



The Effectiveness of the Technological Pedagogical and Content Knowledge Approach Using Canva Media in Teaching Anecdote Writing Skills

Nurdin^{1*}, Sri Mulyanti², Aan Hasanah³

¹²³Program Magister Pendidikan Bahasa dan Sastra Indonesia, Universitas Suryakencana, Jawa Barat, Indonesia

*E-mail : sahabatnurdin29@gmail.com

ABSTRACT

This study aims to describe: 1) the pre-test mean score for anecdotal text writing skills; 2) the post-test mean score for anecdotal text writing skills; and 3) the effectiveness of the Technological Pedagogical and Content Knowledge (TPCK) approach using Canva media in improving learning outcomes regarding anecdotal text writing skills—specifically transitioning from linear narrative to multimodal literacy. The study employed a quantitative descriptive method via a quasi-experimental design (specifically, a one-group pre-test-post-test design) conducted during the even semester of the 2025/2026 academic year with Grade X students at SMK Vancanitty. The study population consisted of 26 Grade X students who participated in the pre-test, the instruction on anecdotal text writing skills (transitioning from linear narrative to multimodal literacy) using the TPCK approach with Canva media, and the post-test. A sample of 25 students was determined using a statistical formula and selected via simple random sampling without replacement. Data on learning outcomes regarding anecdotal text writing skills (transitioning from linear narrative to multimodal literacy) were collected using a test instrument. Pre-test and post-test data were analyzed using inferential statistics (specifically, a one-sample t-test), while data regarding the effectiveness of the approach and learning media were analyzed using a paired-sample t-test. The research results indicate: 1) the pre-test mean score for anecdotal text writing skills fell into the low category; 2) the post-test mean score for anecdotal text writing skills fell into the low category; and 3) the use of the TPCK approach via Canva media proved effective in improving learning outcomes for anecdotal text writing skills (transitioning from linear narrative to multimodal literacy), as the t-test yielded a significance value of 0.00 ($p < 0.01$).

Keywords : technological pedagogical content knowledge, canva media, teaching, anecdote writing skills

INTRODUCTION

Technological Pedagogical and Content Knowledge (TPCK) is one of many instructional approaches. Through this approach, teachers gain experience in integrating information and communication technology (ICT) into their teaching activities. This perspective holds that teachers need to combine three knowledge domains—technical, pedagogical, and content knowledge—when integrating ICT (Mishra & Koehler, 2006). In the 21st century, information technology has advanced rapidly and become essential in various activities, including work and education. This framework aims to understand the interaction between TPCK and technology,

enabling teachers to deliver effective instruction using technology (Setiawan et al., 2018; Nuruzzakiah et al., 2022; Walidaian et al., 2021). TPCK is considered a promising framework for equipping teachers in Indonesia with modern technology to address challenges related to integrating computing and information technology into the teaching process (Warsito, 2009; Shing et al., 2015; Setyowati & Rachmajanti, 2023). Implementing technology in schools and classrooms is crucial, as it supports the understanding of complex concepts. Teachers must master technology and help students become collaborative, creative, and workforce-ready. In the

Submitted
18/08/2026

Accepted
29/08/2026

Published
01/09/2026

Citation	Nurdin, N., Mulyanti, S., & Hasanah, A. (2026). The Effectiveness of the Technological Pedagogical and Content Knowledge Approach Using Canva Media in Teaching Anecdote Writing Skills. <i>Jurnal Pembelajaran Bahasa dan Sastra</i> , Volume 5, Nomor 5, September 2026, 4045-5054. DOI: https://doi.org/10.55909/jpbs.v5i5.1824
----------	--

Publisher
Raja Zulkarnain Education Foundation

21st century, teachers are expected to master TPACK to design instruction that integrates subject matter, pedagogy, and technology (Hapsari et al., 2022; Harisa et al., 2022; Sinaga et al., 2022).

Instructional approaches may utilize various media, ranging from conventional to electronic formats (Arsyad, 2016; Sriwismaningsih & Purnawan, 2023).

