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SOCIAL MEDIA AND AI INTEGRATION INTO TEACHING AND LEARNING EXPERIENCE

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Abstract

The dynamics of teaching and learning have changed due to the rise of modern technologies, mainly social media and artificial intelligence (AI). This study determined the elementary teachers' response to the emerging use of social media and AI in educational methods and how these may impact the students' learning. Data was collected using a survey questionnaire composed of social media and AI use and views on the role of educators in the digital age. Statistical methods, including mean and standard deviation, were used in data analysis. The respondents demonstrated their proficiency in using social media and AI, representing a range of instructional roles and experience levels. Results indicate that Facebook and YouTube are frequently used online for assistive instructional information. Moreover, various AI techniques were used, such as automated grading systems, tailored learning platforms, and language translation services. Teachers incorporated these technologies and emphasized the need for further professional development; this shed light on the strategic integration of social media and AI in education holds tremendous potential to revolutionize learning paradigms, foster collaboration, and cultivate personalized learning experiences. However, it requires careful navigation of ethical, privacy, and accessibility considerations to harness its full benefits and ensure inclusivity and integrity within educational ecosystems.

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INTRODUCTION

The convergence of social media and artificial intelligence (AI) in the modern educational landscape has brought a new era and redefined the dynamics of teaching and learning. How knowledge is distributed has changed due to the integration of these technological breakthroughs, resulting in the roles and duties of educators undergoing substantial modifications (Dede, 2016). Learners use social media platforms daily because they provide various communication options, teamwork, and information sharing. The lines separating formal and informal learning environments become increasingly hazy as students use these platforms regularly, resulting in adapting the influence and information obtained through these platforms (Kassens-Noor et al., 2020). However, navigating this

complex educational landscape presents educators with innovative and arising problems due to learners' exposure to a vast online environment. Artificial intelligence (AI) has significantly improved diverse areas of education, from automated evaluation tools to customized learning experiences (Lee et al., 2021). AI can completely transform the educational process by automating administrative duties, delivering real-time feedback, and customizing instruction to each student's needs. However the use of AI in education brought concerns about equity, privacy, and the morality of using algorithms in teaching and learning (Su & Zhong, 2022).

Amid these technological developments, teachers' roles are expected to guide and develop learners in values and academic aspects with these emerging technologies (Dede, 2016; Pentang, 2021). Teachers help students navigate the vast information from social media and maximize the potential use of AI-driven instructional tools by acting as mentors, guides, and facilitators. Aside from shaping values and knowledge in the classroom, teacher-student interaction becomes crucial for developing critical thinking, emotional intelligence, and digital literacy—skills seen as a vital factor in improving the learners' achievement in this digital age (Su & Zhong, 2022). Hence, to ensure that these learners are ready for this innovation and possible challenges of the digital age, teachers must be knowledgeable about the rapidly changing field of technology in education (Lee et al., 2021).

Social media platforms facilitate community creation, cooperation, and the distribution of information, marking this as a significant factor to incorporate in the educational scene (Pierce-Grove, 2016). There is evidence that students who actively use social media for education exhibit higher levels of engagement and perceived learning results (Junco et al., 2010). Hence, teachers must help students use social media ethically and productively for academic objectives. Moreover, using adaptive learning technologies; a subset of artificial intelligence, improved student performance (Shute & Kim, 2013). Thus, integrating AI tools into education can potentially improve learning outcomes.

The focus of this study underscores the necessity of a balanced strategy by integrating technological tools with an appropriate pedagogical approach and the significance of teacher guidance in moderating the usage of social media and AI educational tools. However, teachers face difficulties navigating the moral and practical issues surrounding integrating AI and social media in the classroom (Bal & Bicen, 2017). The digital gap and data protection require careful planning and further research before integrating into educational methods (Wang et al., 2011). This suggests that teachers must be knowledgeable about ethical practices in using innovative technologies in education because they are considered vital persons to assist learners using AI and social media in integrating classroom discussion.

Due to this, examining how educators modify their instructional strategies to capitalize on the advantages of social media and artificial intelligence while minimizing potential hazards is crucial. With an emphasis on the crucial role of educators in learning development, this study investigates the complex effects of social media and artificial intelligence on education. The general objective of this study is to determine the response of educators to the emerging use of social media and artificial intelligence educational tools. This could contribute to an immersive idea of how these professionals shaped the students' learning experiences with these adaptive technologies.

