjukkan bahwa secara parsial motivasi kerja guru berpengaruh positif dan signifikan terhadap keberhasilan penerapan teknologi dalam pembelajaran sebesar 9,2%. Kemudian dukungan organisasi sekolah secara parsial berpengaruh positif dan signifikan terhadap keberhasilan penerapan teknologi dalam pembelajaran sebesar 36,7%. Secara simultan motivasi kerja dan dukungan organisasi berpengaruh terhadap keberhasilan penerapan teknologi dalam pembelajaran sebesar 59%. Dibandingkan dengan motivasi guru, dukungan sekolah berupa layanan infrastruktur, ketersediaan komputer, jaringan internet memberikan kontribusi lebih besar dalam meningkatkan kualitas pembelajaran.

ABSTRACT

The problem with teachers in general is that they have not fully mastered the use of technology in learning. To evaluate the effect of teacher work motivation and organizational support on the application of technology is the goal to be achieved in this study. This study used a quantitative method, namely explanatory research. Samples were taken using simple random sampling technique of 115 respondents. Data collection was carried out through questionnaires and interviews. Test method with validity and reliability tests. Validity test to correlate questions with the total score of each variable. The data that has been collected is then analyzed using descriptive statistical analysis methods. The results of the study show that partially the teacher's work motivation has a positive and significant effect on the successful application of technology by 9.2%. Then the support of school organizations partially has a positive and significant effect on the successful application of technology by 36.7%. Simultaneously work motivation and organizational support affect the success of applying technology in learning by 59%. Compared to teacher motivation, school support in the form of infrastructure services, availability of computers, internet networks makes a greater contribution to improving the quality of learning.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.
Copyright © 2023 by Author. Published by Universitas Pendidikan Ganesha.



1. INTRODUCTION

Today the development of science and technology, including the use of technology in education is very fast. Several universities had even implemented online learning in e-learning before the humanitarian disaster of the Covid-19 virus outbreak (Nácher et al., 2021; Saha et al., 2022; Sidhu & Gage, 2021). Therefore, human resources are needed, namely teachers who have the ability to acquire, manage, and utilize information technology in order to survive or even adapt to conditions that are always changing, uncertain, and competitive (Al-Hariri & Al-Hattami, 2017; Irawan et al., 2020; Yuzulia, 2021). The problem faced by teachers that the application of learning technology is still lacking due to work motivation, limited technological facilities, and the

school environment, in this case the teacher is not literate in using learning technology (Hutauruk & Sidabutar, 2020; Primasari & , Zulela, 2019).

The development of educational technology in learning is a hot topic not only in the United States but also globally throughout the world (Müller & Wulf, 2020; Tuma, 2021; Yu, 2021). Windschitl found that research researchers focused on serious studies of how teachers use technology in classroom learning. To find out how technology can change the way we learn, we must understand how we absorb knowledge (Hamilton D et al., 2004; Windschitl & Sahl, 2016). Teachers as educators must understand and understand that educational technology contributes to the learning environment in conveying knowledge, besides technological literacy is mandated in the education curriculum (Hamilton D et al., 2004; Windschitl & Sahl, 2016). Information and communication technology includes all technologies related to information handling. Learning with module designs linked to digital technologies offers many opportunities for learning as well as actionable feedback. Rapid technological developments that attract students more than reading books, and teacher-centered learning which results in difficulty developing student activities so that the development of student literacy tends to be less than optimal (Fayza et al., 2021; Fikriyah et al., 2020; Harahap et al., 2021).

One important aspect in the successful use of technology in learning is human resources or teachers (Eltem & Berber, 2021; Sudarsana et al., 2019; Zafar, 2019). Teachers still have limited skills in using technology in learning such as technical skills (mastery of technology), human relations skills, and conceptual skills. These three skills are essential for effective learning management (Sert & Boynuegri, 2016; Sudirman et al., 2022). The results showed that 30% of students preferred combined (online and face-to-face) classes across the curriculum, compared to 47% of students who preferred hands-on learning. This means that students still prefer face-to-face learning (Hamilton et al., 2020; Tempelaar, 2019).

