



The Influence of Social Media on Students' Mathematical Creative Thinking Skills

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ABSTRACT

This research endeavors to scrutinize the mathematical creative thinking proficiencies of students and to ascertain the extent to which social media engagement impacts these abilities. The methodological framework employed herein is quantitative, adopting a descriptive research design, with data collection facilitated via survey instruments. The cohort for this investigation comprised 33 students enrolled in class X APHP at SMK Negeri 1 Pacet. To measure mathematical creative thinking skills, a test instrument was used, while social media usage was measured using a non-test instrument, namely a questionnaire. The collected data was then analysed using statistical tests with a quantitative approach, namely regression and quantitative descriptive tests. The empirical findings reveal that the aggregate mathematical creative thinking capacity among the students at SMK Negeri 1 Pacet registers at 73.5%, positioning it within a high classification. Nevertheless, a more granular examination indicates a positive correlation between social media utilization and mathematical creative thinking acumen; however, this association is characterized by diminutive strength and lacks statistical significance. Consequently, these results suggest that social media does not exert a substantial influence on the enhancement of mathematical creative thinking skills among the student population at SMK Negeri 1 Pacet.

Keywords: mathematical creative thinking skills; social media

INTRODUCTION

Education plays a fundamental role for every individual, serving as a guide towards a meaningful existence and contributing positively to society at large. Through the educational process, individuals' capacities can be enhanced, which in turn forms the foundation and crucial human resources for national development (Kasipahu et al., 2022). In line with the views of Sulistiyaningrum et al. (2023), the progress of a nation's education sector is a major determinant of that nation's growth and development. In Indonesia, the educational landscape is still in a phase of evolution, so that continuous efforts to improve quality are essential for accelerating the nation's progress (Septian & Nursofa, 2025).

The ever-evolving era presents unique challenges and opportunities. In the domain of pedagogy, the adoption of contemporary paradigms is a must. The progress that has been outlined not only encourages transformation in the education sector, but also facilitates the learning process and active participation in various activities that are in line with the current milieu (Maskur et al., 2020; Amelia & Ma'arif, 2022). This approach ensures that the learning materials and experiences gained are not only relevant but also capable of providing maximum output in the existing context (Sulistiyaningrum et al., 2023). In line with this view, Rahmani & Widayari (2017) argue that the rapid dissemination of science and

technology has led to innovative breakthroughs in various disciplines, especially in the field of education. Innovation, in this context, is defined as a progressive modification involving the development of existing entities or the creation of improvements that are different from previous conditions.

Rapid developments in the field of communication and information technology have triggered significant transformations and evolution in various dimensions of human existence. The digital era has arrived, marked by the prevalence of the internet and related devices, such as smartphones and social media platforms (Palwa et al., 2024). In addition to offering convenience, technology has required humans to become more adaptive and dynamic in order to face the challenges of rapid change. This phenomenon can be analogised as a coin with two sides, displaying positive and negative aspects in the course of life (Fanaqi, 2021). The use of social media, which is a consequence of easy internet access, is now one of the undeniable manifestations of this change. According to data from the Ministry of Communication and Information Technology, in 2020, there was a significant increase in social media users in Indonesia, namely around 10 million people from the previous year, with around 196.7 million Indonesians actively using social media in 2020, a figure equivalent to 73.7% of Indonesia's total population in 2020 (Sumantri & Dewi, 2025).

Social media is part of digital media and can take the form of social networks such as Facebook, blogs, YouTube, WhatsApp, forums, and microblogs. In addition, social media is a group of internet-based applications built on Web 2.0 technology with an ideology that enables the creation of user-generated content exchange. The use of social media among students will affect their learning outcomes (Septian et al., 2020; Olita et al., 2022).