According to Melinda (2021), Razak (2020), instructional media are used to assist both teachers and students in achieving learning objectives. Data from the Ministry of Education and Culture of the Republic of Indonesia indicates that students' writing creativity remains low, with only 40% of students feeling confident in composing texts (Kemdikbud, 2022). In this context, the use of digital media such as Canva is expected to serve as an effective solution for enhancing students' creativity.

Canva is an intuitive and user-friendly graphic design tool that enables students to express their ideas visually. With its engaging features, Canva helps students create anecdotal texts that are not only informative but also visually appealing. Research by Arianto & Suyitno (2023), Kharissidqi & Firmansyah (2022), and Adawiyah et al. (2019) indicates that the use of visual media in instruction can boost student interest and motivation. This aligns with constructivist learning theory, which posits that students learn more effectively when actively engaged in the learning process.

In an educational context, creativity is a crucial skill that needs to be fostered. Tonra et al. (2023), Herawati et al. (2025), and Isran & Pratiwi (2021) note that creativity encompasses the ability to generate new and original ideas. When students merely sit, listen, read books, and answer questions to the best of their ability without truly grasping the material, they often become bored; this leads to diminished interest in learning, particularly in Indonesian language classes. Canva is an application that teachers can utilize to create instructional media. It is an online design platform offering a wide range of graphic design options—including presentations, posters, pamphlets,

infographics, banners, invitation cards, photo editing tools, and Facebook covers (Perangin-angin et al., 2022). Canva greatly simplifies the process of designing instructional media for teachers. As noted by Triningsih (2021) and Wardana et al. (2022), Canva facilitates technology-based learning processes for both teachers and students, fostering skills and creativity alongside other benefits; designs created with Canva can heighten student interest and motivation by presenting teaching materials in an engaging manner. Ultimately, the Canva application can enhance student learning interest while fostering creativity in both students and teachers regarding the creation of instructional media. Using Canva as a learning medium effectively facilitates students in acquiring 21st-century skills—specifically by fostering varied, non-monotonous learning experiences, utilizing multiple information sources, and leveraging technology to achieve educational goals (Miftahul, 2023). According to Tanjung (2019), learning interest warrants attention as it is a key driver of the learning process and a factor in student success. When an individual becomes interested in something, they are naturally drawn to the subject, often becoming fully engrossed in it. Students with a genuine interest in a lesson approach their studies with enthusiasm and diligence, contrasting sharply with those who merely passively receive information. High learning interest encourages active participation and leads to a better grasp of the material presented by the teacher. Consequently, boosting student interest is crucial for motivation and engagement. Utilizing Canva to create learning media offers numerous advantages: it enables the creation of diverse designs featuring animations, templates, and pagination tools that foster creativity and save time for both teachers and students when designing engaging materials—such as presentation slides, mind maps, and posters. This is facilitated by a wide array of features, including a user-friendly "drag-and-drop" interface and collaborative capabilities that allow students to work together on designs. Pelangi (2020) similarly highlights the



advantages of the Canva application, noting the following: (1) the availability of diverse, attractive designs; (2) the enhancement of creativity for both teachers and students through the use of various features; (3) time efficiency and practicality in media design; and (4) the flexibility to design using either a laptop or a mobile device.

Based on the explanation above, the problem formulations are presented as follows. First, what is the pre-test mean score for the anecdote writing skills of Grade X students at SMK Vancanitty? Second, what is the post-test mean score for the anecdote writing skills of Grade X students at SMK Vancanitty? Third, how effective is the use of TPCK and Canva media in teaching anecdote writing skills to Grade X students at SMK Vancanitty? These also constitute the research objectives for this article focusing on anecdote writing instruction. First, to describe the pre-test mean score for the anecdote writing skills of Grade X students at SMK Vancanitty. Second, to describe the post-test mean score for the anecdote writing skills of Grade X students at SMK Vancanitty. Third, to describe the effectiveness of using TPCK and Canva media in teaching anecdote writing skills to Grade X students at SMK Vancanitty.