Therefore, various government policies continue to be focused on managing the quality of education as well as possible, to create quality human resource development (Darman, 2017). Several factors influence the success of learning to improve the quality of educational outcomes, including leadership, teacher motivation to learn information technology, and school organizational support (Hasgimianti et al., 2018; Pratiwi et al., 2021). Organizational support is the extent to which an organization pays attention to the welfare of its members, listens to their complaints, tries to help them when they have problems, and treats them fairly.

The challenge in using technology in education is not only students but also teachers (Fikri et al., 2021; Straub, 2009). The use of technology in learning can affect student learning outcomes in addition to student internal and external factors (Dabbagh et al., 2019; Fatimah & Santiana, 2017). One of the internal factors that influence is work motivation, while one of the external factors is the support of the organizational environment (Kurniawan et al., 2018; Shaleh, 2016). To build a work motivation, one of the first steps that can be taken is to examine the ability of human resources to learn and change at four levels.

Based on the explanation above, the right solution to improve teachers' ability to use technology in learning is to increase motivation in teaching and the availability of supporting infrastructure / equipment support and adequate training. This is expected to increase the ability to master technology. There are differences between previous researchers where the research results show that motivation and organizational environmental support have a positive effect on the success of learning technology (Hasgimianti et al., 2018; Shaleh, 2016). The motivational factor that is attached to each individual is work motivation, and this motivation greatly influences the performance of a teacher (Ariyanti, 2020).

Motivation in working / teaching plays an important role in providing passion, enthusiasm and pleasure at work so that those who have high motivation will also have a lot of energy to carry out activities (Ningrat et al., 2020; Sudiarditha et al., 2017; Sumantri & Whardani, 2017). Teachers who have high motivation to do assignments can minimize mistakes in their work (Hartanti & Yuniarsih, 2018). It can be said that the level of teacher performance is also influenced by the teacher's work motivation. Work motivation arises because there are various needs that educators want to fulfill (Lisnawati, 2017).

From the results of previous research there are still conflicts regarding teacher motivation in using technology in learning, as well as applications using technology, so researchers want to examine how successful the application of technology is in improving student learning outcomes. So that the originality of this research lies in the emotional relationship of teachers in adapting to technology in schools. Based on the description above, the objectives to be achieved in this study are to test and analyze whether teacher work motivation can affect the success of implementing technology in learning. To test and analyze whether school organizational support can affect the success of implementing technology in learning. A significant difference between this study and previous research is that this research examines the variable success of implementing technology in learning by measuring the teacher's work motivation and school environment support.

2. METHOD

This research is research with quantitative methods. This research is a verificative research and explanatory research causal study. Judging from its purpose, this research is included in survey research. This research is included in the group of cross-sectional studies. The population in this study were teachers at junior high schools in South Minahasa Regency with a total of 922 teachers. The sampling technique used simple random sampling using sampling without replacement with an estimated error rate of 5%, taking into account the representativeness of teachers from each junior high school so that the total sample was obtained as many as 115 junior high school teachers from 12 junior high schools. Simple random sampling is a random sampling technique, and each member of the population has an equal chance of being selected.

Operationalization of variables are all variables contained in the hypothesis that has been formulated, which are as follows: The dependent variable X1 variable is motivation (5 indicators), the dependent variable X2 school organizational support (4 indicators) and the dependent variable Y is technology in learning as measured by 5 indicator, in Table 1.

Table 1. Operationalization of Variables and the Number of Questions

Variable	Indikator	Item of Questionare
Motivation (X1)	• The need for achievement	2 Item
	• Opportunity to grow	2 Item
	• Pride of work	2 Item
	• The need for recognition	2 Item
	• Salary earned	2 Item
School Organizational Support (X2)	• Teacher skills training	2 Item
	• Availability of equipment and technology,	2 Item
	• Leadership	2 Item
	• School and peer management Work.	2 Item
Learning technologies (Y)	• Number and variety of digital-based reading materials and teaching aids	2 Item
	• Number of activities in schools that utilize technology and information	2 Item
	• Number of presentations of school information using digital media,	2 Item
	• Number of school policies regarding the use and utilization of information and communication technology in the school environment	2 Item
	• The level of utilization and application of information and communication technology and communication	2 Item

Data collection techniques using primary data. Primary data is data/information collected by researchers through a list of questions to measure indicators addressed to respondents with the aim of obtaining facts and factual information from respondents, using questionnaires and interviews. To ascertain whether there is an effect of teacher work motivation and organizational support on the successful application of technology in learning in junior high schools in South Minahasa Regency, the test was carried out with the Path Analysis test. Path analysis is used with the consideration that the pattern of relationships between variables in the study is correlative and causal in nature. The method of testing the data is done by testing the validity and reliability. The validity test in this study was carried out by correlating each question with the total score for each variable. The data that has been collected is then analyzed using descriptive statistical analysis methods. Before carrying out path analysis, it is necessary to test the classical assumptions to ascertain whether the model is free from normality, multicollinearity, autocorrelation and heteroscedasticity problems and is continued with hypothesis testing.