Undeniably, every entity always has positive and negative aspects. This is also true of social media, which exhibits both sides, manifested in constructive and destructive impacts. Regarding the negative implications of social media, as stated by (Zahro, 2021) excessive consumption of platforms such as Facebook, Snapchat, Instagram, and the like has the potential to trigger adverse conditions, including emotional disruption, behavioural anomalies, and the manifestation of uncomfortable physical symptoms when use is discontinued. Social media addiction syndrome, to a significant extent, can be attributed to the social ecosystem catalysed by the existence of digital social networks. This incessant interaction, in turn, contributes to the proliferation of various interpersonal problems, including but not limited to neglect of real-world relationships, professional and academic obligations, and physical well-being, all of which can lead to an escalation of negative feelings in individuals (Hanif & Nerrahim, 2022).

Despite the negative impacts of social media described above, social media also offers various positive benefits. As stated by Khairuni (2016), the advantages of using social media include: 1) Facilitation of the learning process; this platform can be used as a collaborative tool for academic discussions with classmates about assignments, including searching for relevant information; 2) Increased social connectivity; social media facilitates the formation of new relationships and the maintenance of relationships with old acquaintances, including individuals from educational backgrounds, social environments, and previous online interactions; 3) Reduction of stress and academic fatigue; social media can serve as a mechanism for releasing tension after an intensive period of study. Examples include participation in humorous online interactions, games, and other recreational

activities. Furthermore, a study conducted by Upshaw et al. (2022) at the University of Arkansas, published in the journal *Translational Issues in Psychological Science*, investigated the correlation between social media consumption, divergent thinking, and the realisation of creative achievements in the real world. The findings of this study indicate that creative achievements realised in real-life contexts have a positive association with the frequency of active engagement in social media use. Based on this correlation, it can be concluded that the optimal and strategic use of social media as a didactic instrument has the potential to increase the creative thinking capacity of students.

Referring to Ahmadi's analysis (Kamalia & Ruli, 2022), the creative thinking process can be defined as a series of mental activities oriented towards the derivation of original ideas from the accumulation of thoughts, information, conceptual frameworks, recorded experiences, and internalised knowledge bases. Furthermore, Nurani et al. (2020) argue that creative thinking encompasses four fundamental dimensions: 1) fluency, which refers to the capability to generate relevant and targeted ideas; 2) flexibility, which refers to the competence in finding various approaches to solving a problem; 3) originality, which is defined as the ability to formulate responses that are unique and different from the norm; and 4) elaboration, which relates to the expertise in comprehensively describing and detailing responses. In line with this, Putri et al. (2020) articulate indicators of creative thinking in detail, including: 1) Fluency, which is divided into: (a) The ability to generate ideas, solutions, or questions in large numbers continuously; (b) The capacity to propose various alternative methods or suggestions in carrying out activities; (c) The ability to explore more than one alternative answer; 2) Flexibility, which includes: (a) Developing a variety of ideas, solutions, or questions; (b) Analysing a problem from a multifaceted perspective; (c) Identifying various options or different lines of thought; (d) The ability to adapt review methods or mindsets; 3) Originality, including: (a) The emergence of new and distinctive expressions; (b) The formulation of unconventional approaches; (c) The capacity to form unusual syntheses of components; and 4) Elaboration, including: (a) Substantive improvement and development of a concept or output; (b) Addition or detailing of an entity, abstraction, or situation to make it more appealing. Sumarni & Adiasuty (2019) argue that mathematics is a manifestation of creativity that explores the elegance of axiomatic structures, theorems, relations, logic, and other related elements. All of this captivates researchers thanks to its inherent logical integrity. Thus, we can conclude that creative thinking plays an important role in mathematics learning, and therefore creative thinking is a skill that needs to be considered.

Based on previous research conducted by (Utami et al., 2015) concerning "The Effect of the Instagram-Assisted Project-Based Learning Model on the Creative Thinking Ability of Grade X Students at SMA Negeri 8 Surakarta," have established a demonstrable impact of an Instagram-enhanced Project-Based Learning (PjBL) pedagogical approach on students' creative ideation capabilities. This conclusion is substantiated by the empirical data, which indicate a superior average performance in the experimental cohort (82.72) compared to the control group (77.12). Concurrently, research undertaken by (Hanif & Nerrahim, 2022), titled "The Influence of Social Media on Students' Creative Thinking Skills," identified a discernible, albeit elementary, effect of social media engagement on the cultivation of mathematical creative thinking among students.