This research offers various benefits viewed from different perspectives. First, theoretical benefits. There are several theoretical contributions in this study, including: 1) the development of technology-based learning theory; 2) the application of creativity theory in writing instruction; 3) the development of Indonesian language learning models; and 4) contributions to the study of instructional media. Second, practical benefits. For students, this article is beneficial as it enhances motivation and creativity. For Indonesian language teachers, this article can serve as an alternative instructional approach for teaching anecdote writing skills. Third, academic benefits. This article has the potential to serve as a reference for both students and lecturers writing about anecdote writing skills.

Relevant articles can be found in various online journals. Three relevant articles are pre-

sented below.

First, Latif et al. (2023) reported several findings: 1) the form and type of technology integration in education need to consider pedagogical aspects and content knowledge so that the selection and use of technology can function effectively in alignment with student characteristics and the content being taught; 2) the forms and types of technology integration utilized include virtual labs, molecular and particle animation media, smartphone applications, and augmented reality; and 3) technology integration in the learning process indicated initial, core, and closing activities requiring various approaches. Utilizing technology in education within the initial, core, and closing activities requires considering the type and form of technology used according to pedagogical aspects (setting learning objectives) and content aspects (depth and breadth of material at each stage). The study results highlighted teachers' competencies on TPACK to effectively support teaching and learning processes in alignment with global needs and challenges.

Second, Marni et al. (2023) found several findings, namely: participants demonstrated a moderate level of TPACK competency (mean score = 2.69; 67.25%). Variations in competency were observed across demographic categories. The highest competency levels were found among second-year students and those with 3–4 years of technology experience, suggesting potential developmental windows for optimal TPACK acquisition. Gender differences were also evident: male participants showed higher scores in most TPACK domains, while female participants performed better in integrated TPACK. The results highlight that TPACK development may not follow a strictly linear progression. Instead, certain periods during teacher education may serve as optimal phases for strengthening technology integration skills. These findings underscore the importance of implementing structured and targeted technology integration strategies within teacher education curriculum to support effective TPACK development among pre-service teachers.

Third, Azhar et al. (2025) found several findings, namely: the construction and utilization of TPACK-based ICT significantly contributed to reducing learning loss, with a combined influence of 88.7%. Teachers with strong TPACK competencies demonstrated greater effectiveness in implementing technology-enhanced learning. However, challenges such as low digital literacy and unequal access to infrastructure remain significant barriers. These results underscore the strategic role of teacher competence and infrastructure readiness in addressing post-pandemic learning gaps. The strong correlation between TPACK use and learning loss mitigation suggests that targeted professional development and digital transformation policies are essential. Improving TPACK competence among educators and enhancing digital infrastructure are critical to mitigating learning loss. The study advocates for national policies that institutionalize TPACK-based training and equitable technology access to promote pedagogical innovation and reduce educational disparities.

METHOD

This study employs a quantitative descriptive method using a quasi-experimental design. According to Sugiyono (2010), Fraenkel (2012), and Creswell (2012), quantitative descriptive methods are commonly used in social science research, such as in the field of education.

The quasi-experiment utilized a one-group pretest-posttest design, meaning a single class served as the research subject. The process began with a pretest, followed by instruction utilizing a specific approach and Canva as a medium, and concluded with a posttest.

The research was conducted during the even semester of the 2025/2026 academic year at SMK Vancanitty. The school is located at Jl. Wijaya Kusuma No. 39, Cipendawa, Pacet District, Cianjur Regency, West Java, Indonesia.

The study population consisted of Grade X students who participated in the pretest, the instruc-

tional sessions—focused on writing anecdotal texts by transforming linear narratives into multimodal literacy using the TPACK approach and Canva—and the posttest. The total number of students was 26.

A sample of 25 students was determined using Slavin's formula (Amin et al., 2023; Santoso, 2021; Razak, 2017). Sample members were selected via simple random sampling without replacement from the population.

Data regarding the students' ability to write anecdotal texts (transforming linear narratives into multimodal literacy) were collected using a performance-based test instrument. The writing test was systematically and objectively constructed to ensure validity (Fulcher & Davidson, 2007; Azwar, 2016; Limiansih et al., 2025).