3. RESULT AND DISCUSSION

Result

Analysis of the validity of the instrument was carried out using the Spearman rho correlation formula, where there were 5 indicators for the Y variable, 5 indicators for the X1 variable, 5 indicators for the X2 variable with each indicator consisting of 3 questions. The validity of the instrument was determined by comparing the magnitude of the r_{xy} obtained with the critical value of r at $n = 42$, $\alpha = 0.05$. The instrument validity test showed that the instrument variable X1 was valid for 15 questions, 12 questions were valid for the instrument

variable X2 and 15 questions were valid for the variable (Y). All questions are valid and reliable. The research data that has been collected is then carried out a normality test where the results show that the data is normally distributed, which can be seen from the spread of points around the diagonal axis of the graph. Another approach that can be taken to detect the normality test is to use the Kosmogorov-Smirnov statistical approach. The basis for decision making in the normality test with Kosmogorov-Smirnov is to look at the asymp,sig (2-tailed) probability value, if the asymp,sig (2-tailed) value is > 0.05, it can be said that the data is normally distributed. The Kolmogorov-Smirnov test results can be seen in Table 2.

Furthermore, the results of the multicollinearity test look at the TOL (Tolerance) and VIF (Variance Inflation Factor) multicollinearity values of each independent variable on the dependent variable. The results show that the Tolerance value is greater than 0.10 and the VIF value is less than 10, so the model is declared to have no symptoms of multicollinearity.

Table 2. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Predicted Value
N		115
Normal Parameters ^{a,b}	Mean	33.2058824
	Std. Deviation	0.86038014
Most Extreme Differences	Absolute	0.177
	Positive	0.177
	Negative	0.103
Test Statistic		0.177
Asymp. Sig. (2-tailed)		0.008^c

Next, what will be done is the heteroscedasticity test which is carried out to see if there are variable variants in the regression model that are not the same (constant). The distribution points on the Scatterplot do not show a specific pattern or spread randomly and it can be seen that the distribution is above and below zero, so it can be concluded that the regression model used does not experience symptoms of heteroscedasticity. After the classic assumption test meets the requirements, then it is continued with testing the hypothesis in the form of a t test in Table 3.

Table 3. Partial Significance Test Results (t)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
1 (Constant)	40.298	4.371		9.219	0.000		
Motivation (X1)	0.304	0.130	0.099	3.038	0.584	0.919	1.088
Organizational support (X2)	0.606	0.114	0.256	6.065	0.161	0.919	1.088

Table 3 shows the regression equation looking at the Unstandardized Coefficients column. Based on the table above, the following equation is obtained: $Y = 0.304X1 + 0.606X2 + e$. Significance test or t test was conducted to see the significance of the influence of motivational variables, organizational support variables on the success of technology implementation. The test results are as follows. First, testing the first hypothesis, namely the effect of work motivation (X1) on the success of technology in learning (Y) has a tcount of 3.038 (> ttable 2.009). Testing the hypothesis shows that there is a significant effect of work motivation on the successful application of technology in learning. Second, testing the second hypothesis, namely the effect of organizational support on the success of technology in learning (Y) has a tcount of 6.065 (> ttable 2.009). Testing the hypothesis shows that there is a significant influence of organizational support on the successful application of technology in learning.

Furthermore, the simultaneous significance test F was carried out with the aim of being used to determine the significance of the effect of the variables of work motivation and organizational support simultaneously or on learning technology. The results of the simultaneous significance test in Table 4.

