

The Impact of Social Media on Teachers' Teaching Creativity in Elementary Schools

Widiya Saputri Wulandari¹, Nurtanio Agus Purwanto², Agus Herwanto³, Marwan⁴

^{1,2,3,4} Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; widiyasaputri.2023@student.uny.ac.id

ARTICLE INFO

Keywords:

Educational innovation;
Teacher professional
development;
Digital pedagogy

Article history:

Received 2024-11-24
Revised 2025-05-01
Accepted 2025-06-29

ABSTRACT

This study investigates the influence of social media usage on the teaching creativity of elementary school teachers. As digital platforms increasingly become part of educational practices, understanding their role in fostering teacher creativity is essential. A descriptive quantitative approach was employed, involving 76 teachers from SD Islam Al Azhar 31 Yogyakarta. Data were collected using a closed-ended questionnaire designed around validated indicators of social media usage and teaching creativity. The instrument was pilot-tested to ensure its validity and reliability. A One-Way ANOVA test was used to analyze the relationship between social media use and teaching creativity. The findings indicate that teachers frequently utilize social media as a source of inspiration and a collaborative platform, particularly for accessing visual media, planning interactive activities, and applying diverse teaching strategies. Reported engagement in creativity-related activities showed 30% of respondents indicating "always," 25% "often," and 20% "sometimes." The ANOVA test revealed a significant relationship, with an F-value of 236.810 and a significance level of < 0.001 , indicating a strong positive correlation between social media use and teaching creativity. These results suggest that social media can effectively support the enhancement of teaching creativity by offering accessible resources and collaborative opportunities. However, the study is limited by its reliance on self-reported data and its focus on a single institution, which may affect the generalizability of the findings. This study highlights the potential of social media as a valuable tool in promoting professional creativity among teachers and serves as a reference for future teacher development programs.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Widiya Saputri Wulandari

Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; widiyasaputri.2023@student.uny.ac.id

1. INTRODUCTION

The advancement of information and communication technology has brought significant changes in various aspects of life, including in the field of education. One of the prominent phenomena is the increasing use of social media, not only among teenagers and adults but also in elementary school environments. Social media, defined as internet-based applications that enable the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Social media is now utilized as a means of communication, collaboration, and information exchange in various fields, including education (Al-

Rahmi & Zeki, 2017; Thomas & Akdere, 2013). Moreover, social media is a means to build networks and share information, both for social and professional purposes, which contributes to work efficiency and enhanced collaboration (Harrison & Veerappa, 2014). In a business context, social media not only serves as a means of communication but also helps in enhancing innovation and productivity (Georgescu & Popescu, 2015).

The use of social media among teachers can have negative impacts, especially when used excessively or not in accordance with the professional context. Research shows that intensive use of social media can lead to a decrease in productivity and teaching quality, as teachers can be distracted by social activities that are not directly related to teaching (Chen & Xiao, 2022). Additionally, excessive interaction through social media can also create blurred boundaries between personal and professional life, leading to ethical conflicts related to professionalism expectations among educators (Warnick et al., 2016). While exposure to social media content can affect teachers' mental health, triggering stress, anxiety, and dissatisfaction that impact the quality of their interactions with students (Andleeb et al., 2023). Based on an interview with the principal of SD Islam 31 Yogyakarta, social media has become an urgent issue at the school that is being addressed, both among teachers and students, where the use of social media by teachers can still be controlled through warnings, but monitoring students is more difficult due to the lack of cooperation from parents. Nevertheless, social media platforms like Facebook, Instagram, and TikTok now play a much broader role than just being sources of entertainment; they have evolved into effective communication tools and valuable learning resources, even at the elementary school level.