Specifically, it seeks to determine which social media platforms elementary teachers find most effective for educational content, describe the AI tools that elementary teachers are using in the teaching and learning process, and describe the perception of the elementary teachers in understanding the challenges and opportunities associated with education in the era of social media and artificial intelligence in Social Media and Artificial Intelligence Awareness, Teacher's Role in the Digital Age, Perceived Impact on Students, Pedagogical Adaptation, Future Outlook, and Student-Teacher Relationship.

METHODOLOGY

Research Design and Respondents

Descriptive design was utilized to determine the level of agreement of elementary teachers in the emerging use of social media and AI Educational tools in incorporating modern teaching and learning experiences in a classroom setting. The research sample in this study consisted of 100 elementary school teachers from the Schools Division of Puerto Princesa City, Palawan, Philippines, during the school year 2023–2024, selected using a simple random sampling procedure.

Data Collection Tools and Procedures

In this study the survey questionnaire form was used to collect data regarding the respondents' perspectives of elementary teachers adapting social media and artificial intelligence in acquiring information and using it to provide new learning experiences. In conducting this study, the researchers obtained authorization from the Puerto Princesa City Schools Division Superintendent, and the Public Schools District Supervisors assigned to different elementary schools in the mentioned schools division. The predefined number of respondents received questionnaires from the researcher via Google Forms. As the respondents completed the survey, the researcher addressed their queries and reviewed the study's objectives. Ultimately, the researcher gathered every response from the Google Form and used the appropriate statistical procedures required for data processing.

Statistical Treatment

The study analyzed and interpreted the data using various statistical techniques aligned with the study's specific objectives to identify the social media and AI tools used in teaching and learning. The respondents' perceptions of the opportunities and problems related to education in the age of social media and artificial intelligence were described using the mean and standard deviation. The respondents' perceptions of the influence on students, pedagogical adaptation, future outlook, student-teacher connection, and understanding of social media and artificial intelligence awareness were all evaluated using these measures. The researchers quantified the average perception and degree of variation among the respondents in each area by computing the mean and standard deviation. Moreover, a qualitative description was assigned to determine the level of agreement in the specific statements: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree, 1.00–1.80 = Strongly Disagree.

RESULTS AND DISCUSSION

Social Media Platforms Used to Acquire Information

Facebook and YouTube were the most frequently mentioned social media platforms by respondents when asked which ones were best for educational content (both 45.6%). Consequently, results show that elementary teachers understand the importance of

Facebook's networking features and YouTube's video-based material for enhancing learning opportunities. YouTube's enormous library of videos spanning a wide range of themes and topics contributes to its popularity as a valuable medium for educational content (Michniuk, 2014). Facebook's popularity as a medium for instructional content, it is likely that educators recognize the opportunity for community development, information sharing, and collaboration in this social media space (Junco, 2012). It is a valuable tool for teachers to enhance their classroom instruction because it creates dynamic and captivating learning experiences due to its visual and aural components (Bakla & Mehdiyev, 2022). Teachers can share information, ideas, and best practices in Facebook groups and pages devoted to education, which promotes networking and professional development.

