

## Analysis of Digital Literacy Influenced by Reading Intensity, Use of Online Media and Role of Parents

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### KEYWORD

Digital Literacy; Reading Intensity; Use of Online Media; The role of parents; Gender

### A B S T R A C T

*This research aims to examine and determine the impact of online media usage, parental involvement, reading frequency, and gender on digital literacy. The study employs a quantitative approach using survey methods. The sample was selected through Simple Random Sampling, utilizing the Slovin formula with a 10% margin of error, resulting in a sample size of 70 students. Data was collected via questionnaires featuring checklists and rating scales, and analyzed using descriptive statistical analysis and multiple linear regression with the aid of IBM SPSS Version 25. The findings provide an overview of digital literacy among Ad-Da'wah Vocational School students in West Jakarta, indicating that there are more female students than male students. Online media usage does not significantly impact students' digital literacy. Similarly, parental involvement does not significantly affect the digital literacy of students at Ad-Da'wah Vocational School. The study highlights that digital literacy is crucial for increasing students' reading frequency, and that reading frequency significantly influences digital literacy among these students.*



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### INTRODUCTION

The rapid advancements in digital technology in the current millennial era have made it easier for all groups to access information effortlessly and without time constraints. The millennial generation views information technology as an essential part of daily life (Baharun & Finori, 2019), to the extent that they cannot separate themselves from it (Pratiwi & Asyarotin, 2019). These technologies are continually evolving and profoundly impacting everyday activities (Nurohmah et al., 2020). Technological progress facilitates various daily tasks, such as communication, conducting transactions, and promotions, without the need for face-to-face interaction and can be performed anywhere and at any time (Sabila Fitriana et al., 2019). Similarly, technological advancements can have negative effects if not utilized properly and responsibly. There is a risk of misuse of information media and technology, which can lead to issues such as pornography, gambling, fraud, spreading false information, and provocation (Nurzakiyah, 2018).

According to Deiniatur & Cahyono (2024), Wulandari et al. (2022), and Yuvita et al. (2023), digital literacy encompasses the capability to effectively and necessarily perform digital tasks in various aspects of daily life, including work, study, and leisure. Digital literacy refers to an individual's perception, attitude, and ability to appropriately use digital media and tools to identify, access, manage, integrate, evaluate, analyze, and synthesize digital resources. It is expected that digital literacy will foster intensive communication with others in specific contexts and situations, enable individuals to engage in media expression, constructive social action, self-reflection, and the creation of new knowledge.

The 21st century, known as the century of knowledge, is driven by advancements in technology and information. This era is characterized by globalization, which has intensified competition, necessitating superior knowledge and skills. The term "digital literacy" combines "literacy" and "digital," each with distinct definitions (Syamiya et al., 2023). Lanham describes literacy as the ability to read and write, but in today's context, it extends to understanding presented information. Consequently, one of the essential skills for the 21st-century generation is literacy. There are six key literacy skills to be mastered: reading and writing literacy, numeracy, financial literacy, scientific literacy, cultural literacy, civic literacy, and digital literacy (Khomsiyatun, 2019).

According to Sujana & Rachmatin (2019) and Wahjusaputri & Nastiti (2022), one of the biggest global threats in digital literacy is the spread of negative content, including hoaxes, hate speech, bullying, crime, radicalism, pornography, and various types of fraud through digital or manual media. This issue arises from a low understanding of effectively and accurately using digital technology to receive and disseminate information, indicating low digital literacy skills. Literacy impacts both older and younger generations, in urban and rural areas, and persists through the ages. While there is no specific definition of literacy, it is crucial to note definitions provided by the UN and other international organizations, as literacy relates to global issues, not just local ones. In the era of globalization, people must master the use of advanced technology, particularly the internet, to easily search for and access information, and communicate quickly and widely (Ummah & Azmi, 2020). The rapid development of information and communication technology affects various human activities (Etik Anjar Fitriarti, 2019). Digital literacy is essential for educators to align with students' needs and trends in digital usage in classroom learning (Kurniawati et al., 2018).

The use of digital media as an aspect of digital literacy is driven by various information needs (Murdy & Putri, 2020). The user experience in this form of communication is something that must be continuously developed to enhance the ability to understand digital literacy. Additionally, the internet's development offers a wide range of information, both educational and entertainment (Coduras et al., 2016; Laretive, 2019). Many parents have expressed concerns about issues encountered during home learning, such as excessive assignments and insufficient use of technology. As primary educators, parents have the responsibility to support their children's learning at home, demonstrating how to effectively guide them in using technology for their studies (Purwanto et al., 2020).