In the context of education, social media allows teachers to explore new approaches and methods, connect with a global community of educators, exchange ideas, share experiences, and gain inspiration from innovations by fellow educators (Seifert, 2018; Torphy et al., 2020), which helps enrich teaching methods and adapt them to the characteristics of today's students. Moreover, social media encourages teachers' creativity in developing more interactive and engaging learning activities by utilizing creative trends or popular challenges to create tasks relevant to students' daily lives, thereby creating a more contextual and enjoyable learning experience (Muls et al., 2019; Rahman et al., 2020), which ultimately increases students' active participation and deep understanding of the learning material (Nochumson, 2020).

In the National Education System Law of 2003, Article XI, paragraph 2, it is stated that educators are required to create a meaningful, enjoyable, and creative learning atmosphere. Creativity, which means the ability to produce something new (KBBI, 2008), in the context of teaching includes the teacher's efforts to create a conducive, comfortable, and challenging learning environment (Fleith, 2000). Creative teachers are able to combine new ideas, help students solve problems, analyze situations, and generate innovative concepts (Calavia et al., 2021; Fan & Cai, 2022). A learning environment that encourages creativity is characterized by the presence of choices, acceptance of different ideas, and the reinforcement of students' strengths and interests (Richardson & Mishra, 2018; Torrents et al., 2021)

This research aims to explore how the use of social media affects the teaching creativity of elementary school teachers. Social media platforms like Facebook, Instagram, and TikTok are no longer just means of communication; they have also become spaces for self-expression, broadening horizons, and building professional identities, including for teachers who need creativity in applying technology, innovative methods, and engaging materials in their teaching (Šliogerienė & Valūnaitė-Oleškevičienė, 2017). Platforms like TikTok and Instagram provide educational content that can inspire teachers to create more interactive and relevant learning activities (In'am et al., 2022), while Twitter plays a role in enhancing technology integration skills through professional development (Nochumson, 2020). This research examines the extent to which social media encourages teachers to experiment with creative techniques, enrich teaching materials, and create dynamic learning environments, as well as evaluates how interactions on social media shape their views on educational innovation (Chung & Chen, 2018). The results of this study are expected to provide an in-depth understanding of the role of social media

in supporting or limiting the creativity of elementary school teachers and its impact on classroom learning effectiveness (Kasperski & Blau, 2023).

2. METHODS

This study uses a descriptive quantitative method to systematically describe the influence of social media usage on the teaching creativity of elementary school teachers. The sample in this study consists of 76 teachers from SD Islam Al Azhar 31 Yogyakarta, who were selected using total sampling technique because the entire population of teachers at the school is considered relevant to the research objectives. The selection of this school is based on institutional characteristics that actively encourage the use of social media in learning; thus, it is expected to provide contextual and in-depth data. However, since it only involves one private school in Yogyakarta, generalizing the results of this study to the national population of elementary school teachers needs to be done with caution.

The main instrument used in this study is a closed questionnaire containing 20 statements regarding teachers' views on the influence of social media on teaching creativity. This questionnaire uses a five-point attitude scale, namely "never", "rarely", "sometimes", "often", and "always" to capture the spectrum of teachers' responses from full acceptance to rejection of the given statements, such as "I use social media to seek inspiration for teaching methods". The instrument was developed based on indicators of social media use in the context of education and teaching creativity, and then tested on a small group of teachers at the same school to ensure content validity and item reliability, with sentence adjustments made based on feedback from the trial.

Data collection was conducted after obtaining informed consent from all participants. Respondents are guaranteed the confidentiality of their identities, and the data obtained is used solely for academic purposes. The process of filling out the questionnaire is done manually by marking (✓) the most appropriate answer choice. The collected data were analyzed using two statistical approaches. First, descriptive analysis was conducted to identify the frequency distribution, mean, and mode of each indicator of social media usage and teaching creativity, providing an overview of the respondents' behavioral tendencies. Second, inferential analysis using One-Way ANOVA was applied to test whether there is a significant difference in teaching creativity levels based on the frequency of social media use. One-way ANOVA was chosen because the independent variable (frequency of social media use) consists of more than two categorical groups, while the dependent variable (teaching creativity) is measured continuously. This ANOVA test aims to determine whether the average teaching creativity significantly differs between groups of teachers with varying intensities of social media use, with a significance level set at $\alpha = 0.05$. All analyses were conducted using the latest version of SPSS, with initial tabulation support using Microsoft Excel to ensure data input accuracy.

