SOCIAL MEDIA IN EDUCATION: ARE TEACHERS READY FOR THE DIGITAL SHIFT?

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Abstract

The use of social media in education has become an important topic in the digital era, although the level of readiness and utilization among educators still varies. This study aims to evaluate educators' readiness to use social media as a learning tool across different teaching stages. A survey with questionnaires was distributed to educators from various backgrounds, including teaching stage, age, gender, years of teaching experience, and subjects taught, to collect data on the frequency of use, the most frequently used platforms, purposes of use, and the challenges faced. The results show that platforms such as Instagram, TikTok, Twitter, and Facebook can enhance student engagement in an interactive and engaging way, facilitate flexible learning, and build a broader learning community. However, there are significant challenges, such as a lack of specific training for teachers, limited digital literacy, concerns about privacy and data security, and inadequate technological infrastructure, especially in remote areas. Although most teachers have access to technology and basic digital skills, these barriers need to be addressed to maximize the potential of social media in education. Additional support, such as training and infrastructure improvements, is needed to fully harness the potential of social media. The implications of this study indicate the need for more flexible policies and strong institutional support to enhance teachers' readiness to use social media, reduce barriers, and achieve a more inclusive and innovative education.

Keywords: Sosial media, Education, Teacher readiness, Digital learning

1   INTRODUCTION

The beginning of the 21st century, with the general adoption of digital technologies, changed many aspects of societies and education. Social media were developed to help friends and peers communicate and interact (Best et al., 2014). Nowadays, they have been recognized as one of the most helpful tools in educational contexts. The potential of social media to transform educational practice is immense, with the development of real-time communication, collaborative learning, and opportunities to create inclusive learning environments. As more students join digital environments, integrating social media into education is a purposeful step towards meeting the increasingly different needs of today's learners (Tess, 2013). Yet, as great

as the potential for social media to transform educational practice is, it still needs to be integrated inconsistently into formal educational settings due primarily to variable readiness among educators to adopt these platforms.

Social media's relevance in education is underscored by its unique features that facilitate both formal and informal learning processes (Greenhow & Chapman, 2020; Greenhow & Lewin, 2016; Roudotul et al., 2023; Yamtinah et al., 2023). The dynamic interactive spaces offered by platforms like Instagram, TikTok, Twitter, and Facebook empower students and educators to engage in discussions, share resources, and collaborate on projects beyond the confines of the traditional classroom (Coleman & O'Connor, 2019; Malik et al., 2019; Manca, 2020). This fosters personalized learning, enabling students to access educational content tailored to their needs and pace. Furthermore, the multimedia capabilities of these platforms introduce new forms of teaching, such as video tutorials, infographics, and real-time feedback. As education increasingly adopts learner-centred approaches, the role of social media in promoting active student participation and creating virtual learning communities becomes more significant.(Best et al., 2014; Tess, 2013)

Despite these potential benefits of using social media as part of educational practices, significant challenges still need to be addressed toward its widespread adoption. There are barriers, among which is the digital divide among educators. Generally, this determines how eager or capable they would be to use social media as a teaching tool (Al-Bahrani et al., 2015). Moreover, structured professional development programs providing specific training on using social media in their curriculum need to be improved for most educators. What makes one even more hesitant is a set of concerns related to data privacy and security and the potential misuse of personal information. On the other hand, lacking technological infrastructure, particularly in rural and under-resourced areas, contributes to a disparate level of access to and total effectiveness of social media for educators and students in these areas, allowing for a digital divide in which some educators and students are more advantageously positioned than others to benefit from social media-enhanced learning (Laskar, 2023).

Various researchers have considered the role of social media in education, particularly in promoting active student participation, collaborative learning, and acquiring digital literacy competencies among students (Asomah et al., 2022; Carpenter et al., 2016; Oh et al., 2020; Phesa, 2024; V.Rasiah, 2014). Scholars like Malik et al., (2019) and Manca (2020) state that proper social media integration significantly enhances student interaction and motivation.