Table 4. Simultaneous Significance Test Results (F)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	24.428	2	12.214	1.532	0.032
Residual	247.130	31	7.972		
Total	271.559	33			

The results can be seen that the F count is 1.532 while the resulting significance value is 0.032, meaning that organizational motivation and support simultaneously have a positive effect on the successful application of technology in learning. Partial and Simultaneous Hypothesis Test Summary showed the test results where the Fcount value of 33.825 is greater than Ftable 3.183. The test scores indicate that simultaneously (overall) work motivation (X1) and organizational support (X2) have a significant influence on the successful application of work technology (Y) in junior high school teachers in South Minahasa Regency.

The direct effect of work motivation on the successful application of learning technology to teachers in South Minahasa Regency is 9.2%. In other words, work motivation directly without being related to other variables, contributes to the success of learning technology by 9.2%. Furthermore, the indirect effect of the work motivation variable on the success of learning technology, through the organizational support variable is 6.5%. The influence given by work motivation related to the existence of organizational support, has an influence of 6.5% on the success rate of applying learning technology to junior high school teachers in South Minahasa Regency. Furthermore total effect of work motivation on technology success, both directly and indirectly through organizational support variables, is 15.8%, of the overall influence of 59.0% on learning technology in South Minahasa Regency teachers. In detail the influence of work motivation, and organizational support for learning technology simultaneously and partially, can be seen in [table 5](#)

The total effect of work motivation on technology success, either directly or indirectly through organizational support variables, is 15.8%, of the overall effect of 59.0% on learning technology for South Minahasa district teachers. In detail, the effect of work motivation, and organizational support on learning technology simultaneously and partially, in [Table 5](#).

Table 5. Recapitulation of the Effect of Work Motivation and Organizational Support on Successful Application of Technology in Learning

Variable	Direct Effect (DE)	Indirect Effect (IE)		Total Effect (TE)=(DE)+(IE)
		Via X ₁	Via X ₂	
X ₁ →Y	9.2%	0%	6.5%	15.8%
X ₂ →Y	36.7%	6.5%	0%	43.3%
Effect X ₁ and X ₂ on Y				59.0%
Other variable effect				41.0%
Total				100%

Based on the results of the analysis in [Table 5](#) above, it is known that the effect of work motivation is 15.7% and organizational support is 43.3%. So overall work motivation and organizational support have an effect of 59.0%, while the remaining 41.0% success in implementing technology in learning is influenced by other variables not involved in the study. The high influence of organizational support compared to work motivation on the success of learning technology, is in line with the approach from a theoretical perspective ([Ivancevich & Matteson, 2004](#)). Organizational support is the degree to which employees show a high level of participation in the organization, have a stronger desire to keep working and be able to continue to contribute to the achievement of goals, to be involved in their work, and to be willing to put forth considerable effort for the benefit of the South Minahasa District Education Office.

Discussion

The results showed that there was a direct effect of teacher work motivation on the successful application of technology in learning by 9.2%. The direct influence of the school's organizational environment on the successful application of technology in learning is 36.7%, so that the total direct influence and indirect influence is 59%. The results of this study are in line with the results of research which found that one of the factors that influenced the increase in student learning outcomes was also influenced by motivational factors, while one of the external factors was organizational and environmental support ([Kurniawan et al., 2018; Shaleh, 2016](#)).

The results of hypothesis testing show that the variable teacher work motivation has a positive and significant effect on the successful application of technology. The results of this study are in line with research which found that the higher the motivation, the more successful the application of technology in learning ([Haskimianti et al., 2018; Pratiwi et al., 2021; Zhu et al., 2020](#)). Things that need to be improved to motivate teachers' work are the need for achievement, opportunities for development, pride in one's own work, the need for recognition, and the salary one receives ([Ariyanti, 2020; Lisnawati, 2017](#)). Motivation will provide energy to work or direct activities while working, and cause a teacher to know the goals that are relevant between organizational goals and personal goals ([Brandmiller et al., 2020; Suprpto et al., 2021](#)).