3. FINDINGS AND DISCUSSION

3.1. Social Media

In this study, a questionnaire was used to explore teachers' use of social media in a professional context, such as seeking teaching ideas, expanding knowledge, and building communication with colleagues. Data were analyzed based on the mean and mode to describe the frequency and tendency of teachers' attitudes towards the use of social media. The results of this analysis are presented in Table 1 to provide further understanding of the utilization of social media in supporting the teaching process.

Table 1. Mean and Mode Results Data of Social Media Variables

No	Item	Mean	Modus
1	I use social media.	3	5
2	I find teaching practice videos on social media.	3	4
3	I enjoy sharing or exchanging learning ideas on social media.	3	3
4	I demonstrate strong professional ethics in interactions with other social media users.	3	3
5	I seek information on social media to enhance my learning experience.	3	3
6	I use social media to facilitate access to learning resources.	3	2
7	I use social media to expand access to knowledge and skills for a teacher.	3	4
8	I use social media to free myself from the limitations of uniform offline teaching content.	3	3
9	I use social media to encourage sharing of knowledge and learning materials.	3	4
10	I find resources on social media can help understanding and practice in learning.	3	4
11	I find courses/private lessons/online learning through social media will be more systematic and complete.	3	2
12	I find more clear categories of knowledge about learning materials on social media.	3	5
13	I find videos and other applications needed to share teaching skills.	3	5
14	I find most of the latest learning information and statistics available on social media are true and reliable.	3	3
15	I use social media to communicate across schools.	3	4
16	I find that resources on social media can meet the needs of prospective elementary school teachers at various levels.	3	5
17	I found that social media made it easier for me to collaborate and communicate with experienced elementary school teachers.	3	5
18	I collected information about the subject matter on social media.	3	2
19	I found that social media provided a database of information needed by elementary school teachers.	3	2
20	I found that the content on social media could inspire me to do the same.	3	4

Based on the data, respondents generally “always” use social media to find teaching practice videos, expand access to knowledge, share learning materials, and collaborate with other teachers, although in some activities, such as sharing learning ideas, freeing themselves from uniform offline content, and trusting social media information, the frequency is “sometimes”. They “rarely” use social media to seek additional learning resources or more systematic online courses. In general, although the use of social media varies, these platforms significantly contribute to supporting learning, knowledge sharing, and collaboration, as well as providing inspiration that motivates teachers to implement new ideas in their teaching, even though their use in daily learning has not yet been fully consistent.

Based on the results of the descriptive analysis, the use of social media by elementary school teachers tends to be high in several aspects. As many as 30% of respondents stated that they “always” use social media to seek teaching inspiration, share ideas, and expand access to knowledge. About 25% of respondents use social media “often” in knowledge-sharing activities, while 20% of others “sometimes” utilize it to support the learning process. The highest-scoring item is the use of social media to find visual learning media and collaborate with experienced teachers.