According to Darmawan and Arifin (2021), there is a significant relationship between reading intensity and digital literacy skills. Essentially, digital literacy involves effectively using digital information media to simplify tasks. As reading habits improve, individuals become more discerning about the digital information they consume, identifying credible news sources and avoiding misinformation, such as radical content or fake news. Internet usage in India ranks third in Asia, following China and Japan, with a user base of 212.35 million people. In 2020, Banten Province ranked fifth in internet usage in Indonesia, following West Java, Central Java, East Java, and North Sumatra, with a user base of 9,980,725 people.

Factors influencing digital literacy, as noted by Kuo (2016) and McDougall et al. (2018), include: 1) the use of online media, 2) academic values, 3) the role of parents and family, and 4) reading intensity. According to Syah, Darmawan, Purnawan, et al. (2019), the factors impacting digital literacy skills are: 1) active use of online media, 2) academic achievement, 3) the role of parents or family, 4) reading intensity, and 5) digital literacy skills. Meanwhile, Rosalina et al. (2021) identify factors influencing digital literacy competency as: 1) environmental support, including the campus environment and family role, 2) socio-economic conditions, encompassing financial status and media criticality, and 3) media use intensity, referring to the use of digital media in daily activities and academic tasks. From the three perspectives mentioned above, regarding factors influencing digital literacy, there is a particular issue that needs addressing: the problem of online media usage.

Based on the outlined issues and background, researchers are interested in examining student learning outcomes in accounting education, focusing on digital literacy, the use of online media, parental involvement, and reading intensity.

Based on the theoretical studies and previous research described, the framework for this research is as follows: The use of digital media, as a component of digital literacy, is driven by various information needs. User experiences, as forms of communication, must be continuously developed to enhance digital literacy understanding. Research by Rino et al. (2022a) indicates that in education, the use of high-quality, practical e-modules is prevalent among lecturers for classroom teaching. Additionally, the internet's development provides a wealth of information, both educational and entertainment (Syah & Hermawati, 2018).

According to Diyah Ayu Nikita and Nafik Umurul Hadi (2018), Parwati et al. (2021), and Putrie & Fauzia (2019), the role of parents is crucial in fostering and supervising children's digital literacy. This helps prevent children from getting distracted by games, social media, and inappropriate sites. Syah and Darmawan (2019) assert that increased reading intensity positively impacts digital literacy skills, as these skills involve using digital information media to simplify tasks. As reading habits improve, individuals become better at discerning necessary digital information and credible news, thereby avoiding misinformation and radical content. Additionally, psychological studies on gender indicate no significant differences in mathematical ability between men and women, suggesting that other factors such as education, home environment, and reading habits play a more significant role in determining intelligence and communication skills (Syamiya et al., 2022). Additionally, gender is a characteristic inherent in men and women that is socially and culturally constructed. It is used to describe emotional differences between the sexes; for instance, women are often perceived as gentle, emotional, beautiful, and nurturing, while men are seen as brave, powerful, strong, and rational (Munisah & Khusaini, 2017). The author suggests that these gender perceptions may influence the use of digital literacy at Ad-Dakwah Vocational School in West Jakarta. The following section provides an explanation of the proposed framework composition.

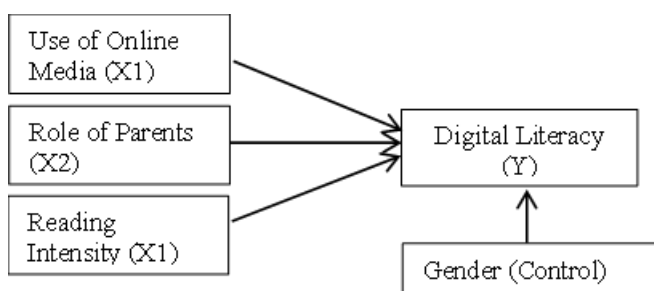


Figure 1. Framework

**RESEARCH METHODS**

In this study, a quantitative research approach was employed. Quantitative methods are utilized to examine specific populations and samples concerning digital literacy capabilities and the factors influencing digital literacy. According to Hardani MSi et al. (2020), quantitative research is systematic, planned, and structured from the beginning to the end, and is not influenced by field conditions. Additionally, a descriptive approach is used to detail the research object. This study employs a survey method, collecting data from a selected sample simultaneously using Google Forms, which were distributed through student WhatsApp groups (Latifah et al., 2023). The population, as defined by Sugiyono (2018), is a generalized area consisting of objects or subjects with specific quantities and characteristics determined by the researcher for study and conclusion drawing.. Meanwhile, Saputra and Riyadi (2016) emphasize that the population in each study must be explicitly stated, including the size of the population and the research area covered. In this study, the population consisted of students in class X. The sampling technique used was Simple Random Sampling, where sample data is randomly selected from the population without considering the strata within that population (Pascasarjana & Indonesia, 2019; Sugiyono, 2018). To determine the sample size, the Slovin formula was applied, resulting in a sample size

of 70 from a total population of 234, using a 10% margin of error.