Each student's answer sheet was evaluated to obtain a raw score for their anecdotal text writing ability. Scoring was conducted using a rubric aligned with the test specifications.

The pretest and posttest data on anecdotal text writing ability were analyzed using parametric inferential statistics. The appropriate statistical test for this data was the one-sample t-test (performed using SPSS). This parametric inferential statistical procedure was selected because the testing prerequisites—normality and homogeneity—were met. The testing criterion dictates that the null hypothesis (H_0) is accepted if the t-value has a significance level (sig.) > 0.05 . H_0 posits that the mean scores for the pre-test and post-test of anecdote writing skills are equal to the respective comparison means. The pre-test comparison mean is relatively low, whereas the post-test comparison mean is relatively high.

Data regarding the effectiveness of using the TPACK approach and Canva media in teaching anecdote writing skills were analyzed using parametric inferential statistical procedures. The appropriate test for this dataset is the paired-sample t-test (conducted via SPSS). This parametric procedure was chosen because the requirements for normality and homogeneity were satisfied.

The testing criterion is that H_0 is accepted if the t-value has a significance level (sig.) < 0.05 ; otherwise, H_0 is rejected. In this article, H_0 implies that the TPCK approach and Canva media are ineffective for teaching anecdote writing skills, while the alternative hypothesis (H_1) implies that they are effective.

RESULTS

The prerequisite tests for the one-sample t-test and paired-sample t-test are the normality test and the homogeneity test. First, the pre-test and post-test data on anecdote writing skills are normally distributed. This is indicated by a Shapiro-Wilk statistic of 0.8111 with a significance level of 0.071 (> 0.05) (Figure 1). Second, the pre-test and post-test data on anecdote writing skills are proven to be homogeneous. This result is indicated by a significance level of 0.626 (> 0.05) (Figure 2).

Tests of Normality					
Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.
0,343	25	0,068	0,811	25	0,071

a. Lilliefors Significance Correction

Figure 1
Screenshot of Normality Test via SPSS

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Based on Mean	.119	1	24	.626
Based on Median	.118	1	24	.614

Figure 2
Screenshot of Homogeneity Test via SPSS

1. Pre-test Data

The mean pre-test score for anecdote writing ability was 22.64, with a standard deviation of 0.79 (Figure 3). The one-sample t-test value for the sample's pre-test anecdote writing ability data, using a comparison mean of 23.00, was -22.09 with a sig-

nificance (sig.) of 0.19 (Figure 4). Thus, the significance value of 0.19 is greater than 0.05; therefore, the null hypothesis (H_0) is accepted. This means the observed mean pre-test score of 22.64 is equal to the comparison mean of 23.00. This mean falls into the "very low" category. In other words, the anecdote writing ability of Grade X students at SMK Vancanitty was classified as very low prior to the instruction utilizing the TPCK approach and Canva media.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
data	25	22,64	0,790	0,211

Figure 3
Screenshot of One-Sample t-Test Statistics for Pre-test Results via SPSS

One-Sample Test				
Test Value = 23				
	t	df	Sig. (2-tailed)	Mean Difference
data	1,558	24	0,138	0,333

Figure 4
Screenshot of One-Sample t-Test for Pre-test Results via SPSS

2. Post-test Data

The mean post-test score for anecdote writing ability was 91.93, with a standard deviation of 3.03 (Figure 5). The one-sample t-test value for the sample's post-test anecdote writing ability data, using a comparison mean of 91.00, was 18.63 with a significance (sig.) of 0.247 (Figure 6). Thus, the significance value of 0.247 is greater than 0.05; therefore, the null hypothesis (H_0) is accepted. This means the observed mean post-test score of 91.92 is equal to the comparison mean of 91.00. This mean falls into the "very high" category. In other words, the anecdote writing ability of Grade X students at SMK Vancanitty was classified as very

high after the instruction utilizing the TPCK approach and Canva media.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
data	25	91,93	3,030	0,973