Distinct from prior investigations, the present research endeavors to explicitly delineate the direct impact of social media engagement, posited as the principal independent variable, on students' mathematical creative cognition, irrespective of any prescribed pedagogical framework. Consequently, this inquiry contributes novel insights toward a more comprehensive appreciation of social media's potential as a cognitional instrument in cultivating creative thinking proficiencies, especially within the domain of mathematical pedagogy.

RESEARCH METHODS

The methodological framework underpinning this investigation was quantitative, employing a descriptive design rooted in positivist philosophy. This approach is characterized by an examination of a defined population or sample, the utilization of specific instruments for data acquisition, and subsequent statistical analysis of quantitative data. The overarching objective was to empirically validate pre-established hypotheses.

The analytical technique adopted for this research was simple linear regression. This method was selected by the investigator to ascertain not only the existence of an influence exerted by social media (designated as the independent variable, X) on students' mathematical creative thinking capabilities (the dependent variable, Y), but also to quantify the magnitude of this influence. Consequently, social media served as the independent variable (X), whereas students' mathematical creative thinking abilities constituted the dependent variable (Y).

Then, to measure students' mathematical creative thinking abilities, a descriptive test technique was used, the results of which were categorized as presented in Table 1.

Table 1. Categories of Average Scores for Mathematical Creative Thinking

No.	Percentage	Category
1.	<40%	Very Low
2.	41%-55%	Low
3.	56%-70%	Medium
4.	71%-85%	High
5.	86%-100%	Very High

The assessment technique is applied to each question that has all numeracy indicators or if the question only has one or several indicators. In essence, the assessment is adjusted to the indicators contained in the question. After all the scores are obtained, they are categorised based on Table 1. The number of students who achieve a certain category can be expressed as a percentage using the following formula:

$$p = \frac{f}{N} \times 100\%$$

Description:

p = Percentage

f = The frequency for which the percentage is being sought

N = Number Of Class (frequency/number of individuals)

The cohort under investigation comprised tenth-grade pupils from SMK Negeri 1 Pacet. Specifically, the sample for this research was constituted by 33 students enrolled in the second semester of the 10th grade APHP program, all of whom maintained active

engagement with social media platforms. The methodological approach to sample selection employed was purposive sampling, a strategy wherein participants are chosen deliberately in accordance with the study's predetermined objectives. Within the framework of this investigation, the research sample was drawn from a selection of students actively utilizing social media across various classes. This selection process also involved consultation with the educational institution, leading to the designation of a single class as the focal point for the research activities.

This study uses two types of instruments, namely tests and questionnaires. The test in this study is a test of students' mathematical creative thinking abilities, while social media users are analyzed using a questionnaire. The type of test used in this study is an essay test on exponential material, consisting of two story questions, with four items in each story question, which are compiled based on indicators of mathematical creative thinking abilities: 1) fluency, 2) flexibility, 3) originality, and 4) elaboration. Meanwhile, the instrument for analyzing social media users in this study uses a questionnaire consisting of 18 statements based on indicators including: how often users access social media in a day; the duration of time spent each time accessing it; the main reasons for using social media (entertainment, information, social interaction, etc.); the emotional impact of social media use (positive or negative); the influence of social media on direct and online social interactions; the impact of social media use on daily activities and productivity; users' awareness and behavior regarding security and privacy on social media; users' level of satisfaction with their social media experience; and how social media influences users' behavior and habits.

RESULTS AND DISCUSSION

Students' Mathematical Creative Thinking Skills

The results of the descriptive test to measure students' mathematical creative thinking abilities using IBM SPSS Statistics Version 30 software are shown in Table 2.

Table 2. Descriptive Statistics of Students' Mathematical Creative Thinking Abilities

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Fluency	33	4	8	6.73	1.376
Flexibility	33	3	8	6.09	1.739
Originality	33	2	8	4.97	1.591
Elaboration	33	0	8	5.36	2.104
Rata-rata	33	4	8	5.88	1.166
Valid N (listwise)	33				

Based on Table 2, out of 33 students, the average fluency score was 6.73 or 84.125%, the average flexibility score was 6.09 or 76.125%, the average originality score was 4.97 or 62.125%, and the average elaboration score was 5.36 or 67%. Meanwhile, the average score for students' mathematical creative thinking ability across all indicators is 5.88 or 73.5%.