The Digital Literacy variable (Raharjo & Winarko, 2021; Syah, Darmawan, Purnawan, et al., 2019) includes the following indicators: Access, Selection, Understanding, Analysis, Evaluation, Production, and Collaboration. The Use of Online Media variable (Rino et al., 2022; Tambunan et al., 2021) includes indicators such as Relevance or Suitability, Teacher Ability, Ease of Use, Usefulness, Learning Motivation, and Independent Learning Skills. The Role of Parents variable includes indicators such as Guiding, Motivating, Providing Facilities, Giving Instructions, Overcoming Learning Difficulties, Accompanying Learning, Maintaining Health, Giving Rewards, Checking Learning Results at School, and Reminding about Assignments/Homework (Thalib & Istiqamah, 2021). The Reading Intensity variable (Aizid, 2011; Muhammad et al., 2017) includes indicators such as Reading Frequency, Quantity of Reading Resources, Clear Reading Purpose, Critical Thinking, Varied Reading Materials, Rich Vocabulary, and Knowing How to Read Correctly (Aizid, 2011; Muhammad et al., 2017).

## RESULTS AND DISCUSSION

Based on the analysis conducted on 50 respondents who were not part of the research sample, 14 questions addressed the dependent variable (Y), Digital Literacy; 12 questions focused on the use of online media; 20 questions examined the role of parents; and 14 questions pertained to reading intensity. The test results indicated that 12 questions were invalid: 2 from the digital literacy variable, 2 from the use of online media, 2 from the role of parents, and 3 from reading intensity. After consulting with the supervisor, the invalid questions were discarded and not used in the final research.

Table 1. Instrument Test Results

Variable	Number of Respondents	Early Instruments	Valid	Invalid	Final Instruments
Digital Literacy (Y)	50	14	12	2	12
Use of Online Media (X1)	50	12	10	2	10
The role of parents (X2)	50	20	15	5	15
Reading Intensity (X3)	50	14	11	3	11
Total					48

The reliability test results show that the Cronbach's Alpha value for all variables is 0.888. This indicates that the statements used in the research meet the reliability criteria, as the Cronbach's Alpha value is greater than 0.60. Therefore, the statements are considered reliable and suitable for distribution to respondents in the study.

### Respondent Description

The characteristics of respondents based on gender among students at the West Jakarta Ad-Dakwah Vocational School for the 2021/2022 academic year are as follows. The gender distribution of digital literacy among Ad-Dakwah students shows that out of 70 respondents, 36% were male and 64% were female. This indicates that female students use digital tools more than male students. The classification also considered factors such as major, father's occupation, mother's occupation, father's income, and mother's income.

Table 2 Description of Statistical Data

	N	Minimum	Maximum	mean	Std. Deviation
Use of Online Media	70	20	50	39.26	6.093
The role of parents	70	26	72	51.51	10,632
Reading Intensity	70	22	55	40.66	8,609
Digital Literacy	70	24	57	43.51	8,578
Valid N (listwise)	70				

Source: SPSS Version 25 Output Results

Based on Table 2, the statistical description includes the minimum value, maximum value, mean, and standard deviation for a total of 70 respondents (N). The online media use variable has a mean score of 39.26,

placing it in the medium group category. The parental role variable has a mean score of 51.51, also placing it in the medium group category. The reading intensity variable has a mean score of 40.66, classifying it within the medium group category. Lastly, the digital literacy variable has a mean score of 43.51, placing it in the high group category.

Table 3. Normality Test

No.	Variable	Asym p. Sig	Condition	Information
1	Unstandardized Residual	0.058	Asym p. Sig < 0.1	Normal

Source: SPSS Version 25 Output Results

Based on Table 3, the Kolmogorov-Smirnov significance value is 0.058, which is greater than 0.01. Therefore, it can be concluded that the data follows a normal distribution.