However, most of the literature currently focuses on student outcomes and usage patterns without a corresponding emphasis on educators' readiness to integrate such tools into their pedagogical practices (Barrot, 2021). On those occasions when teacher readiness is investigated, too often, the study is limited to a particular geographic or demographic context, failing to consider how multiple factors, teaching experiences, subject matter, and institutional support influence educators to adopt social media. Consequently, this study would bridge this gap by providing a broader and more complex understanding of factors that impact educators' readiness to use social media in diverse educational settings.

Although there is increasing academic interest in integrating social media into education, several knowledge gaps still need to be addressed regarding the barriers educators face when integrating social media into their daily teaching routines. This study, aiming to fill these gaps, will be comprehensive in its approach. It will not only delve into the barriers educators face but also investigate how demographic factors such as age, gender, teaching experience, and subject areas influence a teacher's ability and willingness to adopt social media in the classroom. Furthermore, the study will explore infrastructure and institutional challenges, especially in developing regions where technological resources are often limited. By examining a diverse group of educators from various educational levels and global regions, the research will provide a thorough assessment of their preparedness and challenges in utilizing social media as a teaching tool. The study will analyze educators' readiness to use social media, determine the frequency and purpose of its use, identify the types of platforms employed, and uncover the obstacles hindering the adoption of these technologies. Additionally, the study will offer recommendations to address these barriers, enhancing the effective use of social media in different educational contexts.

Ultimately, this research contributes to the expanding literature on digital tools in education, emphasizing the critical role of educator readiness in successfully integrating social media into classrooms. The findings will provide valuable insights for policymakers and educational institutions, equipping them with the knowledge to make informed decisions about where to allocate resources and support. By highlighting areas where support is needed to improve educators' digital skills and enhance technological infrastructure, particularly in underserved regions, the study prepares the education sector for the future. Moreover, the study will guide the development of targeted professional training programs, ensuring that educators are equipped with the necessary skills to effectively incorporate social media into their teaching

practices. The research also advocates for creating flexible policies that accommodate the diverse needs of educators, fostering more inclusive and innovative approaches to social media use in education.

2 METHODOLOGY

The study employed a qualitative-descriptive research design to assess educators' readiness to use social media as a tool for teaching and learning. A total of 31 teachers from various regions of Central Java, Indonesia, participated in the study (Table 1). The participants were selected based on diverse demographic factors, such as teaching level, age, gender, years of teaching experience, and subjects taught. Data was collected through a survey disseminated via Google Forms, which aimed to capture information on social media usage frequency, the most commonly used platforms, the purposes for using social media in education, and the challenges faced by the teachers.

The questionnaire, consisting of 10 items (Table 2), was designed to gauge the teachers' readiness to integrate social media into their teaching practices. In addition to the core questions, the participants were also asked about their perspectives on using social media in learning, the obstacles they encountered, and the types of support they required for more effective implementation. The data gathered provided a comprehensive overview of social media adoption among the educators surveyed, highlighting the factors influencing their ability and willingness to use these tools in classroom settings.

Table 1. Characteristics of participants

Characteristics	Types	Frequency (%)
Ages	<25 years old	9,7
	25-34 years old	48,4
	35-44 years old	35,5
	45-54 years old	6,5
	>55 years old	-
Gender	Male	32,3
	Female	67,7
Teaching stage	Elementary school	22,6
	Junior high school	19,4

Senior high school	38,7
Undergraduate	19,4

Table 2. Statement of questionnaire

Elements	Statements
Use of social media in learning	How frequently do you use social media in classroom teaching?
	Which social media platform do you use most frequently to support learning?
	What is your primary purpose for using social media in education?
Challenges in Social media adoption	What is the biggest challenge you face in using social media to support teaching and learning?
	How comfortable are you with the use of social media in education?
	Have you ever attended any training or workshops on the use of social media in education?
	If yes, how useful was the training or workshop?
Support and needs	What kind of support do you need to use social media more effectively in your teaching practices?
	Are you interested in participating in a program or community to share experiences and best practices in the use of social media for education?
	Please provide your suggestions or opinions on the use of social media in education.