Figure 5
Screenshot of One-Sample t-test Statistics for Post-test Results via SPSS

One-Sample Test				
	Test Value = 91			
	t	df	Sig. (2-tailed)	Mean Difference
data	1,863	24	0,247	0,367

Figure 6
Screenshot of One-Sample t-test Results (Post-test) via SPSS

3. Effectiveness of the Approach and Media

The TPCK approach and Canva media proved effective for teaching anecdote writing skills to Grade X students at SMK Vancinitty. This conclusion is based on the results of the paired-sample t-test. The pre-test mean was only 22.64, with a standard deviation of 0.798. Conversely, the post-test mean—representing learning outcomes using the TPCK approach and Canva media—was relatively high at 91.92, with a standard deviation of 3.03 (Figure 7).

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
pretest	22,64	25	0,798	0,151
posttest	91,92	25	3,030	1,785

Figure 7
Screenshot of Descriptive Statistics for Pre-test and Post-test Scores via SPSS

The paired-sample t-test value was -24.083, with a significance (sig.) value of 0.000 (Figure

8). Since the significance value of 0.00 is less than 0.05—the criterion for rejecting the null hypothesis (Ho)—it indicates that the pre-test mean score of 22.64 differs significantly from the post-test mean score of 91.92. Thus, the conclusion drawn is that the TPCK approach and Canva media are effective for improving anecdote writing skills among Grade X students at SMK Vancinitty.

Paired Samples Test			
	t	df	Sig. (2-tailed)
pretest - posttest	-24,083	24	0,000

Figure 8
Screenshot of Paired-Sample t-test Results for Anecdote Writing Skills via SPSS

DISCUSSION

Low Pre-test Results

The low pre-test results regarding anecdote writing skills among Grade X students at SMK Vancinitty are understandable. This situation arose due to several factors. First is the factor of prior learning experience. The students had absolutely no prior experience in writing anecdotes; no teacher had previously guided them to develop an understanding of how to write anecdotes (Buchari, 2018; Riyanto, 2002; Arifin et al., 2019). Furthermore, the low pre-test results were attributed to the fact that students had not yet received instruction on writing anecdotal texts (Anderson & Krathwohl, 2001; Damayanti et al., 2025). Several scholarly articles report similar findings regarding low pre-test results for specific learning objectives. Hasanah et al. (2026) noted low pre-test results for short story reading comprehension, as well as for reading comprehension regarding paragraphs on mathematical topics.

High Post-test Results

The high post-test results for anecdotal text writing skills are attributed to the use of the TPCK approach and Canva as a learning medium. First, the TPCK approach enhances the cognitive ability to develop written ideas based on an-



ecdotal texts (Harisa et al., 2022; Setyowati & Rachmajanti, 2023; Nuruzzakiah et al., 2022). Second, the use of Canva is believed to reinforce the TPACK approach in teaching anecdotal text writing. Numerous studies have demonstrated that Canva effectively improves learning outcomes (Aprilia et al., 2024; Arifah & Charlina, 2025; Nur & Ria, 2023).

Teaching approaches and media create a "domino effect"; specifically, the combination of the TPACK approach and Canva is believed to boost student learning motivation. Students are motivated because the teacher facilitates critical thinking during the anecdotal text writing process through electronic media. Various online journal articles confirm the positive impact of increased learning motivation on learning outcomes (Muhammad, 2016; Andriani & Rasto, 2019; Oktiani, 2017).

CONCLUSION

First, the mean pre-test score for anecdotal text writing skills among Grade X students at SMK Vancanitty fell into the low category. Second, the mean post-test score for anecdotal text writing skills among Grade X students at SMK Vancanitty fell into the very high category. Third, the use of TPACK and the Canva platform is effective for teaching anecdote writing skills to Grade X students at SMK Vancanitty.