Table 4. Linearity, Multicollinearity, Heteroscedasticity Tests

	Variable	Sig.	Information	Tolerance	VIF	Information	Sig.Hetero	Information
1.	Use of Online Media (X1)	0.111	Linear	0.675	1.481	Not occur	0.222	No Symptoms
2.	Parental Role (X2)	0.741	Linear	0.594	1,684	Not occur	0.022	No Symptoms
3.	Reading intensity (X3)	0.277	Linear	0.484	2,067	Not occur	0.721	No Symptoms

Source: Primary Data Processed Using SPSS Version 25

From the data provided, it is evident that the Variance Inflation Factor (VIF) values for the three independent variables are all below 10. Specifically, the Social Media Use variable (X1) has a VIF of 1.481, the Parental Role variable (X2) has a VIF of 1.684, and the Reading Intensity variable (X3) has a VIF of 2.067. These results indicate that there is no multicollinearity among the independent variables. Additionally, the significance values for the Online Media Use variable (X1) (0.438), the Parental Role variable (X2) (0.057), and the Reading Intensity variable (X3) (0.772) are all greater than 0.05. Therefore, it can be concluded that there is no heteroscedasticity among the independent variables in the regression model.

Table 5. Multiple Regression Analysis

	Variable	B
1.	(Constant)	8,947
2.	Use of Online Media (X1)	0.094
3.	Parental Role (X2)	0.102
4.	Reading Intensity (X3)	0.630

Source: Primary Data Processed Using SPSS 25

Table 6 Partial Test X → Y

Variable	Tcount	Ttable	Sig.
X1 → Y	0.686	1.6686	0.495
X2 → Y	1,219	1.6686	0.227
X3 → Y	5,487	1.6686	0.000

Source: Primary Data Processed Using SPSS 25

The multiple regression model employed in the study examining the impact of online media use, parental role, and reading intensity on the digital literacy of students at Ad-Dakwah Vocational School in Jakarta is represented as follows:  $LD = 26.715 + 0.094 PMO + 0.102 PO + 0.630 IM + e$ .

**Utilization of Online Media for Digital Literacy**

The analysis results from the multiple regression tests show that the t-test value for the online media use variable has a t-value of 0.686, which is less than the t-table value of 1.66864, and a significance value of 0.495,

which is greater than 0.05. Therefore, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected. This indicates that, in part, the use of online media does not have a significant effect on digital literacy. This finding aligns with research conducted by Martzoukou et al. (2020), which states that students across various fields of study generally face challenges with references, particularly in terms of the practical aspects of citation styles, citing multiple authors, and citing web content (Pratolo & Solikhati, 2020).

The internet has positive and negative impacts on its users, including students (Techataweewan & Prasertsin, 2018), while the application of learning really requires students' digital literacy skills, because e-learning is synonymous with using the internet (Binali et al., 2021). In addition, research (Park & Jang, 2016) says that not every user is equally competent in using the Internet, and some communities may still not be able to take advantage of the Internet's full potential (Hosman & Pérez Comisso, 2020). Additionally, Muthmainnah (2019) The ease of obtaining information sometimes makes students less creative. They tend to copy and paste material from the internet to fulfill their duties.

### **The Role of Parents in Digital Literacy**

The analysis results from the multiple regression tests indicate that the t-test value for the online media use variable is 1.219, which is less than the t-table value of 1.66864, and the significance value is 0.227, which is greater than 0.05. Therefore, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected. This means that, partially, the role of parents has no significant influence on digital literacy. This finding is consistent with research conducted by Wigati et al. (2022), which highlighted several sociodemographic characteristics such as age, gender, education, family, and work.

The effects are stronger for students with low socio-economic background and for low achievers. As for school characteristics, the effects of ICT skills are stronger for students in technical and vocational schools, two tracks of the Italian schooling system associated with lower social background and lower skills (Pagani et al., 2016).

### **Reading Intensity on Digital Literacy**

The analysis results from the multiple regression tests show that the t-test value for the online media use variable is 5.497, which is greater than the t-table value of 1.66864, and the significance value is 0.000. Therefore, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected. This indicates that, partially, reading intensity has a positive effect on digital literacy. This finding is supported by research conducted by Syah, Darmawan, and Purnawan (2019), which found that reading intensity significantly affects digital literacy skills. It suggests that reading intensity is a crucial factor in managing any literacy ability (Nenohai et al., 2024; Yesgat et al., 2023).

Teachers can now use the internet as a teaching medium and as a learning resource. The internet also facilitates students to learn and gain knowledge (Muthmainnah, 2019). Through interviews, data was obtained that technical skills in using digital technology and understanding valid and reliable sources of information were one of the obstacles in completing final assignments for USU Faculty of Psychology students (Akbar & Anggraeni, 2017).