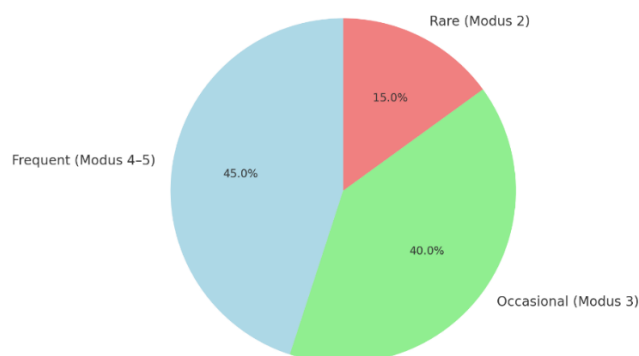


Figure 1. Comparison of Social Media Usage Frequency Among Teachers

From the analysis results, there is a tendency that activities aimed at seeking inspiration and collaboration on social media are more frequently carried out by teachers, as indicated by a high mode value (4–5), such as using social media to find teaching practice videos, share knowledge, and collaborate with experienced teachers. This indicates that social media is primarily utilized for practical needs and new ideas that directly support teaching activities. Conversely, activities related to the use of social media for more formal or academic purposes, such as seeking additional learning resources, taking systematic online courses, or accessing learning material databases, tend to be rarely performed (mode 2–3). One of the reasons is that social media provides more informal content than structured learning resources, so teachers may feel less confident about the credibility or completeness of the available information. In addition, the lack of familiarity with using social media for formal learning and the limited time teachers must explore more in-depth sources also become limiting factors.

This explanation is reinforced by a pie chart that shows that 45% of the total items fall into the “often” used category (mode 4–5), 40% fall into the “sometimes” category (mode 3), and only 15% of activities are classified as “rarely” done (mode 2). This reflects that most teachers are quite active in utilizing social media to support learning activities, especially those that are quick, contextual, and practical. However, there is still room for strengthening the use of social media in a more structured and systematic manner. Therefore, it is important for schools and education policymakers to enhance teachers' digital literacy so that they not only use social media as a source of inspiration but also as a platform for sustainable and reliable professional development.

3.2. Teaching Creativity

The use of social media by elementary school teachers shows great potential in supporting teaching creativity, especially as a source of inspiration, innovative ideas, and collaboration with fellow teachers. Social media not only serves as a communication tool but also as a means of professional development that encourages creativity in learning. The results of the questionnaire show that teachers apply various aspects of creativity, such as method innovation, material adjustment, and the creation of engaging learning environments. Table 2 summarizes the frequency trends of creativity application, clarifying the role of social media in supporting the creative teaching process.

Table 2. Results of Mode of Teaching Creativity Variable

No	Item	Mean	Modus
1	The teacher uses a variety of teaching methods.	3	3
2	The teacher uses supplementary books along with the main textbook in the classroom.	2	2
3	The teacher appreciates students' answers, both correct and incorrect.	4	4
4	The teacher offers more than one topic for students to choose from in each writing assignment.	3	3
5	The teacher teaches students how to learn more effectively.	4	4
6	The teacher's questions are mostly open-ended rather than multiple choice.	5	5
7	The teacher cares about class discussions.	4	4
8	The teacher uses flashcards or videos in her teaching.	5	5
9	The teacher reminds students about the dos and don'ts.	4	4
10	Before starting a conversation or reading something new, the teacher asks students to guess the theme from the pictures provided.	2	2
11	The teacher encourages students' new and original ideas.	4	4
12	The teacher helps students become familiar with the discussion.	5	5
13	The teacher asks students to apply the material they have learned.	4	4
14	The teacher ensures that the basic material is learned accurately.	5	5
15	The teacher allows students to play various games in the classroom.	5	5
16	The teacher asks students to listen to the conversation for the first time while the students' books are closed.	5	5
17	The teacher asks about similarities and differences between pictures, sentences, and texts.	4	4
18	The teacher asks questions to make students think more deeply.	5	5
19	The teacher allows students to talk about their experiences in class.	5	5
20	The teacher chooses students' favorite topics for class discussions.	3	3

The results of the analysis in Table 2 show that elementary school teachers apply teaching creativity at varying levels. Activities such as the use of visual media (flashcards, videos), open-ended questions, class games, and allowing space for students to share experiences have a high frequency (mode 4–5), indicating an interactive approach and encouraging critical thinking. On the other hand, activities such as guessing the theme from pictures and the use of supplementary books tend to be rarely conducted (mode 2), indicating that the creative approach at the beginning of learning is not yet optimal. About 30% of activities are categorized as “always” done, 25% “often”, 20% “sometimes”, and 20% “rarely”, while only 5% are “never”. These findings reflect that although creativity has been sufficiently integrated, there is still room for development, particularly in expanding student participation and enriching learning resources beyond standard materials.