3   FINDINGS AND DISCUSSION

The rapid development of digital technology has significantly transformed the educational landscape. Integrating social media into the learning process is one of the most prominent innovations. Social media platforms such as Facebook, Twitter, Instagram, and YouTube have become inseparable in daily life, including among educators and students. The use of social media in the educational context offers various benefits, ranging from facilitating more interactive and collaborative communication to providing broader access to diverse learning resources. Recent research (Qureshi et al., 2023)indicates that social media can enhance learning motivation, student engagement, and deeper understanding of concepts. Furthermore, Ansari & Khan, (2020) highlighted the role of social media in facilitating student-centered learning in their study. Through social media, students can actively engage in knowledge construction, share ideas, and provide feedback on learning materials. Additionally, students can utilize social media to develop 21st-century skills such as communication, collaboration, and critical thinking. Another study by Rasheed et al., (2020) revealed that using social media in learning can foster student creativity and innovation.

The preponderance of teachers, as evidenced by the tallest bar in Figure 1, utilize social media with a frequency of 4 (frequently). This indicates that social media has become an indispensable component of their daily routines. A minority of educators reported infrequent use of social media (frequency of 1). The survey findings reveal a positive correlation between the level of comfort and the frequency of social media use among educators (Figure 1). The more frequently an educator uses social media, the greater their comfort level with the platform (Asomah et al., 2022). This suggests that as educators engage more with social media, they develop increased confidence and familiarity with its diverse features. Furthermore, Figure 1 also illustrates that most educators feel at ease using social media. This underscores the substantial potential for integrating social media into educational contexts, presenting an opportunity for a more dynamic and engaging learning environment.
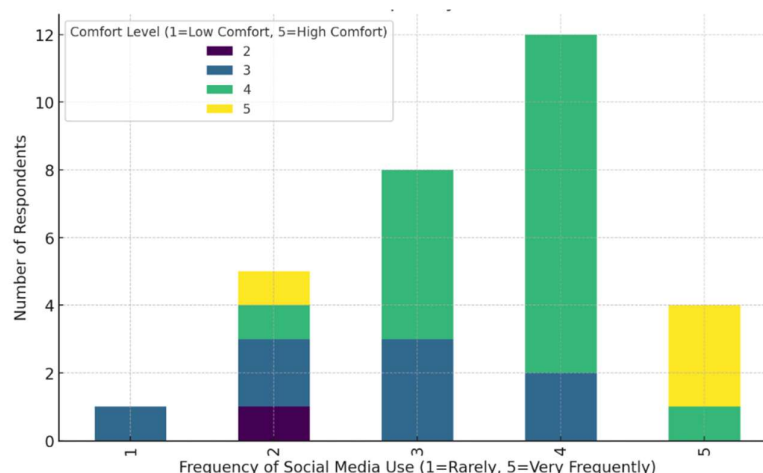
Figure 1. Comfort Level vs Frequency of Social Media Use

One of the key reasons teachers frequently integrate social media into education is its role in enhancing independent learning. Social media serves as a versatile educational tool (Catalano, 2021), allowing students to revisit materials outside the classroom and take control of their learning. This empowerment makes education more flexible and accessible, as students can engage with learning materials at their own pace (Barrot, 2021). Additionally, social media simplifies the explanation of complex concepts by using various multimedia formats, such as video demonstrations and visual aids. Teachers can design comprehensive lesson plans and deliver them interactively, ensuring the learning process is engaging and less daunting.

Social media plays a pivotal role in education across three distinct learning contexts: formal, informal, and non-formal learning, as proposed by Greenhow & Lewin (2016). In formal learning, which occurs in structured educational settings, social media can be directed by an agent, such as an instructor, educational software, or a learning management system, to guide the student's learning process. Informal learning, on the other hand, is self-directed and independent of formal institutions or external agents. This type of spontaneous, exploratory learning is significantly enhanced by technology (Barrot, 2021). Lastly, non-formal learning occurs outside traditional school settings, offering more flexible learning opportunities.

Beyond content delivery, social media provides motivation and inspiration for both students and teachers. Educators can encourage students through motivational posts and success stories and by highlighting exemplary student performances (Howell, 2021). Such efforts foster a growth mindset and enhance students' academic and personal development.