### **Overview of Gender in Digital Literacy**

A gender perspective on digital literacy can be observed among students at Ad-Dakwah Vocational School in West Jakarta. The study sampled 70 respondents, with male respondents comprising 36% and female respondents comprising 64%. This indicates that women use digital technology more than men (Ajadi & Kayode, 2021; Aljundi, 2022; Ayodele & Nasiru, 2021).

Pagani et al., (2016) research shows a large and significant gender gap in mathematics test scores, such that the coefficient for males is positive and highly significant, with magnitudes ranging between 6.3 and 2.3 in different specifications. These results are consistent with existing empirical evidence: although the origins of gender differences in mathematics test results are strongly debated, their existence is recognized in most countries. Apart from that, according to (Akbar & Anggraeni, 2017) female students outperform digital literacy compared to university students, outperforming digital literacy in the "high category". Meanwhile, in the SDL

variable, it outperforms self-directed learning in the "high category".

## CONCLUSION

Based on the research and discussion results on the factors influencing digital literacy among vocational school students (a survey of Ad-Dakwah Vocational School students in West Jakarta), the findings are as follows: (1) Digital literacy levels, when viewed from a gender perspective, show that there are more female students than male students at Ad-Dakwah Vocational School in West Jakarta; (2) The use of online media does not significantly impact the digital literacy of students at Ad-Dakwah Vocational School in West Jakarta; (3) Parental involvement does not significantly influence the digital literacy of these students, indicating that increasing students' reading intensity is necessary for improving digital literacy; (4) Reading intensity significantly affects the digital literacy of students at Ad-Dakwah Vocational School in West Jakarta.

## REFERENCES

- Aizid, R. (2011). *Bisa Baca Secepat Kilat (Super Quick Reading)*.
- Ajadi, M. T., & Kayode, F. E. (2021). Socio-cultural determinants of female students' participation in school sports in Kogi State, Nigeria. *Journal of Education and Learning (EduLearn)*, 15(2), 312–319. <https://doi.org/10.11591/edulearn.v15i2.16941>
- Akbar, M. F., & Anggraeni, F. D. (2017). Teknologi Dalam Pendidikan : Literasi Digital dan Self-Directed Learning pada Mahasiswa Skripsi. *Indigenous: Jurnal Ilmiah Psikologi*, 2(1), 28–38. <https://doi.org/10.23917/indigenous.v1i1.4458>
- Aljundi, K. M. (2022). Impact of the introduction to special education course in improving attitudes among handicapped individuals. *Journal of Education and Learning (EduLearn)*, 16(3), 418–424. <https://doi.org/10.11591/edulearn.v16i3.20499>
- Ayodele, A. A., & Nasiru, O. I. (2021). Effect of guided-discovery technique on Colleges of Education Social Studies students' learning outcome. *Journal of Education and Learning (EduLearn)*, 15(3), 390–396. <https://doi.org/10.11591/edulearn.v15i3.20300>
- Baharun, H., & Finori, F. D. (2019). Smart Techno Parenting: Alternatif Pendidikan Anak Pada Era Teknologi Digital. *Jurnal Tatsqif*, 17(1), 52–69. <https://doi.org/10.20414/jtq.v17i1.625>
- Binali, T., Tsai, C. C., & Chang, H. Y. (2021). University students' profiles of online learning and their relation to online metacognitive regulation and internet-specific epistemic justification. *Computers and Education*, 175. <https://doi.org/10.1016/j.compedu.2021.104315>
- Coduras, A., Saiz-Alvarez, J. M., & Ruiz, J. (2016). Measuring readiness for entrepreneurship: An information tool proposal. *Journal of Innovation and Knowledge*, 1(2), 99–108. <https://doi.org/10.1016/j.jik.2016.02.003>
- Darmawan, D., & Arifin, S. (2021). The Studi Empiris tentang Perilaku Konsumen Produk Air Minum dalam Kemasan Ditinjau dari Variabel Harga dan Kesadaran Merek. *Ideas: Jurnal Pendidikan, Sosial, Dan Budaya*, 7(3), 179. <https://doi.org/10.32884/ideas.v7i3.434>
- Deiniatur, M., & Cahyono, B. Y. (2024). Digital literacy practices of novice English as a foreign language teacher in writing research articles for publication. *Journal of Education and Learning (EduLearn)*, 18(1), 165–172. <https://doi.org/10.11591/edulearn.v18i1.20899>
- Diyah Ayu Nikita, & Nafik Umurul Hadi. (2018). Pengaruh Status Sosial Ekonomi Rumah Tangga Dan Lingkungan Keluarga Terhadap Perilaku Konsumtif Siswa Kelas Viii Smp Negeri 1 Karangrejo Tahun Ajaran 2017/2018. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 8(1).
- Etik Anjar Fitriarti. (2019). Urgensi Literasi Digital Dalam Menangkal Hoax Informasi Kesehatan Di Era Digital. *Journal Of Communication Studies P-ISSN*, 4(2).
- Hardani MSi, A., Ustiawaty, J., & Juliana Sukmana, D. (2020). *Metode Penelitian Kualitatif & Kuantitatif* (A. Md. , AK Husnu Abadi, Ed.; 1st ed.). CV. Pustaka Ilmu Group. <https://www.researchgate.net/publication/340021548>
- Hosman, L., & Pérez Comisso, M. A. (2020). How do we understand “meaningful use” of the internet? Of divides, skills and socio-technical awareness. *Journal of Information, Communication and Ethics in Society*, 18(3), 461–479. <https://doi.org/10.1108/JICES-05-2020-0055>