The standard deviation value for the fluency indicator is 1.376, for the flexibility indicator is 1.739, for the originality indicator is 1.591, and for the elaboration indicator is

2.104. Overall, the average standard deviation for students' mathematical creative thinking ability is 1.166.

The minimum score obtained by students on the fluency indicator was 4 or 50%, on the flexibility indicator was 3 or 37.5%, on the originality indicator was 2 or 25%, and on the elaboration indicator was 0 or 0%. The average minimum score for mathematical creative thinking ability obtained by students across all indicators was 4 or 50%.

Meanwhile, the maximum score for each indicator is 8 or 100%. This means that students are able to demonstrate fluency, flexibility, originality, and elaboration in solving the given mathematical problems very well. The average maximum score for mathematical creative thinking ability obtained by students across all indicators is 8 or 100%.

Based on these results, it was found that the indicator of mathematical creative thinking ability that students mastered the most was fluency with an average score of 6.73 or 84.125%. The most varied score was obtained in the elaboration indicator with the highest standard deviation compared to other indicators, namely 2.104. This was also evident from the highest minimum and maximum score range, which was 4.

There are four indicators of students' mathematical creative thinking ability, namely fluency, flexibility, originality, and elaboration. As categorized by Sudjana (Rahman et al., 2023), the categories of each indicator of mathematical creative thinking ability of students at X APHP SMK Negeri 1 Pacet are as presented in Table 3.

Table 3. Categories of Each Indicator of Mathematical Creative Thinking Ability of Students X APHP SMK Negeri 1 Pacet

No.	Indicator	Average	Description
1.	Fluency	84,125%	High
2.	Flexibility	76,125%	High
3.	Originality	62,125%	Medium
4.	Elaboration	67%	Medium

Overall, the minimum score for students' mathematical creative thinking ability is 50% in the low category, and the maximum score is 100% in the very high category. The average mathematical creative thinking ability of students at SMK Negeri 1 Pacet is 73.5% in the high category. This high category reflects that students have a high level of mathematical creative thinking ability.

Based on each indicator, the mathematical creative thinking ability of students in class X APHP at SMK Negeri 1 Pacet is categorized as high for the fluency and flexibility indicators, moderate for the originality and elaboration indicators, and high for the overall average of all indicators. The results of this study are similar to those of Pratiwi et al. (2021) which showed that subjects were able to demonstrate high-level mathematical creative thinking abilities by fulfilling all indicators of mathematical creative thinking in solving the problems given.

There are factors that influence whether a person's mathematical creative thinking ability is classified as high or not. These factors are related to factors that arise from within and outside the student in the learning process they receive. Factors that can influence learning are divided into internal and external factors. Internal factors include physiological factors related to individual health and psychological factors (including intelligence, interests, talents, motivation, maturity, and self-confidence). Meanwhile, external factors

include factors originating from parents, factors originating from schools, and factors originating from society (Suzana et al., 2021).

This is in line with the results of this study, which show a high ability to generate many relevant ideas and produce various ideas with different approaches. Furthermore, students are also able to provide unusual answers that are different from others, which are rarely given by many people, and are able to develop, add to, and enrich an idea.

The Influence of Social Media on Students' Mathematical Creative Thinking Skills

Data analysis in this study was conducted using simple linear regression and multiple linear regression tests. Before performing linear regression, prerequisite tests were first conducted through classical assumption tests. These tests consisted of several important stages aimed at ensuring that the data met the necessary assumptions, so that the regression analysis results would be more valid and could be interpreted properly. The prerequisite tests that must be performed in simple linear regression tests are normality tests, linearity tests, and heteroscedasticity tests.

Classical Assumption Test

This study used classical assumption tests, including: normality test with *Kolmogorov-Smirnov*, linearity test with *Linearity Test*, and heteroscedasticity test using *Breusch-Pagan-Godfrey*.