Another common application is assignment management and assessment. Teachers can post assignments, send reminders, and collect submissions through social media platforms. This added flexibility accommodates diverse learning styles, allowing students to submit their work in various formats. Importantly, the assessment process becomes more personalized and interactive, as teachers can provide feedback and engage in discussions with students (Ansari & Khan, 2020)

Social media also strengthens communication by offering an open digital channel between teachers and students (Greenhow & Chapman, 2020). It facilitates real-time interactions, allowing students to clarify doubts and ask questions outside of regular class hours. This ongoing communication not only nurtures a sense of community and connection, making educators feel more connected and engaged, but also fosters a similar sense among students. Teachers, in turn, use social media to actively engage students by organizing polls, quizzes, and other interactive content. These activities make learning more participatory, shifting students from passive listeners to active contributors, thereby increasing their engagement and interest.

While less common, social media can also be used to celebrate student achievements. Some teachers go the extra mile to publicly recognize and congratulate individual students, which is a powerful motivator for the recognized students and encourages their peers to strive for similar accomplishments (Kezar & Elrod, 2020). Moreover, social media enables video-based assignments, such as presentations or project demonstrations. This allows students to submit rich multimedia work that transcends the limitations of traditional paper-based assignments, offering a more dynamic and creative expression of their learning.

Figure 2 highlights the unwavering popularity of social media platforms across different age groups. WhatsApp and YouTube, the undisputed leaders, consistently emerge as the most popular platforms among all age groups. This reaffirms our understanding of the market, as WhatsApp's widespread use across all age groups and YouTube's high popularity among all age groups are clear indicators of their dominance. WhatsApp has seamlessly integrated into daily life, while YouTube's appeal spans both entertainment and information (Athreh & Obeidat, 2022; Habes et al., 2020; Phesa, 2024).

As Figure 2 illustrates, the younger generation, particularly those under 25, gravitate towards more dynamic and interactive platforms such as TikTok and Instagram. This preference is a clear reflection of how technological advancements and shifts in user

behavior are shaping the social media landscape (Boffone, 2022; Molem et al., 2024). Meanwhile, adults aged 25-44, with their preference for more familiar and user-friendly platforms like Facebook (Manca, 2020), further underscore this point. For the older generation (45-54 years old), social media usage tends to focus more on WhatsApp and YouTube, with other platforms used but with lower frequency than younger age groups.

The research analyzed the frequency of social media usage across various teaching stages and categorized participants into four primary groups: Elementary School, Middle School, High School, and Undergraduate programs. These teaching stages reflect distinct levels of education, each associated with different teaching responsibilities and engagement with digital platforms, mainly social media. As illustrated in Figure 3, the average frequency of social media usage shows a notable increase as we progress through the educational levels, from elementary to undergraduate programs.
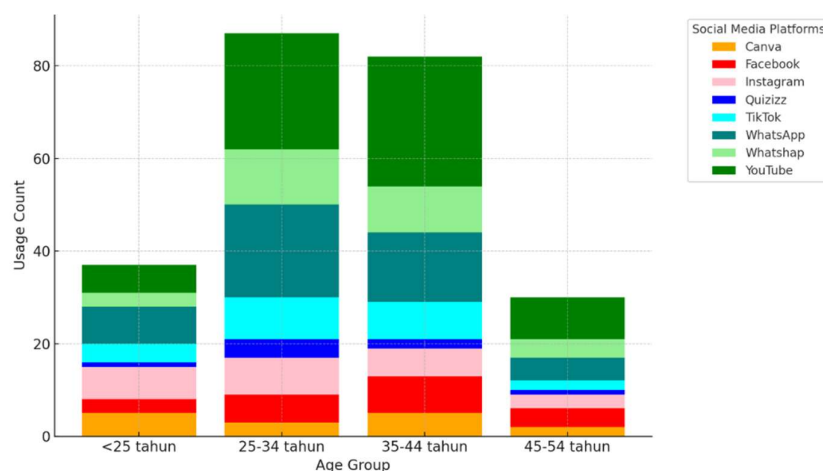