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- Khomsiyatun, U. (2019). Pola Pengembangan Literasi Bahasa Pada Anak Studi Kasus Di Paud Wadas Kelir. *Jurnal Metabasa*, 1(2).  
<https://doi.org/10.18261/issn1891-943x-2006-01-03>
- Kuo, N.-C. (2016). Promoting Family Literacy Through the Five Pillars of Family and Community Engagement (FACE). In *School Community Journal* (Vol. 26, Issue 1).  
<http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Kurniawati, N., Maolida, E. H., & Anjaniputra, A. G. (2018). The praxis of digital literacy in the EFL classroom: Digital-immigrant vs digital-native teacher. *Indonesian Journal of Applied Linguistics*, 8(1), 28–37.  
<https://doi.org/10.17509/ijal.v8i1.11459>
- Laretive, J. (2019). Information Literacy, Young Learners and the Role of the Teacher Librarian. *Journal of the Australian Library and Information Association*, 68(3), 225–235.  
<https://doi.org/10.1080/24750158.2019.1649795>
- Latifah, W., Khusaini, K., & Wahab, A. Y. L. (2023). Determinasi Pendidikan Kewirausahaan, Penggunaan Media Sosial, dan Lingkungan Keluarga dalam Meningkatkan Minat Berwirausaha. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 13(1), 40. <https://doi.org/10.24036/011228550>
- Martzoukou, K., Fulton, C., Kostagiolas, P., & Lavranos, C. (2020). A study of higher education students' self-perceived digital competences for learning and everyday life online participation. *Journal of Documentation*, 76(6), 1413–1458. <https://doi.org/10.1108/JD-03-2020-0041>
- McDougall, J., Readman, M., & Wilkinson, P. (2018). The uses of (digital) literacy. *Learning, Media and Technology*, 43(3), 263–279. <https://doi.org/10.1080/17439884.2018.1462206>
- Muhammad, M., Rahadian, D., & Safitri, E. R. (2017). Penggunaan Digital Book Berbasis Android Untuk Meningkatkan Motivasi Dan Keterampilan Membaca Pada Pelajaran Bahasa Arab. *Pedagogia*, 15(2), 169. <https://doi.org/10.17509/pedagogia.v15i2.8094>
- Munisah, & Khusaini. (2017). Pengaruh Gender, Status Bekerja dan Status Perkawinan Terhadap Prestasi Akademik. *Jurnal KREATIF*, 5(1), 112–131.
- Murdy, K., & Putri, A. N. (2020). Kompetensi Literasi Digital Mahasiswa STKIP 'Aisyiyah Riau. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 10(1), 71. <https://doi.org/10.24036/011084550>
- Muthmainnah, N. (2019). A Correlational Study of Digital Literacy Comprehension Toward Students' Writing Originality. *Langkawi: Journal of The Association for Arabic and English*, 5(1), 45.  
<https://doi.org/10.31332/lkw.v5i1.1151>
- Nenohai, J. M. H., Dao Samo, D., Garak, S. S., Rimo, I. H. E., & Soko, I. P. (2024). Preservice mathematics teacher knowledge of higher order thinking skills. *Journal of Education and Learning (EduLearn)*, 18(2), 588–597. <https://doi.org/10.11591/edulearn.v18i2.21184>
- Nurohmah, R., Aini, N., Kholik, A., & Maryani, N. (2020). Literasi Media Digital Keluarga di Tengah Pandemi COVID-19. *Educivilia: Jurnal Pengabdian Pada Masyarakat*, 1(2), 159.  
<https://doi.org/10.30997/ejpm.v1i2.2834>
- Nurzakiyah, C. (2018). Literasi Agama Sebagai Alternatif Pendidikan Moral. *JPA*, 19(2).
- Parwati, L., Fatimah, S., Jannah, M., & Mahmudah, U. (2021). *Seminar Nasional PGMI 2021 Peran Keterlibatan Orangtua dalam Pengembangan Literasi Digital pada Anak Sekolah Dasar game , sosial media dan hal-hal tidak penting lainnya seperti*. 586–595.
- Pascasarjana, S., & Indonesia, U. P. (2019). *Peran teori dalam penelitian kuantitatif*.
- Pagani, L., Argentin, G., Gui, M., & Stanca, L. (2016). The impact of digital skills on educational outcomes: evidence from performance tests. *Educational Studies*, 42(2), 137–162.  
<https://doi.org/10.1080/03055698.2016.1148588>
- Park, Y. J., & Jang, S. M. (2016). African American Internet Use for Information Search and Privacy Protection Tasks. *Social Science Computer Review*, 34(5), 618–630. <https://doi.org/10.1177/0894439315597429>
- Pratiwi, A., & Asyarotin, E. N. K. (2019). Implementasi literasi budaya dan kewargaan sebagai solusi disinformasi pada generasi millennial di Indonesia. *Jurnal Kajian Informasi & Perpustakaan*, 7(1).  
<https://doi.org/10.24198/jkip.v7i1.20066>