The following is a summary of the results of the classical assumption test using IBM SPSS Statistics Version 30, presented in Table 4.

Table 4. Classical Assumption Test Output

Classical Assumption Test	X → Y	Conclusion
Normality	0,200	Fulfilled
Linearity	0,241	Fulfilled
Heteroscedasticity	0,777	Fulfilled

Hypothesis Testing

The results of the simple linear regression test on the effect of social media on students' mathematical creative thinking abilities using IBM SPSS Statistics Version 30 are presented in Table 5.

Table 5. Output of Simple Linear Regression Test of X against Y

Independent Variable	Coefficient (B)	Sig. (p.value)	R Square
Social Media	0,174	0,666	0,006

The regression coefficient (B) of 0.174 indicates that social media has a positive effect. This means that every 1-unit increase in social media use will increase students' mathematical creative thinking ability by 0.268. Based on the significance value of $0.666 > 0.05$, H_0 is accepted. Therefore, it can be concluded that social media does not have a significant effect on students' mathematical creative thinking ability. The coefficient of determination (R Square) value obtained is 0.006. This indicates that the social media variable contributes very weakly, at 0.6%, to students' mathematical creative thinking ability.

The findings of this study indicate a very weak and insignificant positive influence of social media on students' mathematical creative thinking ability.

There is a very weak and insignificant positive correlation between social media and students' mathematical creative thinking abilities, because not all social media platforms provide space for educational content. One example is WhatsApp, which is only used as a communication tool because the content it provides is limited in time. The results of this study show that students at SMK Negeri 1 Pacet predominantly use the WhatsApp social media platform, as shown in Figure 1.

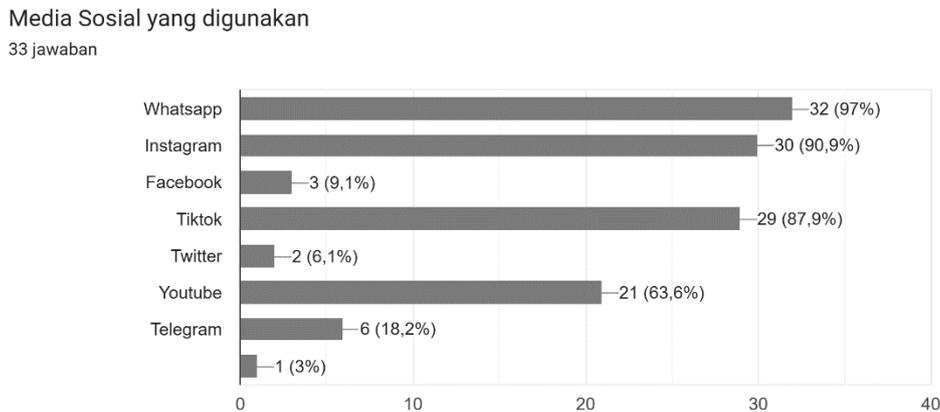


Figure 1. Social Media User Graph

Based on Figure 1, it shows that WhatsApp users dominate up to 97% of the population of social media users in class X APHP SMK Negeri 1 Pacet. Thus, the weak and insignificant positive influence of social media on students' mathematical creative thinking skills can be indicated through the social media platforms used by students. This aligns with the findings of (Istiqomah & Wijaya, 2022), who studied the use of social media, particularly WhatsApp, in mathematics education to stimulate students' mathematical thinking abilities. The results showed a weak positive influence, but it was not statistically significant.

Additionally, negative statement number 4 received a score of 72% with the statement "I use social media only for entertainment." This statement reflects the user motivation indicator, showing the purpose of students using social media. This serves as the second indication that most students use social media solely for entertainment, leading to a weak and insignificant positive influence between social media and students' mathematical creative thinking abilities. The results of this study are in line with the results of (Hanif & Nerrahim, 2022), who examined the influence of social media on students' mathematical thinking abilities. The results of that study showed that there was a positive influence between social media use and students' creative mathematical thinking, but the influence was weak and not statistically significant. This is because students use social media more for entertainment and communication purposes, rather than for learning activities that can develop higher-level thinking skills such as creative thinking. Social media such as Instagram, TikTok, or WhatsApp tend to be used for social and personal purposes, rather than as tools for solving mathematical problems (Ramly & Ayu, 2022).