In this study, teaching creativity is operationalized through the self-report method, where teachers fill out questionnaires to report how often they apply various creative practices in teaching. Creativity is measured based on the frequency of using innovative methods, teaching flexibility, the use of visual

media, and the empowerment of student ideas, without direct classroom observation. The research results show that teachers tend to frequently use visual and interactive-based creative strategies, such as the use of flashcards, videos, classroom games, open-ended questions, and providing space for students to share experiences. However, some creative approaches, such as the use of supplementary books and giving students topic choices, are rarely implemented. Factors such as limited resources, national curriculum demands, time constraints, and lack of professional training are suspected to be the main causes. The solutions that can be implemented include providing access to alternative learning resources, training teachers in creativity-based learning strategies, and more flexible management of learning time.

If compared to previous research, these results are consistent with the findings (Fleith, 2000; Richardson & Mishra, 2018; Torrents et al., 2021), which emphasizes that teachers' creativity is largely reflected through the use of visual media and classroom interactions. However, when compared to innovative (Calavia et al., 2021; Fan & Cai, 2022; Nochumson, 2020), this research reveals that although social media has become a source of inspiration, creativity based on deep content innovation is still under-optimized. Thus, the results of this study enrich the literature by showing that while visual elements and student interactions have been widely applied, the aspects of creativity related to the development of learning materials and the empowerment of student choices still need improvement to create a more dynamic and creative learning environment.

3.3. Social Media on Teaching Creativity

Based on previous analysis results, social media has played an important role as a source of inspiration and a medium of collaboration for teachers to support various forms of teaching creativity. The frequent use of social media by teachers to seek teaching ideas, collaborate, and share knowledge indicates a potential relationship between the intensity of social media use and the level of creativity applied in the classroom. To further examine whether the intensity of social media use has a significant impact on teaching creativity, a One-Way ANOVA statistical test was conducted. This test aims to identify differences in teaching creativity among groups of teachers based on the frequency of social media use, thereby providing an overview of the impact of social media in supporting innovation and creativity in the teaching process.

Table 3. One-Way ANOVA Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1872.731	1	1872.731	236.810	<.001 ^b
	Residual	585.204	74	7.908		
	Total	2457.934	75			

a. Dependent Variable: Teaching Creativity

b. Predictors: (Constant), Social Media

Based on previous analysis results, social media has played an important role as a source of inspiration and a collaborative medium for teachers to support various forms of teaching creativity. The frequent use of social media by teachers to search for teaching ideas, collaborate, and share knowledge indicates a potential relationship between the intensity of social media use and the level of creativity applied in the classroom. To further test whether the intensity of social media use has a significant impact on teaching creativity, a One-Way ANOVA statistical test was conducted. The results of the ANOVA test show that social media usage has a significant impact on teaching creativity, with an F value of 236.810 and a significance level of $p < 0.001$, indicating that the more frequently teachers use social media, the higher the teaching creativity they apply.

However, these findings need to be read more critically. Some creative activities, such as the use of supplementary books outside the main textbooks and giving students the opportunity to choose discussion topics, remain rarely conducted despite the high frequency of social media use. This is likely not just a matter of lack of inspiration, but rather related to systemic constraints such as a strict national curriculum, minimal creativity-based professional training, and limited resources in schools. Teachers who frequently use social media might gain more ideas in the form of visual and interactive activities (such as the use of videos or flashcards), but ideas that require structural flexibility in learning (such as choice-based learning or alternative literacy sources) are difficult to implement without adequate policy support.

Furthermore, the frequency of social media usage seems to have a greater impact on the dimensions of operational creativity, such as method variation, media usage, and student engagement through interactive activities. Meanwhile, strategic creativity dimensions such as student choice-based planning, enrichment of materials from alternative sources, and integration of exploration-based projects have not yet shown comparable improvement. This shows that although social media enriches teachers' practical ideas, its impact on deeper dimensions of creativity remains limited without more systemic interventions.