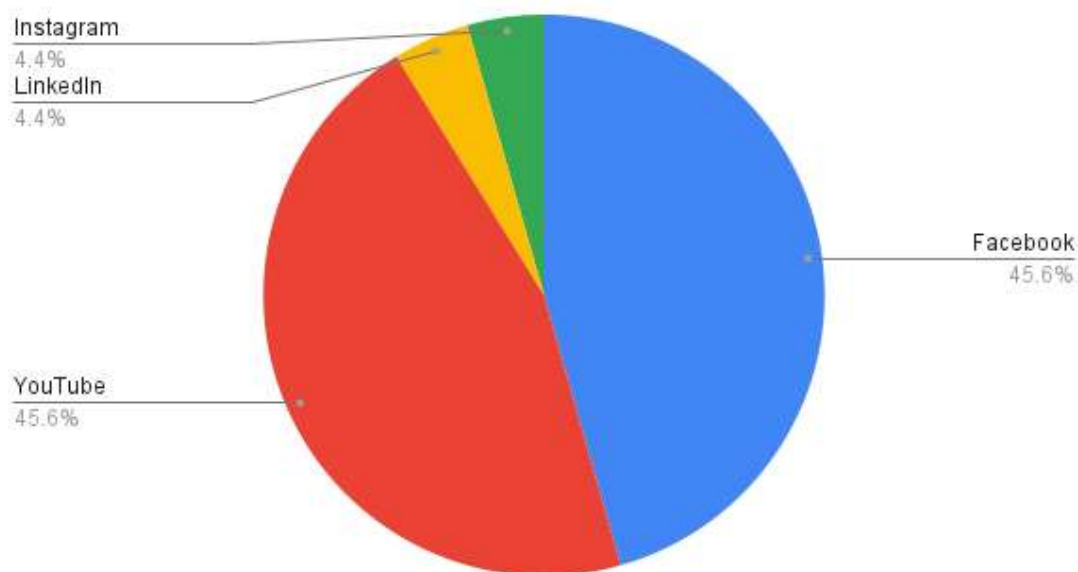


Figure 1. Social Media Platforms for Educational Content

The use of AI Educational tools in the teaching and learning process

Elementary teachers are integrating a variety of AI tools into their instruction. Automated grading systems are the most widely utilized AI tool (32.00%). Teachers can carry out assessment procedures more effectively by using automated grading systems, which can help them save time and give students feedback more quickly. Moreover, personalized learning appeared as the second most popular AI tool (19.60%); using AI algorithms, personalized learning adapts curriculum and training to each student's unique requirements, interests, and learning preferences (Su & Zhong, 2022). This method offers individualized learning experiences, raises student engagement, and improves learning results. While 10.30% of teachers use language translation services; AI-powered language translation services can help students who are not as proficient in the language of instruction and overcome language obstacles. With this application, educators may offer necessary information and resources in various languages, encouraging accessibility and diversity. 12.40% of teachers use research aid tools, which help find pertinent academic resources and complete research. By assisting students with locating trustworthy sources, producing citations, and efficiently organizing their research, these AI technologies can promote information literacy and critical thinking in the classroom (Schiff, 2021).

With utilization rates ranging from 3.10% to 5.20%, other services, including intelligent teaching systems, content creation, plagiarism detection, and virtual laboratories, are also used. Personalized training and support are offered via intelligent tutoring systems and adaptive learning platforms, which customize the learning process to meet the needs of

each learner (Pierce-Grove, 2016). Plagiarism detection programs support academic integrity, while content creation tools enable educators to create dynamic and exciting teaching resources (Weber-Wulff, 2018). With the help of virtual simulations and experiments, virtual laboratories give students practical learning opportunities in a virtual setting (Bryson, 2020). These AI tools are used in the teaching and learning process since it is becoming more widely acknowledged that AI has the potential to improve education.