CONCLUSION

The empirical evidence derived from this investigation suggests a pronounced capacity for mathematical creative thought among student participants. Nevertheless, a more granular examination reveals a correlation between social media engagement and the

aforementioned cognitive faculty, notwithstanding its negligible and statistically inconsequential magnitude.

These outcomes collectively suggest that social media platforms exert no substantial influence on the augmentation of students' mathematical creative ideation. Consequently, pedagogical practitioners are advised to advocate for the integration of social media as an instrumental resource for academic pursuits, transcending its conventional roles in interpersonal discourse and leisure. Such an approach may potentially foster a statistically significant interrelationship between social media utilization and mathematical creative acuity, thereby contributing to a more robust development of students' inventive mathematical cognitive processes.

REFERENCES

- Amelia, N. P., & Ma'arif, S. (2022). Pengaruh Pengguna Media Sosial Tiktok terhadap Kemampuan Numerasi Matematika Siswa Kelas IV di SD. *Jurnal Cakrawala Pendas*, 8(4), 1201–1207. <https://doi.org/10.31949/jcp.v8i4.2885>
- Fanaqi, C. (2021). Tiktok Sebagai Media Kreativitas di Masa Pandemi Covid-19. *Jurnal Dakwah*, 22(1), 105–130.
- Hanif, A., & Nerrahim, H. (2022). Pengaruh Media Sosial ke Atas Kemahiran Berfikir Kreatif Pelajar. *Journal of General Studies*, 206–212.
- Istiqomah, H. F. N., & Wijaya, S. H. (2022). Stimulasi Kemampuan Berpikir Matematis dalam Fisika Melalui Media Sosial. *Jurnal Pendidikan Dan Ilmu Fisika*, 8(2), 390. <https://doi.org/10.31764/orbita.v8i2.11669>
- Kamalia, N. A., & Ruli, R. M. (2022). Analisis Kemampuan Berpikir Kreatif Matematis Siswa SMP pada Materi Bangun Datar. *Jurnal Edukasi Dan Sains Matematika (JES-MAT)*, 8(2), 117–132.
- Kasipahu, M. K., Asrin, & Jaelani, A. K. (2022). Pengaruh Kompetensi Pedagogik Guru dan Motivasi Belajar Siswa terhadap Kemampuan Numerasi Siswa. *Journal of Classroom Action Research*, 4(2), 140–146. <https://doi.org/10.29303/jcar.v4i1.1721>
- Khairuni, N. (2016). Dampak Positif dan Negatif Sosial Media Terhadap Pendidikan Akhlak Anak (Studi Kasus di SMP Negeri 2 Kelas VIII Banda Aceh). *JURNAL EDUKASI: Jurnal Bimbingan Konseling*, 2(1), 91. <https://doi.org/10.22373/je.v2i1.693>
- Maskur, R., Rahmawati, Y., Pradana, K., Syazali, M., Septian, A., & Palupi, E. K. (2020). The effectiveness of problem based learning and aptitude treatment interaction in improving mathematical creative thinking skills on curriculum 2013. *European Journal of Educational Research*, 9(1), 375–383.
- Nurani, Y., Hartati, S., & Sihadi. (2020). Memacu Kreativitas Melalui Bermain. *Sinar Grafika*, 239.
- Olita, C., Tulandi, S., Sumarauw, S. J. A., & Regar, V. E. (2022). Dampak Penggunaan Media Sosial pada Hasil Belajar Matematika Siswa SMP Negeri 1 Pusomaen. *General and Specific Research*, 2(3), 328–342.
- Palwa, N., Inayah, S., Septian, A., & Larsari, V. N. (2024). Analysis of students' mathematical creative thinking ability in solving open-ended questions based on their self-concept. *International Journal of Mathematics and Mathematics Education (IJMME)*, 2(1), 60–73. <https://doi.org/10.56855/ijmme.v2i1.965>
- Pratiwi, G. D., Supandi, S., & Harun, L. (2021). Profil Kemampuan Berpikir Kreatif Matematis Siswa Ditinjau dari Kemandirian Belajar Kategori Tinggi. *Imajiner: Jurnal Matematika Dan Pendidikan Matematika*, 3(1), 78–87. <https://doi.org/10.26877/imajiner.v3i1.7184>