Figure 2. Top Social Media Platform Preference by Age Group

The findings highlight that individual involved in undergraduate teaching stages—primarily lecturers—demonstrate the highest frequency of social media usage compared to their counterparts in earlier teaching stages. The average frequency for undergraduate educators exceeds 3.5, whereas high school teachers fall slightly below this level. Middle and elementary school teachers, on the other hand, display a more moderate frequency, averaging around 3.0. These differences suggest that higher education professionals, particularly those involved in undergraduate teaching, are more inclined to integrate social media into their daily routines, potentially reflecting a greater need for communication, collaboration, and information sharing within their academic and professional environments (Jogezai et al., 2021; Kircaburun et al., 2020). This trend may also be associated with the

increasing expectations for digital literacy in higher education, where educators are more likely to engage with online platforms for academic purposes, networking, or staying updated with current educational trends. The prominence of social media in undergraduate teaching stages underscores its pivotal role in shaping modern educational practices and fostering a digital shift in higher learning environments (Kümmel et al., 2020).
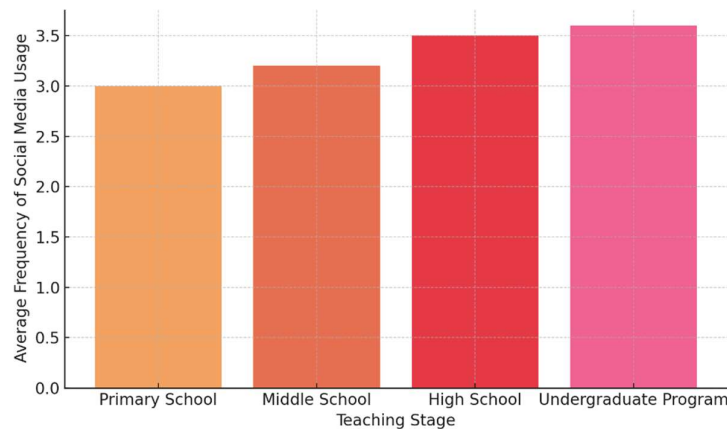

Figure 3. Average Frequency of Social Media Usage by Teaching Stages

Examining the frequency of social media usage across different teaching stages reveals that each stage presents unique patterns of engagement, challenges, and necessary support for optimal integration of social media in educational practices. The frequency of social media usage varies across elementary, middle school, high school, and undergraduate teaching stages, each influenced by the distinct needs and responsibilities associated with the level of education (Aldahdouh et al., 2020; Martin et al., 2020).

Understanding how educators use social media within their teaching roles can be further illuminated by referencing Bloom's Digital Taxonomy (Figure 4), which categorizes digital literacy into six hierarchical levels (Phuapan et al., 2016). At the base is remembering, which involves simply accessing and gathering information. This is followed by understanding, where information is identified, classified, and interpreted from various sources. The next level, applying, emphasizes using this information in different contexts and integrating digital tools to interpret and implement it. As educators progress, they reach the analyzing stage, drawing connections between ideas. Evaluating is the next stage, where decisions or positions are justified by digitally reviewing content or collaborating. Finally, the highest level is creating, where educators produce new and original content, such as videos, podcasts, or educational materials (Allen, 2015; Phuapan et al., 2016). This

taxonomy helps to map out the stages of digital literacy educators may traverse as they integrate social media into their pedagogical practices.

At the elementary school level, the frequency of social media usage is relatively low. One key challenge at this stage, as illustrated in Figure 5, is the "limited access to technology" (with a frequency of 10), combined with "lower-grade students lacking personal devices." Access is necessary for educators and students to engage deeply with digital tools, limiting their interaction to the remembering stage of Bloom's taxonomy. The support needed at this stage primarily involves "access to better technology," allowing educators to move beyond basic information retrieval into more interactive teaching strategies.

Figure 4. Digital Taxonomy Bloom (Phuapan et al., 2016) .

In middle school, social media usage increases slightly, reflecting educators' growing engagement with digital platforms. However, Figure 5 highlights challenges such as "privacy and security concerns" (frequency of 10) and a "lack of support from schools" (frequency of 5), which hinder further integration. Middle school educators are beginning to operate at the understanding and applying stages of Bloom's taxonomy as they interpret and implement information through digital tools. The support needed includes "privacy and security training" to address these concerns, as well as best practice programs to guide the use of social media in a safe and effective manner.