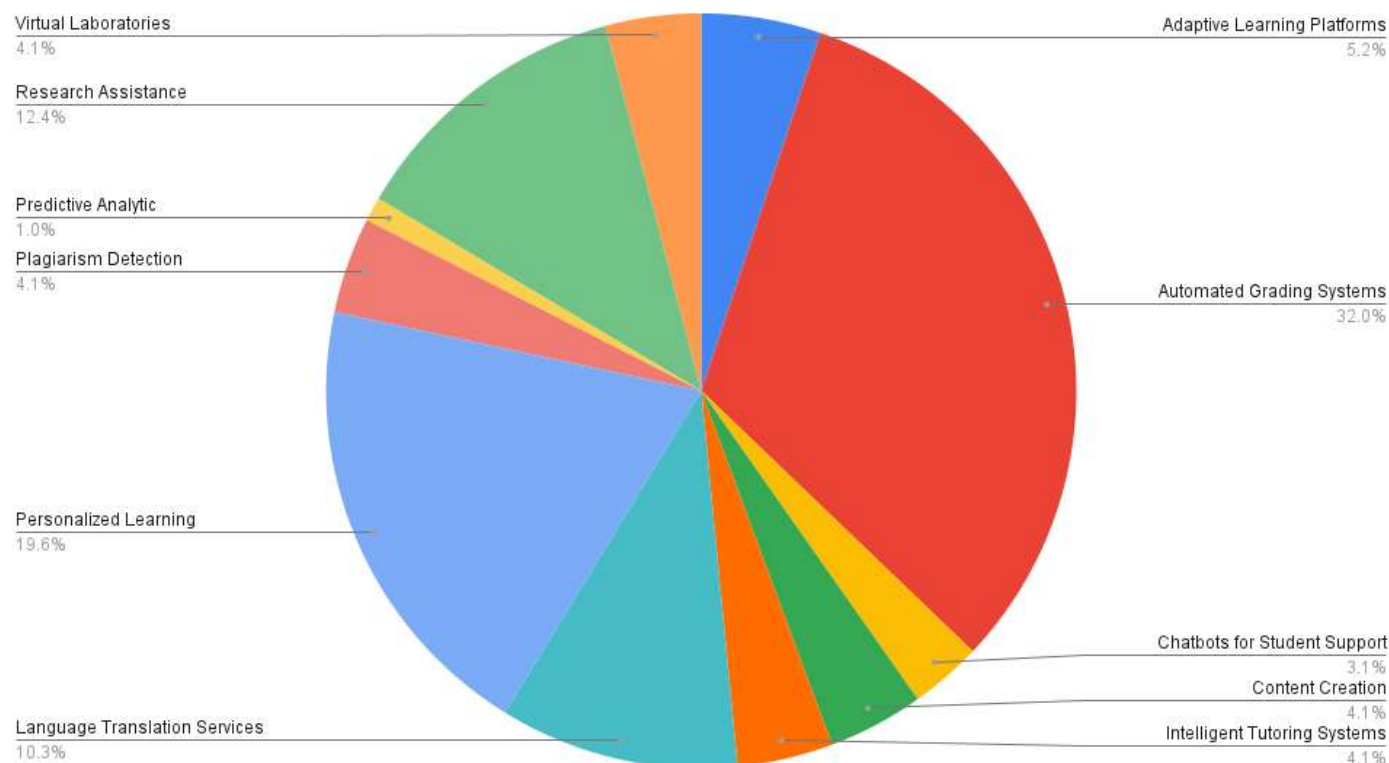


Figure 2. Use of AI in Teaching and Learning

The following results describe the respondents' perception of understanding the challenges and opportunities associated with education in the era of social media and artificial intelligence. Respondents' average degree of agreement on various assertions about using social media and AI awareness in teaching and learning was shown (Table 1). More vital agreement is indicated by higher mean values on the five-point Likert scale, which serves as the basis for interpretation. Elementary teachers perceived an awareness of how social media affects students' education (Mean=4.21, SD=0.76). This suggests that these educators know how social media can affect their learners' educational journeys (Faizi et al., 2013). Additionally, using social media in the classroom enhances students' educational experiences. This demonstrates how educators view social media as an effective tool for improving student learning, emphasizing that modern platforms might improve learners' academic achievement as modern technology might influence and change education (Greenhow & Lewin, 2019).

Results indicate that educators know how AI might enhance and support student learning objectives. Consequently, AI technologies that efficiently utilize resources will give educators a more straightforward path to use AI tools to maximize learning and teaching procedures by efficiently using existing resources (Al Darayseh, 2023). Moreover, neither good nor bad, social media may affect students' education. Hence, educators must understand the need to balance social media's advantages and drawbacks. Interestingly,

social media and AI are vital in transforming and enabling the appropriate skills for each learner-- agreed by educators that social media and artificial intelligence can revolutionize how an individual gains skills (Baker & Inventado, 2014). Thus, knowing the influence of social media on the educational sector will serve as an effective instrument for transforming the current educational system. This implies that educators must know how social media might influence teaching methods. This suggests educators believe that social media and artificial intelligence can completely transform conventional instruction and learning methods (Weber-Wulff, 2018).

Table 1. Social Media and Artificial Intelligence Awareness

Social Media and Artificial Intelligence Awareness		Mean	SD	Interpretation
1	I am aware of the influence of social media on students' education.	4.44	0.87	Strongly Agree
2	I am familiar with the impact of artificial intelligence in the education sector.	4.20	0.82	Agree
3	Integrating social media into education positively impacts students' learning experiences.	4.29	0.77	Agree
4	I believe using artificial intelligence tools enhances students' academic performance.	3.97	0.82	Agree
5	I believe that Artificial Intelligence tools make the most efficient of what you have and what is readily available.	3.86	0.83	Agree
6	I know social media's negative and positive impact on learners' education.	4.56	0.57	Strongly Agree
7	AI and social media are crucial in changing and empowering the right skills for every learner.	4.19	0.72	Agree
8	I am familiar with the impact of social media in the education sector.	4.36	0.61	Strongly Agree
9	AI and social media are powerful tools for changing the traditional educational system.	4.06	0.79	Agree
Mean		4.21	0.76	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Table 2 shows insight into how educators reflect their role in this digital era, particularly regarding integrating social media and AI tools into their teaching and learning process. Results suggest that elementary teachers are flexible in integrating social media platforms into their lesson plans, demonstrating their confidence and expertise in integrating AI and technology into educational methods (Mean = 4.18, SD = 0.73). They demonstrate their commitment to helping learners navigate the digital world by imparting the educator's responsibility to guide learners through online safety and etiquette. Moreover, in terms of training for this awareness, these elementary teachers agreed that the current training programs help them properly incorporate AI into the classroom. This implies they are ready to use AI techniques in their teaching process.