REFERENCES

- Adawiyah, A., Hasanah, A., & Munsir, M. F. (2019). Literasi Visual melalui Teknologi Canva: Stimulasi Kemampuan Kreativitas Berbahasa Indonesia Mahasiswa. *Proceeding Universitas Suryakencana*, 6(1), 183-187
- Amin, N. F., Garancang, S., & Abunawas, K. (2023). Konsep Umum Populasi dan Sampel dalam Penelitian. *Pilar: Jurnal Kajian Islam Kontemporer*. Volume 14 , No. 1, Juni 2023, 15-31.
- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.
- Andriani, R., & Rasto, R. (2019). Motivasi Belajar sebagai Determinan Hasil Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 4(1), 80-86.
- Aprilia, R. R., Sutarna, I. M., & Sriasih, S. A. (2024). Penerapan Project Based Learning Berbantuan Media Canva untuk Meningkatkan Keterampilan Menulis Teks Drama. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Undiksha*, Vol 14, No 2, 311-317, DOI: <https://doi.org/10.23887/jpbsi.v14i2.78851>
- Arianto, D., & Suyitno, S. (2023). Pelatihan Media Pembelajaran Inovatif Menggunakan Canva. *JePKM: Jurnal Pengabdian Kepada Masyarakat*, 4(01), 16-23.
- Arifah, D., & Charlina, C. (2025). The Effectiveness of Canva Media Using the Process Skills Approach in Learning Speech Text Writing Skills. *Jurnal Pembelajaran Bahasa dan Sastra*, 4(3), 370–381. <https://doi.org/10.55909/jpbs.v4i3.729>
- Arifin, S., Yahya, M., & Siddik, M. (2019). Strategi Komunikasi Siswa Dan Guru Kelas XI SMAN 2 Sangatta Utara Dalam Proses Pembelajaran Bahasa Indonesia. *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*, 2(1), 15-38. <https://doi.org/10.30872/diglosia.v2i1.15>
- Arsyad, A. (2016). *Media Pembelajaran*. Jakarta: RajaGrafindo Persada.
- Azhar, F., Primahardani, I., Riyantama, M. Y., Futra, D., & Sintia, A. (2025). Utilizing TPACK to Mitigate Learning Loss in Junior High Schools: An Empirical Study from Riau Province, Indonesia. *Al-Ishlah: Jurnal Pendidikan*, 17(3), 5316-5328. DOI: <https://doi.org/10.35445/alishlah.v17i3.7298>