The implications for policymakers and educational institutions are very clear. First, it is necessary to develop policies that provide flexibility in the curriculum, so that teachers can more freely implement creativity-based learning without worrying about limiting the achievement of minimum standards. Second, teacher training programs should be more focused on strategies for developing creativity that are not only operational (use of media) but also strategic (management of student-centered learning). Third, the provision of supporting resources, such as access to alternative books, educational digital platforms, and inter-school collaboration programs needs to be expanded to strengthen teachers' capacity in implementing creative learning comprehensively. Thus, the utilization of social media by teachers can truly accelerate educational innovation, creating a more dynamic, adaptive learning environment, and empowering students more optimally.

4. CONCLUSION

Based on the findings of this study, the use of social media by elementary school teachers significantly influences their teaching creativity. Data collected from 76 respondents at Al Azhar Islamic Elementary School 31 Yogyakarta revealed that social media serves as a source of inspiration, a platform for collaboration, and a medium for sharing knowledge. Approximately 30% of creativity-related teaching activities—such as using visual media and conducting interactive sessions—are performed consistently. Meanwhile, 25% of activities like encouraging student input and fostering new ideas are carried out frequently, reflecting the teachers' active engagement in promoting creativity. However, 20% of creative practices, such as varying instructional methods and offering topic choices, are only occasionally implemented, and another 20%, including the use of supplementary resources, are rarely conducted. ANOVA test results ($F = 236.810$, $p < 0.001$) confirmed a strong positive relationship between the intensity of social media use and the level of teaching creativity. Despite these findings, the study is limited by its reliance on self-reported data, which may be influenced by personal bias, and its focus on a single school setting, limiting generalizability. Future research should consider longitudinal studies to examine the sustained impact of social media on teaching creativity and investigate the specific contributions of individual platforms such as TikTok, Instagram, or YouTube in fostering educational innovation across diverse contexts.

Acknowledgements: The author would like to thank SD Islam Al Azhar 31 Yogyakarta and all informants who have been willing to participate as resource persons in this research, both morally and materially during the research process. In addition, the author would also like to thank Yogyakarta State University and Mr. Yoppy Wahyu Purnomo, who is the supervisor of the scientific paper writing course.

Conflicts of Interest: no conflict of interest.