Furthermore, they possess adequate knowledge to address the difficulties posed by teaching using social media and AI educational tools, reflecting their preparedness to take on the particular demands and complexities that accompany the digital age. Teachers actively participate in creating educational content on social media sites, resulting in modifying their teaching strategies to include AI technologies that provide an advantage in producing diverse learning experiences that suit the learner's needs and learning demands. This indicates that they are aware of the critical role of these tools to adapt in teaching and learning strategies in order to incorporate AI tools into the learning process successfully (Wang et al., 2011). Moreover, the potential of AI technologies to enhance

teaching and learning by expressing confidence in their ability to navigate and use these tools for educational purposes was emphasized.

Educators as facilitators in this modern learning process are essential in connecting information, community, and the arts within a discipline. Additionally, educators use a variety of teaching approaches are crucial when integrating social media and AI tools into the classroom. An awareness of various instructional strategies allows for more flexibility in designing lessons and activities the promote students' engagement in classroom discussions and could enhance the interest and motivation of the learners. Finally, social media and AI technologies can cut beyond geographic borders, enabling educators to connect with students in different locations. This provides a wide range of opportunities to continue the learning process within or beyond the classroom setting, emphasizing the revolutionary potential of social media and artificial intelligence in extending educational opportunities beyond conventional constraints (Schiff, 2021).

Table 2. Teacher's Role in the Digital Age

Teacher's Role in the Digital Age		Mean	SD	Interpretation
1	I am confident in incorporating social media platforms into my teaching methods.	4.12	0.73	Agree
2	Teachers should be responsible for educating students about online etiquette and safety.	4.63	0.54	Strongly Agree
3	The current teacher training programs prepare educators for integrating artificial intelligence technologies in the classroom.	4.07	0.84	Agree
4	I am adequately equipped to address the challenges associated with teaching in the social media and artificial intelligence era	3.91	0.77	Agree
5	Teachers should be involved in shaping educational content on social media platforms.	4.26	0.69	Agree
6	Teachers must adapt their teaching methods to incorporate AI technologies.	4.07	0.70	Agree
7	I effectively navigate and utilize AI tools for educational purposes.	3.88	0.83	Agree
8	A teacher plays a key role not as a fellow learner but as linking knowledge, community, or art in that discipline.	4.25	0.69	Agree
9	Teachers must use different strategies in teaching while incorporating AI tools so that teaching and learning are more exciting and encouraging.	4.25	0.74	Agree
10	Teachers must use different strategies in teaching while incorporating social media so that teaching and learning are more exciting and encouraging.	4.32	0.71	Strongly Agree
11	I believe that teachers can reach far-off places and educate learners by using AI tools and social media.	4.19	0.76	Agree
Mean		4.18	0.73	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Table 3 offers valuable insights into educators' views regarding the impact of AI and social media on students. Findings revealed that teachers generally concur that social media positively impacts students' participation in educational activities (Mean = 4.06, SD = 0.77). Additionally, students' exposure to AI technologies improves their critical thinking abilities. However, social media can harm learners' mental health, and artificial intelligence might exacerbate educational disparities (Pierce-Grove, 2016). Hence, it is essential to acknowledge these constraints and take the necessary action to help students navigate social media in a way that could lessen the potential harm and provide them with a safe and inclusive online environment.

Moreover, social media plays a part in evaluating students' ability to multitask and offers valuable information and concepts to all students. In addition, adapting AI tools helps students and educators, highlighting the significance of encouraging social media usage responsibly to reduce the danger of self-harm (Greenhow & Lewin, 2019). Additionally, promoting students' use of various social media platforms can improve their thoughts and expertise. This suggests that incorporating AI into the classroom might improve student learning outcomes.