- Azwar, S. (2016). *Sikap Manusia: Teori dan Pengukurannya*. Yogyakarta: Pustaka Pelajar.
- Buchari, A. (2018). Peran Guru dalam Pengelolaan Pembelajaran. *Jurnal Ilmiah Iqra'*, 12(2), 106-124
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. New Jersey: Pearson Practice Hall
- Damayanti, W., Widawati, R., & Hamidah, S. (2025). The Feasibility of Gurindam Writing Teaching Materials Based on Narrative Text for Grade X Using Construct Validity. *Jurnal Pembelajaran Bahasa dan Sastra*, 4(5), 983–990. <https://doi.org/10.55909/jpbs.v4i5.870>
- Fraenkel, J. R., Wallen, E. W., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Fulcher, G. & Davidson, F. (2007). *Language Testing and Assessment: An Advanced Resource Book*. New York: Routledge Applied Linguistics.
- Hapsari, N., Abidin, Z., & Arip, A. G. (2022). Analisis Faktor Jenis Kelamin, Usia dan Lama Bekerja Terhadap Kemampuan TPACK Guru IPA SMP di Kota Cirebon. *Quagga: Jurnal Pendidikan Dan Biologi*, 14(2), 113–123. <https://doi.org/10.25134/quagga.v14i2.4942>
- Harisa, H., Saenab, S., & Rusli, M. A. (2022). Penerapan Pendekatan Technological, Pedagogical, Content, Knowledge (TPACK) terhadap Kemampuan Prosedural IPA Siswa Kelas VIII SMP Telkom Makassar. *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia*, 5(2).
- Hasanah, B. N., Mujiburahman, & Noviani, B. F. (2026). Learning Mathematical Paragraph Reading Skills Using Multiple Choice Test Techniques through Special Teaching Materials. *DISCUSSANT: Journal of Language and Literature Learning*, 4(2), 121–128. <https://doi.org/10.55909/dj3l.v4i2.98>
- Hasanah, A., Subandiyono, & Halil, M. A. (2026). The Learning Short Story Reading Skills Using Innovative Strategies Based on Google Forms and Online Journal Scientific Articles. *DISCUSSANT: Journal of Language and Literature Learning*, 4(2), 105–120. <https://doi.org/10.55909/dj3l.v4i2.53>
- Herawati, N., Nuryani, N., & Saputra, A. E. (2025). Pemanfaatan Canva dalam Pembelajaran Interaktif: Kajian Kualitatif. *Jurnal Penelitian Rumpun Ilmu Teknik*, 4(1), 102-112.
- Huda, M. (2013). *Model-Model Pengajaran dan Pembelajaran: Isu-Isu Metodis dan Paradigmatik*. Yogyakarta: Pustaka Pelajar
- Irsan, I., & Pertiwi, A. (2021). Pelatihan Pembuatan Media Pembelajaran Inovatif Menggunakan Canva. *Jurnal Abdidias*, 2(6), 1412-1417.
- Kharissidqi, M. T., & Firmansyah, V. W. (2022). Aplikasi Canva sebagai Media Pembelajaran yang Efektif. *Indonesian Journal of Education and Humanity*, 2(4), 108-113.
- Latif, A., Robandi, B., Amaliah, A., Khakim, R. R., & Fatonah, N. (2023). Technological Pedagogical Content Knowledge (TPACK) Framework for Science Teachers' Competences in Facing Global Challenges and Issues: A Narrative Literature Review. *IJPTE: International Journal of Pedagogy and Teacher Education*, 7(1), 45-57. DOI: <https://doi.org/10.20961/ijpte.v0i0.74699>
- Limiansih, K., Panuluh, A. H., & Sulistyani, N. (2025). Beyond Content Validity: Comprehensive Validation of Scientific Literacy Assessment for Junior High School Teachers. *Jurnal Penelitian Pendidikan IPA*, 11(12), 802–813.