REFERENCES

- Al-Rahmi, W. M., & Zeki, A. M. (2017). A model of using social media for collaborative learning to enhance learners' performance on learning. *Journal of King Saud University - Computer and Information Sciences*, 29(4), 526–535. <https://doi.org/10.1016/j.jksuci.2016.09.002>
- Andleeb, N., Rafique, S., & Quratulain. (2023). Use of Social Media Tools by Undergraduates: Students and Teachers' Perspective. *Journal of Social Sciences Review*, 3(1), 758–767. <https://doi.org/10.54183/jssr.v3i1.218>
- Calavia, M. B., Blanco, T., & Casas, R. (2021). Fostering creativity as a problem-solving competence through design: Think-Create-Learn, a tool for teachers. *Thinking Skills and Creativity*, 39, 100761. <https://doi.org/10.1016/j.tsc.2020.100761>
- Chen, M., & Xiao, X. (2022). The effect of social media on the development of students' affective variables. *Frontiers in Psychology*, 13(September), 1–8. <https://doi.org/10.3389/fpsyg.2022.1010766>
- Chung, T.-Y., & Chen, Y.-L. (2018). Exchanging social support on online teacher groups: Relation to teacher self-efficacy. *Telematics and Informatics*, 35(5), 1542–1552. <https://doi.org/10.1016/j.tele.2018.03.022>
- Fan, M., & Cai, W. (2022). How does a creative learning environment foster student creativity? An examination on multiple explanatory mechanisms. *Current Psychology*, 41(7), 4667–4676. <https://doi.org/10.1007/s12144-020-00974-z>
- Fleith, D. S. (2000). Teacher and student perceptions of creativity in the classroom environment. *Roeper Review*, 22(3), 148–153. <https://doi.org/10.1080/02783190009554022>
- Georgescu, M., & Popescu, D. (2015). Social Media – The New Paradigm of Collaboration and Communication for Business Environment. *Procedia Economics and Finance*, 20(2012), 277–282. [https://doi.org/10.1016/s2212-5671\(15\)00075-1](https://doi.org/10.1016/s2212-5671(15)00075-1)
- Harrison, R., & Veerappa, V. (2014). Social media collaboration in software projects. *Software Project Management in a Changing World*, 9783642550(December), 401–424. https://doi.org/10.1007/978-3-642-55035-5_16
- In'am, A., Luthfia Amany, D. A., Adila, P., & Pratiwi, K. (2022). Social media as learning resources: Teacher creativity in society 5.0. *AMCA Journal of Education and Behavioral Change*, 2(2), 51–56. <https://doi.org/10.51773/ajeb.v2i2.202>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kasperski, R., & Blau, I. (2023). Social capital in high-schools: teacher-student relationships within an online social network and their association with in-class interactions and learning. *Interactive Learning Environments*, 31(2), 955–971. <https://doi.org/10.1080/10494820.2020.1815220>
- Muls, J., Triquet, K., Vlieghe, J., De Backer, F., Zhu, C., & Lombaerts, K. (2019). Facebook group dynamics: an ethnographic study of the teaching and learning potential for secondary school teachers. *Learning, Media and Technology*, 44(2), 162–179. <https://doi.org/10.1080/17439884.2019.1583670>
- Nochumson, T. C. (2020). Elementary schoolteachers' use of Twitter: exploring the implications of learning through online social media. *Professional Development in Education*, 46(2), 306–323. <https://doi.org/10.1080/19415257.2019.1585382>
- Rahman, N. S. A., Handayani, L., Othman, M. S., Al-Rahmi, W. M., Kasim, S., & Sutikno, T. (2020). Social media for collaborative learning. *International Journal of Electrical and Computer Engineering*, 10(1), 1070–1078. <https://doi.org/10.11591/ijece.v10i1.pp1070-1078>
- Richardson, C., & Mishra, P. (2018). Learning environments that support student creativity: Developing the SCALE. *Thinking Skills and Creativity*, 27, 45–54. <https://doi.org/10.1016/j.tsc.2017.11.004>
- Seifert, T. (2018). *Digital Media and Social Network in the Training of Pre-Service Teachers* (pp. 96–110). IGI Global. <https://doi.org/10.4018/978-1-5225-3082-4.ch006>

- Šliogerienė, J., & Valūnaitė-Oleškevičienė, G. (2017). Evoking teacher creativity while using social media. *Creativity Studies*, 10(1), 84–96. <https://doi.org/10.3846/23450479.2017.1306808>
- Thomas, K. J., & Akdere, M. (2013). Social Media as Collaborative Media in Workplace Learning. *Human Resource Development Review*, 12(3), 329–344. <https://doi.org/10.1177/1534484312472331>
- Torphy, K., Hu, S., Liu, Y., & Chen, Z. (2020). Teachers Turning to Teachers: Teacherpreneurial Behaviors in Social Media. *American Journal of Education*, 127(1), 49–76. <https://doi.org/10.1086/711012>
- Torrents, C., Balagué, N., Hristovski, R., Almarcha, M., & Scott Kelso, J. A. (2021). Metastable coordination dynamics of collaborative creativity in educational settings. *Sustainability (Switzerland)*, 13(5), 1–16. <https://doi.org/10.3390/su13052696>
- Warnick, B. R., Bitters, T. A., Falk, T. M., & Kim, S. H. (2016). Social Media Use and Teacher Ethics. *Educational Policy*, 30(5), 771–795. <https://doi.org/10.1177/0895904814552895>