Table 3. Perceived Impact on Students

Perceived Impact on Students		Mean	SD	Interpretation
1	In my experience, social media has positively influenced students' engagement in educational activities.	3.95	0.76	Agree
2	Exposure to artificial intelligence technologies benefits students' critical thinking skills.	3.83	0.89	Agree
3	I am concerned about the potential adverse effects of social media on students' mental health.	4.21	0.76	Agree
4	I think artificial intelligence may contribute to educational inequality among students.	3.87	0.85	Agree
5	Social media is vital in assessing students' capability to do multiple tasks.	4.01	0.83	Agree
6	Social media provides a wide range of knowledge and ideas that would benefit every student.	4.12	0.77	Agree
7	I believe that embracing Artificial Intelligence benefits both teachers and students.	4.06	0.75	Agree
8	Teachers should have encouraged students to be mindful of their excessive use of social media because it could lead to self-harm.	4.35	0.66	Strongly Agree
9	I believe that teachers should encourage students to use multiple social media platforms in order for them to gain more knowledge and ideas.	4.09	0.75	Agree
10	Integrating Artificial Intelligence in a classroom setting can take learning to another level.	4.08	0.69	Agree
Mean		4.06	0.77	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Findings indicate how educators modify their pedagogy to incorporate social media and AI into their lessons (Table 4). The results showed that instructors agreed they frequently included social media in their lesson plans (Mean = 3.98, SD = 0.77). This implies that these educators actively include social media in their lesson plans and maximize its potential for educational use. While AI technologies give learners individualized learning experiences, this suggests that educators are using AI technologies to customize their pedagogy based on each student's unique demands (Faizi et al., 2013). Moreover, these educators are proactive in incorporating the most recent advancements in AI into their lesson plans, indicating that they are prepared for innovative advancement by keeping up with AI developments to improve their teaching strategies (Su & Yang, 2022). Educators indicated confidence in their abilities to successfully combine more contemporary technological approaches with more traditional teaching methods, demonstrating their ability to combine traditional and tech-based teaching strategies in the teaching and learning process.

Furthermore, incorporating AI and social media into the classroom can raise students' involvement, demonstrating that these technologies significantly affect students' engagement and active participation in the learning process (Dede, 2016). The results also showed that educators actively encourage their peers to use social media and artificial

intelligence in classroom discussions and activities, emphasizing the value of imparting their knowledge and encouraging their peers to use these tools (Baker & Inventado, 2014). Consequently, teachers agreed that integrating social media and artificial intelligence into the classroom improves student performance, implying a direct link between better student performance and the use of these tools.

When social media and AI are combined, learners are more involved in teaching and learning. This demonstrates that these tools foster greater student participation and engagement (Greenhow & Lewin, 2019). Moreover, integrating social media and artificial intelligence into the classroom improves student learning. This suggests that incorporating these technologies has a favorable effect on students' learning outcomes. Furthermore, it was agreed that social media makes it simple for both students and instructors to acquire instructional materials, highlighting how social media makes educational resources easily accessible and convenient to access.

Table 4. Pedagogical Adaptation

Pedagogical Adaptation		Mean	SD	Interpretation
1	I often integrate social media platforms into my classroom activities.	3.92	0.88	Agree
2	I use artificial intelligence tools to personalize the learning experience for your students.	3.71	0.94	Agree
3	I update my teaching strategies to incorporate the latest developments in AI technologies.	3.93	0.84	Agree
4	I am confident in effectively balancing traditional teaching methods with modern technological approaches.	4.16	0.73	Agree
5	I believe that integrating social media and AI into education can enhance overall student engagement.	4.05	0.66	Agree
6	I recommend integrating social media and AI in education with my peers.	3.98	0.72	Agree
7	Students' performance in the classroom is more effective when social media and AI are integrated into teaching.	3.95	0.76	Agree
8	Students are more engaged in teaching and learning when social media and AI are integrated into teaching.	4.03	0.70	Agree
9	Learning outcomes are better when social media and AI are integrated into teaching.	3.94	0.79	Agree
10	Students and teachers can access all the educational resources easily because of social media	4.13	0.72	Agree
Mean		3.98	0.77	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Elementary teachers' perceptions regarding professional development concerning social media and AI are presented in Table 5. Findings suggest, that educators emphasize continuing professional development if they want to successfully navigate teaching in the social media and artificial intelligence era (Mean = 4.29, SD = 0.69). In order to stay current and skilled in using these technologies, one must engage in continuing education. Teachers indicated contentment with the professional development opportunities now offered to improve their classroom proficiency, implying that they have a sense of support when it comes to developing professionally and using technology in their instruction (Al Darayseh, 2023).

The need to prioritize media literacy in teacher professional development programs was acknowledged. In order to use social media in educational settings efficiently and responsibly, one must have a thorough awareness of the various platforms. Teachers acknowledge the benefits of incorporating artificial intelligence in their professional

development initiatives. Having the requisite knowledge of AI tools would improve their methods of instruction and provide their students with a better learning experience (Neier & Zayer, 2015). Another area that teachers require more attention in professional development is cybersecurity awareness. Thus, the significance of providing learners with a safe and secure digital learning environment is crucial, and it was acknowledged that educators must possess comprehensive knowledge regarding cybersecurity protocols (Baker & Inventado, 2014).