The higher the teacher's work motivation will result in the successful application of technology in learning such as in theory and practice, in design, development, utilization, management, and evaluation of processes and resources for learning (Alaviah et al., 2016; Lisnawati, 2017; Pratiwi et al., 2021). With motivation it will provide energy to work or direct activities while working, and cause a teacher to know the goals that are relevant between organizational goals and personal goals. The higher the teacher's work motivation will result in the successful application of technology in learning such as in theory and practice, in design, development, utilization, management, and evaluation of processes and resources for learning, have a high enthusiasm to improve self-quality (Hartanti & Yuniarsih, 2018; Sutarto et al., 2020). The results showed that the direct effect of organizational support on the success of technology implementation was 36.7%. The results of testing the second hypothesis provide results indicating that the organizational support variable has a positive and significant effect on the successful application of technology in learning. The results of the analysis where the t-test of 6,065 is greater than the t-table of 2,009. It can be interpreted that the higher the school's organizational support, the better the application of technology.

School organizational support in the study was measured by indicators, namely teacher skills training, availability of equipment and technology, leadership, school management and colleagues. This is in line with the results of research showing that organizational environmental support has a positive effect on the success of learning technology (Fahmi et al., 2021; Shaleh, 2016). The skills possessed by teachers in South Minahasa Regency are still limited in the use of technology in learning such as technical skills (mastery of technology), human relations skills, and conceptual skills. All three of these skills are essential for effective learning management. The results of this previous study, where environmental factors in school organizations can increase the use of technology in learning (Kusuma et al., 2021; Sudirman et al., 2022).

School organizational support is needed so that human resources (teachers) can effectively deal with technological advances. Organizational support is very important in the application of learning technology. In this case, they include training in computer software for teachers, availability of equipment in the form of computers or internet support, principal leadership, school management and school governance and relationships with colleagues (Hamilton D et al., 2004; Windschitl & Sahl, 2016). The results of related studies also found that there was a significant relationship between organizational support and teacher readiness to use technology. This study found that teachers considered changing the learning system as a response to situations such as when there was Covid19, which was the right step. Teachers believe that changes in digital-based learning systems have a good impact on learning (Mardhatillah & Rahman, 2020; Riyanto et al., 2020).

The results of this study indicate that of the two variables studied, it can be seen that organizational support has a more dominant influence than work motivation. The high influence of organizational support compared to work motivation on the success of learning technology is in line with the approach from a theoretical perspective. Organizational support is the degree to which employees show a high level of participation in the organization, have a stronger desire to keep working and can continue to contribute to achieving goals, involve themselves in their work, and are willing to put a lot of effort into the interests of the South Minahasa District Education Office. This research has limitations, so it is recommended for researchers who want to research the same topic, it is recommended to be more specific about other indicators that have not been measured and add variables related to online learning which are limitations of this research, and the number of samples is not only junior high school teachers but taking samples of elementary and high school teachers.

4. CONCLUSION

Based on the results of the research above, it can be concluded that: Work motivation partially has a positive and significant effect on the success of implementing technology in learning for junior high school teachers in South Minahasa Regency. Likewise, partial organizational support has a positive and significant effect on the success of implementing technology in learning for junior high school teachers in South Minahasa Regency. Together, work motivation and organizational support have a positive effect on the success of implementing technology in learning for junior high school teachers.

5. REFERENCES

- Al-Hariri, M. T., & Al-Hattami, A. A. (2017). Impact of students' use of technology on their learning achievements in physiology courses at the University of Dammam. *Journal of Taibah University Medical Sciences*, 12(1), 82–85. <https://doi.org/10.1016/J.JTUMED.2016.07.004>.
- Alaviah, R., Oesman, A. M., & Wardhana, C. K. (2016). The Correlation between Teacher Teaching Skill Perception with the Students' Motivation of Learning Japanese at MAN 2 Semarang. *CHI'E: Journal of Japanese Learning and Teaching*, 5(2), 51–54. <https://doi.org/10.15294/chie.v5i2.19500>.