- Putri, H. E., Muqodas, I., & Wakhyudy, M. A. (2020). Kemampuan-kemampuan Representasi Matematis dan Pengembangan Instrumennya. *UPI Sumedang Press*.
- Rahman, H., Maya, R., Nurfauziah, P., Siliwangi, I., Terusan, J., & Sudirman, J. (2023). Analisis Kemampuan Berpikir Kreatif Siswa SMK Kelas XI pada Materi Perpangkatan, Bentuk Akar dan Logaritma. *Jurnal Pembelajaran Matematika Inovatif*, 6(2614–2155), 473–482. <https://doi.org/10.22460/jpmi.v6i2.11165>
- Rahmani, W., & Widyasari, N. (2017). Meningkatkan Kemampuan Berpikir Kreatif Matematis Siswa Melalui Media Tangram. *Holistika Jurnal Ilmiah PGSD*, 1(2), 131–136.
- Ramly, R. A., & Ayu, S. (2022). Pengaruh Media Sosial terhadap Hasil Belajar Siswa. *Jurnal Kependidikan Media*, 11(1), 34–38.
- Septian, A., & Nursafa, W. (2025). Pengaruh Media Sosial Tiktok terhadap Numerasi Siswa. *Wacana Akademika: Majalah Ilmiah Kependidikan*, 9(1), 91-98. <https://doi.org/10.30738/wacanaakademika.v9i1.19830>
- Septian, A., Sugiarni, R., & Monariska, E. (2020). The application of android-based geogebra on quadratic equations material toward mathematical creative thinking ability. *Al-Jabar: Jurnal Pendidikan Matematika*, 11(2), 261-272. <https://doi.org/10.24042/ajpm.v11i2.6686>
- Sulistiyaningrum, F., S, H. T. M., & Karolina, V. (2023). Pengaruh Media Pembelajaran Video Tiktok Materi Interaksi Desa Kota terhadap Hasil Belajar Geografi pada Siswa SMAN 9 Pontianak. *Jurnal Pendidikan Dan Pembelajaran*, 4, 2413–2420.
- Sumantri, B. N., & Dewi, I. S. (2025). Pengaruh Penggunaan Aplikasi Tiktok terhadap Berpikir Kreatif Siswa SMA Muhammadiyah KP PON. *Jurnal Ilmiah PGSD STKIP Subang*, 11(01), 212–219.
- Sumarni, S., & Adiastuty, N. (2019). Perbandingan Kemampuan Berpikir Kreatif Matematis antara Siswa Yang Mendapatkan Model Mind Mapping Berbasis Pengoptimalan Fungsi Otak Kanan dan Model Problm Based Learning. *Jurnal Edukasi Dan Sains Matematika ...*, 5(1), 30–42.
- Suzana, Y., Jayanto, I., & Farm, S. (2021). *Teori Belajar & Pembelajaran*. Literasi Nusantara.
- Upshaw, J. D., Davis, W. M., & Zabelina, D. L. (2022). iCreate: Social Media Use, Divergent Thinking, and Real-Life Creative Achievement. *Translational Issues in Psychological Science*, 8(1), 125.
- Utami, R. P., Probosari, R. M., & Fatmawati, U. (2015). Pengaruh Model Pembelajaran Project Based Learning Berbantu Instagram terhadap Kemampuan Berpikir Kreatif Siswa Kelas X SMA Negeri 8 Surakarta. *Bio-Pedagogi*, 4(1), 47–52.
- Zahro, S. (2021). Dampak Media Sosial Tiktok terhadap Perilaku Pencarian Informasi di Pondok Pesantren Al Mahrusiyah III Ngampel Asrama Al Misky. *Jurnal Pendidikan Dan Riset*.