- Marni, S., Andheska, H., Tamphu, S., Wahid, A., Anggraeni, A. W., Helda, T., & Aliman, M. (2026). Analyzing TPACK Competence among Pre-Service Indonesian Language Teachers: A Quantitative Case Study. *Al-Ishlah: Jurnal Pendidikan*, 18(1), 92-105. DOI: 10.35445/alishlah.v18i1.7347
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for the Teacher Knowledge. *Teachers College Record*, 108(6), 1017-1954
- Muhammad, M. (2016). Pengaruh Motivasi dalam Pembelajaran. *Lantanida Journal*, 4(2), 87-97. <https://doi.org/10.22373/lj.v4i2.1881>
- Nur, N. H., & Ria, F. R. A. (2023). Pengembangan Media Kartu Bergambar Berbasis Aplikasi Canva pada Materi Peristiwa Proklamasi Kemerdekaan Kelas V di SDN 1 Bono Tulungagung. *Inventa*, 7(2), 112-120. <https://doi.org/10.36456/inventa.7.2.a7833>
- Nuruzzakiah, N., Hasanuddin, H., Artika, W., Supriatno, S., & Rahmatan, H. (2022). Competency Analysis of Technological Pedagogical and Content Knowledge (TPACK) Biology Teachers. *Jurnal Penelitian Pendidikan IPA*, 8(1), 325-335.
- Oktiani, I. (2017). Kreativitas Guru dalam Meningkatkan Motivasi Belajar Peserta Didik. *Jurnal Kependidikan*, 5(2), 216-232.
- Perangin-angin, L. C. A. B., Hutauruk, A. A., Prayuda, M. S., Sihotang, M., Simanjuntak, M (2022). Efektivitas Penggunaan Aplikasi CANVA sebagai Media Pembelajaran IPA SD. *Jurnal Pendidikan: Media, Strategi, dan Metode*, 2(2), 66-72.
- Razak, A. (2017). *Metode Riset: Menggapai Mixed Methods Bidang Pembelajaran Bahasa Indonesia*: UR Press.
- Razak, A., Syihabuddin, S., Damaianti, V. S., & Mulyati, Y. (2020). The Effectiveness of Islamic Characters by Approaching Constructivism in Reading Understanding Ability. *JOMSIGN: Journal of Multicultural Studies in Guidance and Counseling*, 4(2), 1-12. DOI: <https://doi.org/10.17509/jomsign.v4i2.26214>
- Riyanto, T. (2002). *Pembelajaran Sebagai Proses Bimbingan Pribadi*. Jakarta: Grasindo.
- Santoso, A. (2023). Rumus Slovin: Panacea Masalah Ukuran Sampel? *SUKSMA: Jurnal Psikologi Universitas Sanata Dharma*. Volume 4, Nomor 2, 24-43. DOI: <https://doi.org/10.24071/suksma.v4i2.6434>
- Setiawan, I., Hamra, A., & Jabu, B. (2018). Exploring A Teacher Educator's Experiences in Modeling TPACK to Create English Language Multimedia in Technology Courses. *Journal of Language Teaching & Research*, 9(5). <https://doi.org/10.17507/jltr.0905.19>
- Setyowati, L., & Rachmajanti, S. (2023). The Application of TPACK for Teaching Content Courses: Process, Students' View, and Product in Indonesian Context. *Journal of Innovation in Educational and Cultural Research*, 4(2), 209-219.
- Shing, C. L., Saat, R. M., & Loke, S. H. (2015). The Knowledge of Teaching-Pedagogical Content Knowledge (PCK). *The Malaysian Online Journal of Educational Sciences*, 3(3), 40-55.
- Sinaga, L., Simamora, P., Ningsih, W., & Destine, K. T. (2022). Analysis Technological Pedagogical Content Knowledge (TPACK) Guru IPA dalam Mengimplementasikan Lesson Study For Learning Community Berbasis E-Learning dengan Moodle. *Jurnal Inovasi Pembelajaran Fisika*, 10(3), 54-63.

- Sriwismaningsih, L., & Purnawan, P. (2023). Penilaian Siswa terhadap Pembelajaran Tari Tradisional Menggunakan Metode Pembelajaran Terpadu melalui Media Audio-Video. *GAUNG: Jurnal Ragam Budaya Gemilang*, 1(2), 81–92.
- Tanjung, R. E., & Faiza, D. (2019). Canva sebagai Media Pembelajaran pada Mata Pelajaran Dasar Listrik dan Elektronika. *Jurnal Vokasional Teknik Elektronik dan Informatika*, 7(2), 79-85.
- Tonra, W. S., Angkotasari, N., Sari, D. P., & Ikhsan, M. (2023). Menjadi Guru Kreatif melalui Aplikasi Canva. *JPM: Jurnal Pemberdayaan Masyarakat*, 8(1), 126-133.
- Walidaian, S. N., Wendari, W., & Yahya, F. (2021). Analisis Kompetensi Technology Pedagogy and Content Knowledge (TPACK) Guru SMP Plus Aisyah Samawa. *Indonesian Journal of Teacher Education*, 2(4), 322–328.
- Warsito, H. (2009). Hubungan antara Self-Efficacy dengan Penyesuaian Akademik dan Prestasi Akademik: Studi pada Mahasiswa FIP Universitas Negeri Surabaya. *PEDAGOGI: Jurnal Ilmiah Ilmu Pendidikan*, IX(1), 29–47. <http://ejournal.unp.ac.id/index.php/pedagogi>
- Wardana, M. A. W., Rizqina, A. A., Salsabilah, A. N., Handayani, D. A. P., Dewi, S. M., & Ulya, C. (2022). Pengembangan Media Pembelajaran Berbasis Aplikasi Canva dengan Model Microblogging sebagai Pembelajaran Teks Prosedur Tingkat SMP. *Jurnal Nalar Pendidikan*, 10(1), 71-79.