- Ariyanti, Y. (2020). Keterampilan Manajerial Kepala Sekolah dalam Meningkatkan Kinerja Guru. *AKSES: Jurnal Ekonomi dan Bisnis*, 14(1), 26–35. <https://doi.org/10.31942/akses.v14i1.3265>.
- Brandmiller, C., Dumont, H., & Becker, M. (2020). Teacher Perceptions of Learning Motivation and Classroom Behavior: The Role of Student Characteristics. *Contemporary Educational Psychology*, 63, 101893. <https://doi.org/10.1016/j.cedpsych.2020.101893>.
- Dabbagh, N., Fake, H., & Zhang, Z. (2019). Student Perspectives of Technology use for Learning in Higher Education. *RIED. Revista Iberoamericana de Educación a Distancia*, 22(1), 127. <https://doi.org/10.5944/ried.22.1.22102>.
- Darman, R. A. (2017). Mempersiapkan Generasi Emas Indonesia Tahun 2045 Melalui Pendidikan Berkualitas. *Edik Informatika*, 3(2), 73–87. <https://doi.org/10.22202/ei.2017.v3i2.1320>.
- Eltem, Ö., & Berber, A. (2021). The use of educational games within the structure and properties of matter unit in science class. *Participatory Educational Research*, 8(2), 200–219. <https://doi.org/10.17275/per.21.36.8.2>.
- Fahmi, A. N., Yusuf, M., & Muchtarom, M. (2021). Integration of Technology in Learning Activities: E-Module on Islamic Religious Education Learning for Vocational High School Students. *Journal of Education Technology*, 5(2), 282–290. <https://doi.org/10.23887/jet.v5i2.35313>.
- Fatimah, A. S., & Santiana, S. (2017). Teaching in 21st Century: Students-Teachers' Perceptions of Technology Use in the Classroom. *Script Journal: Journal of Linguistic and English Teaching*, 2(2), 125. <https://doi.org/10.24903/sj.v2i2.132>.
- Fayza, A. A., Nugraha, D. M., & Supriyono. (2021). Pengaruh Literasi Terhadap Perkembangan Pembelajaran Pkn. *Harmony: Jurnal Pembelajaran IPS dan PKN*, 6(1), 57–65. <https://doi.org/10.15294/harmony.v6i1.46506>.
- Fikri, M., Ananda, M. Z., & Faizah, N. (2021). Kendala Dalam Pembelajaran Jarak Jauh di Masa Pandemi Covid-19: Sebuah Kajian Kritis. *Jurnal Education and development*, 9(1), 145–148. <https://doi.org/10.37081/ed.v9i1.2290>.
- Fikriyah, F., Rohaeti, T., & Solihati, A. (2020). Peran Orang Tua dalam Meningkatkan Literasi Membaca Peserta Didik Sekolah Dasar. *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 4(1). <https://doi.org/10.20961/jdc.v4i1.43937>.
- Hamilton D, E., Dahlgren, A., & Hult, B. R. (2004). When Performance Is the Product: Problems in the Analysis of Online Distance Education. *British Educational Research Journal*, 30(1). <https://doi.org/10.1080/0141192042000279530>.
- Hamilton, L. A., Suda, K. J., Heidel, R. E., McDonough, S. L. K., Hunt, M. E., & Franks, A. S. (2020). The role of online learning in pharmacy education: A nationwide survey of student pharmacists. *Currents in Pharmacy Teaching and Learning*, 12(6). <https://doi.org/10.1016/j.cptl.2020.01.026>.
- Harahap, D. M., Harahap, R., & Solin, M. (2021). Pengembangan Bahan Ajar Membaca Untuk Kegiatan Literasi. *Jurnal Penelitian Pendidikan Bahasa dan Sastra*, 6(2), 94–98. <https://doi.org/10.32696/jp2bs.v6i2.942>.
- Hartanti, A. S., & Yuniarsih, T. (2018). Pengaruh Kompetensi Profesional Guru Dan Motivasi Kerja Terhadap Kinerja Guru Di Sekolah Menengah Kejuruan. *Jurnal Pendidikan Manajemen Perkantoran*, 3(1). <https://doi.org/10.17509/jpm.v3i1.9452>.
- Hasgimianti, Putri, R. D., & Rahima, R. (2018). Motivasi Belajar Siswa yang Berlatar Belakang Budaya Melayu dan Jawa. *Educational Guidance and Counseling Development Journal*, 1(1). <https://doi.org/10.24014/egcdj.v1i1.4948>.
- Hutauruk, A., & Sidabutar, R. (2020). Kendala pembelajaran daring selama masa pandemi di kalangan mahasiswa pendidikan matematika: Kajian kualitatif deskriptif. *Journal of Mathematics Education and Applied*, 02(01), 45–51. <https://doi.org/10.36655/sepren.v2i1.364>.
- Irawan, A. W., Dwisona, D., & Lestari, M. (2020). Psychological Impacts of Students on Online Learning During the Pandemic COVID-19. *KONSELI: Jurnal Bimbingan dan Konseling (E-Journal)*, 7(1), 53–60. <https://doi.org/10.24042/kons.v7i1.6389>.
- Ivancevich, J. M., & Matteson, M. (2004). *Organizational behaviour and work (7th Edition)*.
- Kurniawan, B., Wiharna, O., & Permana, T. (2018). Studi Analisis Faktor-Faktor yang Mempengaruhi Hasil Belajar pada Mata Pelajaran Teknik Listrik Dasar Otomotif. *Journal of Mechanical Engineering Education*, 4(2). <https://doi.org/10.17509/jmee.v4i2.9627>.
- Kusuma, W. M., Sudira, P., Hasibuan, M. A., & Daryono, R. W. (2021). The Perceptions of Vocational School Students of Video Animation-Based Learning Media to Operate Lathes in Distance Learning. *Journal of Education Technology*, 5(2). <https://doi.org/10.23887/jet.v5i2.33139>.
- Lisnawati, R. (2017). Fungsi Manajemen Kepala Sekolah, Motivasi, Dan Kinerja Guru. *Jurnal Pendidikan (Teori Dan Praktik)*, 2(2). <https://doi.org/10.26740/jp.v2n2.p143-149>.
- Mardhatillah, A., & Rahman, S. A. (2020). Readiness to Change in Higher Education: Do Demographic