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- Pratolo, B. W., & Solikhati, H. A. (2020). Investigating teachers' attitude toward digital literacy in EFL classroom. *Journal of Education and Learning (EduLearn)*, 15(1), 97–103. <https://doi.org/10.11591/edulearn.v15i1.15747>
- Purwanto, A., Asbari, M., Fahlevi, M., Mufid, A., Agistiawati, E., Cahyono, Y., & Suryani, P. (2020). Impact of Work From Home (WFH) on Indonesian Teachers Performance During the Covid-19 Pandemic: An Exploratory Study. *International Journal of Advanced Science and Technology*, 29(5), 6235–6244. <https://www.researchgate.net/publication/341413246>
- Putria, H., Maula, L. H., & Uswatun, D. A. (2020). Analisis Proses Pembelajaran dalam Jaringan (DARING) Masa Pandemi Covid- 19 Pada Guru Sekolah Dasar. *Jurnal Basicedu*, 4(4), 861–870. <https://doi.org/10.31004/basicedu.v4i4.460>
- Putrie, C. A. R., & Fauzia, M. (2019). Pengaruh Dukungan Sosial Orang Tua Terhadap Prestasi Belajar Siswa SMP Angkasa Halim Perdana Kusuma Jakarta Timur. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 9(2), 177. <https://doi.org/10.24036/011068980>
- Raharjo, N. P., & Winarko, B. (2021). Analisis Tingkat Literasi Digital Generasi Milenial Kota Surabaya dalam Menanggulangi Penyebaran Hoaks. *Jurnal Komunika: Jurnal Komunikasi, Media Dan Informatika*, 10(1), 33. <https://doi.org/10.31504/komunika.v10i1.3795>
- Rino, R., Afdal, Z., Armida S, A. S., Adman, A., Latif, A., Khairunnisa, R., & Yendi, M. S. (2022a). E-modul: Alternatif Media Pembelajaran Online Untuk Perkuliahan Sistem Informasi Manajemen. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 12(2), 188. <https://doi.org/10.24036/011207590>
- Rino, R., Afdal, Z., Armida S, A. S., Adman, A., Latif, A., Khairunnisa, R., & Yendi, M. S. (2022b). E-modul: Alternatif Media Pembelajaran Online Untuk Perkuliahan Sistem Informasi Manajemen. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 12(2), 188. <https://doi.org/10.24036/011207590>
- Rosalina, D., Yuliari, K., Setianingsih, D., & Zati, M. R. (2021). Faktor – Faktor Yang Berpengaruh Terhadap Kompetensi Literasi Digital Mahasiswa di Era Revolusi Industri 4.0. *EKONIKA Jurnal Ekonomi Universitas Kadiri*, 6(2), 294. <https://doi.org/10.30737/ekonika.v6i2.1996>
- Sabila Fitrianaa, Lucky Radi Rinandiyanab, & Dian Kurniawanc. (2019). Pengaruh Integrasi Teknologi Dan Literasi Digital Terhadap Keunggulan Bersaing Cinema 21. *Jurnal Ekonomi Manajemen*, 5(1).
- Saputra, M. R., & Riyadi, S. (2016). *Sistem Informasi Populasi dan Historikal Unit Alat-Alat Berat*.
- Sugiyono. (2018). *Metodologi Penelitian : Kuantitatif, Kualitatif dan R&D* (28th ed.). Alfabeta.
- Sujana, A., & Rachmatin, D. (2019). Literasi digital abad 21 bagi mahasiswa PGSD: apa, mengapa, dan bagaimana. In *Conference Series Journal* (Vol. 1, Issue 1).
- Syah, R., & Darmawan, D. (2019). Pemanfaatan Media Sosial Instagram Sebagai Literasi Visual Pada Pendidikan Orang Dewasa. *Jurnal AKRAB!*, 10(1), 71–80.
- Syah, R., Darmawan, D., & Purnawan, A. (2019). Analisis Faktor yang Mempengaruhi Kemampuan Literasi Digital. *Jurnal Akrab*, 10(2), 60–69. <https://doi.org/10.51495/jurnalakrab.v10i2.290>
- Syah, R., Darmawan, D., Purnawan, A., Ekonomi, F., Bisnis, I., Asmi, M., Masyarakat, P., Ilmu Pendidikan, F., & Negeri Jakarta, U. (2019). Analisis Faktor Yang Mempengaruhi Kemampuan Literasi Digital. *Jurnal AKRAB*, 10(2).
- Syah, R., & Hermawati, I. (2018). The Prevention Efforts on Cyberbullying Case for Indonesian Adolescent Social Media Users. *Jurnal Penelitian Kesejahteraan Sosial*, 17(2), 131–146.
- Syamiya, E. N., Latuconsina, H., Murdy, K., & Rahmah, A. (2023). Pengaruh Upah Minimum, Tingkat Pendidikan dan Literasi Digital Terhadap Pengangguran. *Jurnal Ecogen*, 6(4), 495. <https://doi.org/10.24036/jmpe.v6i4.15528>
- Syamiya, E. N., Lestari, S., Wulandari, D., & Ekawati, D. (2022). *Digital Literacy Analysis on Online Learning Outcomes for Macroeconomics with Gender-Mediated and Family Socio-Economics as Moderating Variables*. 8(2), 450–459.
- Tambunan, C. E., Zakarias, N., & Susanti, N. (2021). Pengembangan Website Berbasis Problem Based Learning Sebagai Media Pembelajaran Online Pada Materi Laju Reaksi. *Jurnal Inovasi Pembelajaran Kimia*, 3(1), 35–45.