Moreover, professional development initiatives should prioritize a pedagogical approach using an online environment. The efficient educational delivery in digital environments, building pedagogical abilities particular to online teaching and learning is essential (Greenhow et al., (2019). It is crucial for educators never to stop learning; continuing education and keeping up with new findings and advancements in the sector would help them advance professionally. The importance of giving students enough time to interact with artificial intelligence was also highlighted; hence, giving teachers time to study and use AI technology efficiently may have an impact on understanding how valuable AI is in giving students access to a wide range of information. In addition, accepting the challenges of the digital age might enhance the teaching and learning process, emphasizing how critical it is to integrate new technology to advance education (Greenhow & Lewin, 2019).

Table 5. Professional Development

Professional Development		Mean	SD	Interpretation
1	I believe that ongoing professional development is necessary for teachers to navigate education in the social media and artificial intelligence era.	4.19	0.71	Agree
2	I am satisfied with the current professional development opportunities provided to enhance my skills in utilizing technology in education.	4.11	0.82	Agree
3	Social Media Literacy should be given priority in the Professional Development of Teachers.	4.19	0.72	Agree
4	Artificial intelligence integration should be given priority in the Professional Development of Teachers.	4.16	0.73	Agree
5	Cybersecurity awareness should be given priority in the Professional Development of Teachers.	4.42	0.62	Strongly Agree
6	Online Pedagogy should be given priority in the Professional Development of Teachers.	4.33	0.71	Strongly Agree
7	Teachers should engage in learning discoveries for their professional growth.	4.43	0.62	Strongly Agree
8	Teachers should be given enough time to engage in Artificial Intelligence to provide a wide variety of information to the students.	4.26	0.68	Agree
9	Embracing every challenge in this digital era can help teachers do better in the teaching and learning process.	4.37	0.68	Strongly Agree
10	Through continuous learning, teachers can grow professionally with the help of new technologies.	4.46	0.61	Strongly Agree
Mean		4.29	0.69	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Table 6 unveiled that technologies will influence education in the future (Mean = 4.36, SD = 0.65). Teachers are viewed as essential mentors who assist students in overcoming the obstacles associated with education in the digital age. Their knowledge and guidance are beneficial in maximizing the advantages of AI and social media while avoiding potential hazards and guaranteeing appropriate use. The funding is required to improve technology accessible for instruction and learning; for educational institutions and schools to supply the

equipment and materials needed to integrate social media and artificial intelligence into the classroom successfully, they must receive sufficient funding (Su & Yang, 2022). This proves that social media and artificial intelligence can significantly enhance the quality of teaching and learning (Raut & Patil, 2016).

The curriculum must reflect the latest AI and social media developments. It is imperative to modify the curriculum in order to give learners the knowledge and abilities they need to thrive in a society where everything is connected digitally. Learning institutions are urged to provide more technology funds to assist educators in adjusting to the digital age (Gerlich et al., 2010). This demonstrates the understanding that for educators to incorporate technology into their lesson plans successfully, they need access to resources, infrastructure, and continuous professional development (Schiff, 2021).

Moreover, this study underscores the importance of educators serving as mentors to their learners regarding social media-related activities. Educators should be skilled in selecting appropriate learning activities that encouraging constructive participation and responsible social media usage. It also emphasized the public and commercial sectors' importance in supporting education. Educational organizations should provide the tools that educators and students need to meet the demands of the digital age in order to give teachers and learners equal opportunity across the board (Lee et al., 2021). Hence, government and educational sectors should look at ways to guarantee all learners equitable access to modern education in this digital era without financial barriers.

Table 6. Future Outlook

Future Outlook		Mean	SD	Interpretation
1	I am optimistic about the future of education in the context of social media and artificial intelligence.	4.22	0.69	Agree
2	Teachers are crucial in guiding students through the challenges of navigating education in the digital age.	4.38	0.63	Strongly Agree
3	I believe there should be an increase in funding for technology accessibility for teaching and learning.	4.40	0.59	Strongly Agree
4	A curriculum should be updated for the needs of the trends in social media and artificial intelligence.	4.30	0.64	Strongly Agree
5	Educational institutions should increase funding for technology to better support teachers in adapting to the digital era.	4.38	0.65	Strongly Agree
6	Educational institutions should increase funding for technology to better support teachers in adapting to the digital era.	4.40	0.62	Strongly Agree
7	I believe that we teachers should know how to choose activities that we give to our students about posting their artworks (liking contests) where the more likely reactions	4.23	0.72	Agree
8	The government and the private sectors that support education should allocate funds for necessary equipment so that teachers and students can keep up with the digital era.	4.40	0.67	Strongly Agree
9	The government should allocate funds to repair and strengthen the signals of every network to benefit students and teachers in every corner of the country.	4.42	0.67	Strongly Agree
10	The government should find a way to implement a free education where parents do not have to pay anything, starting from school supplies, snacks, and gadgets, so that all students can study, similar to what is done in Thailand.	4.43	0.64	Strongly Agree
Mean		4.36	0.65	Strongly Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