- Differences in Psychosocial Predictors Matter? *Jurnal Psikologi Sosial*, 18(1). <https://doi.org/10.7454/jps.2020.08>.
- Müller, F. A., & Wulf, T. (2020). Technology-supported management education: a systematic review of antecedents of learning effectiveness. *International Journal of Educational Technology in Higher Education*, 17(1). <https://doi.org/10.1186/s41239-020-00226-x>.
- Nácher, M. J., Badenes-Ribera, L., Torrijos, C., Ballesteros, M. A., & Cebadera, E. (2021). The effectiveness of the GoKoan e-learning platform in improving university students' academic performance. *Studies in Educational Evaluation*, 70. <https://doi.org/10.1016/j.stueduc.2021.101026>.
- Ningrat, S. P., Agung, A. A. G., & Yudana, I. M. (2020). Kontribusi Etos Kerja, Motivasi Kerja, Disiplin Kerja dan Supervisi Akademik Terhadap Kinerja Guru Sd Gugus VII Kecamatan Mengwi. *Jurnal Administrasi Pendidikan Indonesia*, 3(1), 42–52. <https://doi.org/10.23887/japi.v1i1.3169>.
- Pratiwi, W. A., Prasetyo, I., & Shabrina, M. N. (2021). Faktor-Faktor yang Berpengaruh terhadap Kinerja Guru Taman Kanak-Kanak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(2). <https://doi.org/10.31004/obsesi.v5i2.970>.
- Primasari, I. F. N. D., & Zulela, F. (2019). Model Mathematics Realistic Education (RME) Pada Materi Pecahan di Sekolah Dasar. *Jurnal Basicedu*, 1(1), 1–9. <https://doi.org/10.31004/basicedu.v5i4.1115>.
- Riyanto, D. W. U., Purnama Putri, V., & Abdul Rahman, R. (2020). Effect of Perceived Organizational Support and Self-Efficacy To Change Readiness for Change in Hospital of Muhammadiyah Malang University, Indonesia. *Humanities & Social Sciences Reviews*, 8(5). <https://doi.org/10.18510/hssr.2020.8519>.
- Saha, S. M., Pranty, S. A., Rana, M. J., Islam, M. J., & Hossain, M. E. (2022). Teaching during a pandemic: do university teachers prefer online teaching? *Heliyon*, 8(1), e08663. <https://doi.org/10.1016/j.heliyon.2021.e08663>.
- Sert, N., & Boynueğri, E. (2016). Digital technology use in ELT classrooms and self-directed learning. *World Journal on Educational Technology*, 8(1), 51. <https://doi.org/10.18844/wjet.v8i1.501>.
- Shaleh, M. (2016). Pengaruh Motivasi, Faktor Keluarga, Lingkungan Kampus Dan Aktif Berorganisasi Terhadap Prestasi Akademik. *Phenomenon: Jurnal Pendidikan MIPA*, 4(2). <https://doi.org/10.21580/phen.2014.4.2.122>.
- Sidhu, R., & Gage, W. H. (2021). Enhancing the odds of adopting e-learning or community-focused experiential learning as a teaching practice amongst university faculty. *Heliyon*, 7(4). <https://doi.org/10.1016/j.heliyon.2021.e06704>.
- Straub, E. T. (2009). Understanding technology adoption: Theory and future directions for informal learning. *Review of Educational Research*, 79(2). <https://doi.org/10.3102/0034654308325896>.
- Sudarsana, I. K., Pusparani, K., Selasih, N. N., Juliantari, N. K., & Wayan Renawati, P. (2019). Expectations and challenges of using technology in education. *Journal of Physics: Conference Series*, 1175(1), 1–5. <https://doi.org/10.1088/1742-6596/1175/1/012160>.