For high school educators, the frequency of social media usage continues to rise, reflecting a higher level of digital engagement. However, challenges such as the "lack of student interest" (frequency of 7) and "lack of technical knowledge" (frequency of 10) are prominent. Educators here operate within the analyzing stage, where they foster connections between ideas through social media but may need help to engage students or fully maximize

the potential of digital tools. To support this stage, there is a need for technical training programs that provide educators with the skills necessary to use social media in ways that resonate with students effectively. Furthermore, strategies to enhance student engagement through innovative digital approaches are crucial.

At the undergraduate level, social media usage peaks, with educators—primarily lecturers—engaging the most frequently. As shown in Figure 5, "lack of time to manage social media" (frequency of 14) is a significant challenge at this level, alongside ongoing concerns regarding technical knowledge. Undergraduate educators typically operate at the highest levels of Bloom's taxonomy—evaluating and creating—need substantial support in time management and further technical training. This enables them to effectively integrate social media into their academic routines, particularly in producing original content, such as educational media that fosters collaboration and critical thinking.
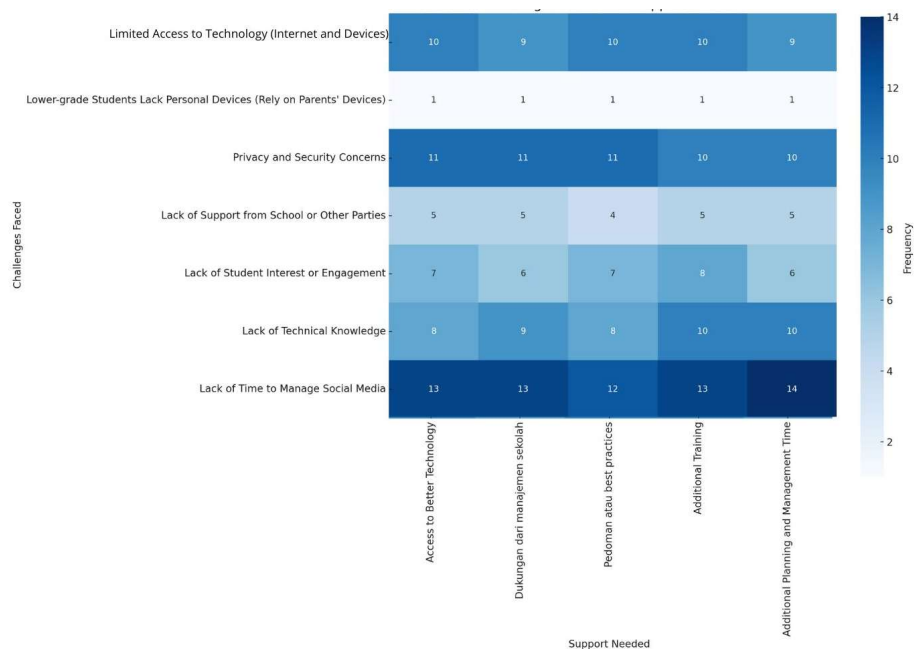

Figure 5. Matrix of Challenges Faced and Support Needed.

Across all stages, the analysis of Figure 5 reveals recurring challenges that point to common areas of support required for successful social media integration. The need for better access to technology is a pressing issue, as it is a fundamental enabler for educators and students to engage deeply with digital tools. By addressing this need, educators can better traverse the levels of digital literacy outlined by Bloom's taxonomy, enabling them to create more dynamic, engaging, and effective learning environments through social media.

4   CONCLUSION

Teachers' readiness to integrate social media into teaching still requires support, including training, technological access, best practices implementation, school management support, and additional time to plan and manage lessons. Teachers are still facing various challenges in social media applications, including needing more time to manage these platforms. In addition to classroom teaching, teachers are also burdened with administrative tasks, making it challenging to allocate time for preparation. Concerns about privacy and security, limited technical knowledge, and restricted access to technology are other issues frequently raised by teachers. Teaching stages are one variable that affects readiness, as seen from the varying frequency of social media use in classrooms. The choice of platform is also influenced by age, with WhatsApp and YouTube being the most widely used platforms across all age groups of teachers. Lecturers aged 25-44 are the educators who most frequently use social media in their classes, as they enjoy greater flexibility in teaching university students and possess advanced digital literacy skills, both among instructors and students.

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