The results of the relationship between students and teachers in the social media and AI era were presented in Table 7 (Mean = 4.09, SD = 0.83). Teachers fully utilize social media platforms for educational reasons. They understand the importance of interacting with learners on social media outside the classroom since it offers another avenue for support and contact. These elementary teachers agreed that AI could improve student-teacher relationships by providing individualized learning opportunities and encouraging positive aspects of student development (Su & Zhong, 2022). Allowing learners to use social media professionally promotes transparency and deepens student and teacher relationships. Social media and artificial intelligence could improve communication, allow educators to answer questions from students after hours, and build a strong sense of mutual respect between educators and learners (Weber-Wulff, 2018). Hence, this AI tool allows teachers to spend more time individually interacting with students who need extra help in their studies and personalizing learning experiences.

Table 7. Student-Teacher Relationship

Student-Teacher Relationship		Mean	SD	Interpretation
1	The educational sector must find a way to improve the facilities, electricity, and internet to access social media platforms properly.	4.47	0.66	Strongly Agree
2	I often use social media platforms to communicate with my students outside class.	4.14	0.77	Agree
3	AI in education can strengthen the bond between students and teachers.	3.98	0.88	Agree
4	I am comfortable with students accessing my professional profile on social media.	3.74	1.03	Agree
5	Social media and AI use improve the effective communication between teachers and students.	4.07	0.73	Agree
6	I respond to my students' queries on any platform outside my working hours.	3.95	0.99	Agree
7	My students regard me with high respect when communicating with me through any social media platform.	4.02	0.84	Agree
8	I can personalize learning experiences for my students by giving them content and feedback that is suited to their needs and interest	4.29	0.69	Agree
9	The use of AI helps to promote student's academic growth through teachers who emphasize their positive aspects.	4.03	0.87	Agree
10	With the help of AI, I can have more time for individual interactions with my students who need learning assistance.	4.03	0.85	Agree
11	If there is free wifi in every area, students can communicate with their teachers anytime they need assistance.	4.32	0.83	Strongly Agree
Mean		4.09	0.83	Agree

Note: 4.30–5.00 = Strongly Agree; 3.50–4.20 = Agree; 2.70–3.40 = Neutral; 1.90–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

CONCLUSION

Elementary teachers have a thorough awareness and comprehension of social media and artificial intelligence's impact on education. They understand how these technologies can boost academic achievement, enrich learning opportunities, and teach students valuable skills. These educators actively use social media and artificial intelligence (AI) to personalize the learning process, and they are responsible for incorporating these tools into the educational approach. The significance of continuing professional development to be knowledgeable and skilled in using AI and social media efficiently was highlighted. Moreover, the positive approach of these tools was emphasized by advancing the future of education. The need for more funding, updated curriculum, and government and educational institution support to take use of social media and artificial intelligence is

crucial. They understand how these tools improve student and teacher relationships by fostering effective communication and individualized learning.

Integrating social media and artificial intelligence in education has brought an innovative change, enhancing learning experiences and shaping the educational landscape. Through social media platforms, students can engage in a new way of remote learning, share knowledge, and connect with peers and educators. Moreover, AI technologies enable personalized learning experiences and adaptive assessments to cater to individual student needs and optimize teaching methodologies. However, while the synergy of social media and AI offers numerous benefits, it also presents challenges and concerns. Privacy and security issues regarding data collection and usage remain paramount, requiring robust safeguards and regulations.

Additionally, the digital divide results in inequalities in access to technology and quality education, calling the needs of efforts to bridge this gap and ensure equitable opportunities for all learners. Hence, proper guidance from the teacher is essential, ensuring that learners are adept at social media and AI platforms with enough guidance to facilitate knowledge with safety and privacy for the students while using the platform. This sheds light on the strategic integration of social media and AI in education holds tremendous potential to revolutionize learning paradigms, foster collaboration, and cultivate personalized learning experiences. Nevertheless, it requires careful navigation of ethical, privacy, and accessibility considerations to harness its full benefits and ensure inclusivity and integrity within educational ecosystems.

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