- Techataweewan, W., & Prasertsin, U. (2018). Development of digital literacy indicators for Thai undergraduate students using mixed method research. *Kasetsart Journal of Social Sciences*, 39(2), 215–221. <https://doi.org/10.1016/j.kjss.2017.07.001>
- Thalib, A., & Istiqamah, N. (2021). Pengaruh Peran Orang Tua Terhadap Hasil Belajar Siswa di SD Inpres 1 Donggulu. *Jurnal Pendidikan Glasser*, 5(2), 83–92.
- Ummah, S. K., & Azmi, R. D. (2020). Pelatihan Pengembangan Perangkat Pembelajaran Berbasis Teknologi Informatika dengan Bercirikan Joyful Learning. *Jurnal Publikasi Pendidikan*, 10(2). <http://ojs.unm.ac.id/index.php/>
- Wahjusaputri, S., & Nastiti, T. I. (2022). Digital literacy competency indicator for Indonesian high vocational education needs. *Journal of Education and Learning (EduLearn)*, 16(1), 85–91. <https://doi.org/10.11591/edulearn.v16i1.20390>
- Wigati, I., Faisal, F., & Astuti, R. T. (2022). Determining digital literacy among teacher from gender perspective through the Rasch model. *Journal of Education and Learning (EduLearn)*, 16(3), 330–335. <https://doi.org/10.11591/edulearn.v16i3.20409>
- Wulandari, D., Khusaini, K., & Syamiya, E. N. (2022). Literasi Digital Sebagai Faktor Penentu Prestasi Akademik. *SAP (Susunan Artikel Pendidikan)*, 6(3).
- Yesgat, D., Melesse, S., Andargie, D., & Beyene, B. B. (2023). Effects of technology-integrated chemistry instruction on students' academic achievement and retention capacity. *Journal of Education and Learning (EduLearn)*, 17(4), 696–709. <https://doi.org/10.11591/edulearn.v17i4.21055>
- Yuvita, Y., Husain, A., Sulistyawati, A. E., Meiristiani, N., Fatimah, E., & Sunmud, S. (2023). Assessing the digital literacy competence of pre-service English teacher in Indonesia and Thailand. *Journal of Education and Learning (EduLearn)*, 17(4), 604–612. <https://doi.org/10.11591/edulearn.v17i4.20910>