- Sudiarditha, I. K. R., Waspodo, A. W., & Triani, N. A. (2017). Pengaruh Lingkungan Kerja dan Motivasi Kerja Terhadap Kepuasan Kerja Karyawan Pada Direktorat Umum Lembaga Pelayanan Publik Televisi Republik Indonesia. *Jurnal Manajemen*, 20(2), 278. <https://doi.org/10.24912/jm.v20i2.48>.
- Sudirman, A., Sherly, S., Candra, V., & Dharma, E. (2022). Determinants of Teacher Performance: Exploring the Role of Satisfaction and Motivation as Mediation. *Jurnal Pendidikan dan Pengajaran*, 54(1). <https://doi.org/10.23887/jpp.v54i1.32417>.
- Sumantri, M. S., & Whardani, P. A. (2017). Relationship between Motivation to Achieve and Professional Competence in the Performance of Elementary School Teachers. *International Education Studies*, 10(7). <https://doi.org/10.5539/ies.v10n7p118>.
- Suprpto, S., Hamzah, S., Yulistio, D., & Susetyo, S. (2021). The Relationship Organizational Culture, Motivation, Resilience and Leadership of Principals with the Work Ethic of Indonesian Language Teachers. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 6(1), 192–210. <https://doi.org/10.25217/ji.v6i1.1293>.
- Sutarto, S., Sari, D. P., & Fathurrochman, I. (2020). Teacher strategies in online learning to increase students' interest in learning during COVID-19 pandemic. *Jurnal Konseling dan Pendidikan*, 8(3), 129. <https://doi.org/10.29210/147800>.
- Tempelaar, D. (2019). Assessment & Evaluation in Higher Education Supporting the less-adaptive student: The role of learning analytics, formative assessment and blended learning. *Assessment and Evaluation in Higher Education*, 45(4). <https://doi.org/10.1080/02602938.2019.1677855>.
- Tuma, F. (2021). The use of educational technology for interactive teaching in lectures. *Annals of Medicine and Surgery* 62, 231–235. <https://doi.org/10.1016/j.amsu.2021.01.051>.
- Windschitl, M., & Sahl, K. (2016). Tracing Teachers' Use of Technology in a Laptop Computer School: The Interplay of Teacher Beliefs, Social Dynamics, and Institutional Culture. *SAGE Journal*. <https://doi.org/10.3102/0002831203900116>.

- Yu, Z. (2021). The effects of gender, educational level, and personality on online learning outcomes during the COVID-19 pandemic. *International Journal of Educational Technology in Higher Education*, 18(1), 1–17. <https://doi.org/10.1186/s41239-021-00252-3>.
- Yuzulia, I. (2021). The Challenges of Online Learning during Pandemic: Students' Voice. *Wanastra: Jurnal Bahasa dan Sastra*, 13(1), 08–12. <https://doi.org/10.31294/w.v13i1.9759>.
- Zafar, T. (2019). Role of Information Communication Technology (ICT) in Education and its Relative Impact. *International Journal of Engineering Research & Technology (IJERT)*, 7(04), 1–10. <https://doi.org/10.13140/RG.2.2.26357.22243>.
- Zhu, M., Bonk, C. J., & Doo, M. Y. (2020). Self-directed learning in MOOCs: Exploring the relationships among motivation, self-monitoring, and self-management. *Educational Technology Research and Development*, 68(5), 2073–2093. <https://doi.org/10.1007/s11423-020-09747-8>.