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The Effect of Using Social Media on Student Development in the Learning Process in the Social Science Study Program Branch: A Systematic Review

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ABSTRACT

The research aims to determine the influence of social media on student development in the learning process. The research method adopts Husamah et al. (2022) and Katz & Nandi (2021). The first stage is the critical stage—first, the formulation of research questions. Second, identify studies that are relevant to the research topic—Third, evaluate and select studies that best suit the research objectives. The third stage is the initial screening of documents, selecting documents that have high relevance and selecting using relevant keywords. The research results show that social media has a relatively significant role in learning. Platforms such as Facebook, Twitter, Instagram, and YouTube positively enhance the teaching and learning process. It can further increase students' independence and self-confidence and encourage collaborative work in the classroom environment. However, using social media also has risks, such as reducing productive study time due to excessive interaction. Apart from that, it has a negative impact on interactions between students and teachers. Teachers must pay attention to knowledge construction and social interaction in the learning process. So, teachers can design strategies that utilize the positive potential of social media while actively reducing the negative impacts that may arise. Teachers must take an integrated and thoughtful approach to social media to create a balanced and effective learning environment.

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INTRODUCTION

Various social media platforms, such as Youtube, Facebook, and WhatsApp, have been recognized as a driving force in achieving learning objectives. By using social media, teachers have the convenience of evaluating the learning process and providing faster feedback to students (O'Connor et al., 2020; Zachos et al., 2018), so they can optimize efficient and productive interactions (Banerjee et al., 2019; Katz & Nandi, 2021; Scott & Goode, 2020). In addition, social media also plays a role in increasing students' independence and confidence in the learning process because they can access learning resources independently and actively participate in an inclusive learning environment (Chen et al., 2021). Not only that, but the presence of social media also promotes collaborative work among students, facilitating interaction and collaboration to find solutions and solve problems together (Alden, 2018; Munthali et al., 2021; Newton et al., 2018; Wang, 2019).

However, even though it has various benefits, the use of social media in education also has the potential to cause harm, especially to student academic achievement. Suppose it is used excessively, for example, on the Facebook platform. In that case, students' learning time can be reduced because more is spent on social interaction or entertainment content than focusing on more productive learning activities (Bhandarkar et al., 2021; Paakkari et al., 2021; Yimer, 2023). This can distract students from the primary purpose of learning. Therefore, it is essential to strike the right balance in the use of social media in educational contexts. It is harnessing the benefits of social media for learning while ensuring that its negative impact on academic achievement is avoided.

Analysis of the influence of social media on the learning process has become an exciting research topic. Because of its significant impact on students and implications for teachers, research continues to seek to explore the pedagogical potential of social media more deeply. So, systematic literature review research on documents in the Social Sciences Study Program Branch indexed by Scopus is fundamental.

The main purpose of this study was to analyze the effect of using social media in the learning process on the development of student's abilities and skills in academic achievement, as well as the teacher's role in implementing a good learning process and students' social participation on social media platforms. By understanding the influence of social media and the teacher's role in guiding and encouraging students' social participation in social media, it is hoped that it can provide important information about how to design the learning process to be implemented and further enhanced so that students get a good academic experience by using social media in the learning process so that the media Social media can be a supporter of learning that is positive and beneficial.

RESEARCH METHOD

This research is a Systematic Literature Review (SLR) research. This literature review adopts the guidelines used by Husamah et al. (2022), while social media is adopted by Katz and Nandi (2021), namely Facebook, Twitter, Instagram, YouTube, and WhatsApp. The research step consists of several steps. Step 1: Formulation of questions. This step covers the research focus, namely the Social Sciences Study Program. The questions in this step are based on topic needs: RQ 1: How many research documents related to social media in the Social Sciences Study Program discipline? RQ 2: How many research documents about social media are articles, conference papers, and reviews? RQ 3: What important contributions and information can be obtained from social media research documents? Step 2: Find studies. This step is to find, select and list the core contributions related to the review question. Data collected from Scopus (https://www.scopus.com). The data used is the period 2018 to 2023. All documents used are available in open access. Documents included in the review are articles, conference papers, and reviews. Source types are journals and conference proceedings. Documents published in English. The keywords used are "Facebook", "Twitter", "Instagram", "YouTube", and "WhatsApp". Step 3: Study Selection and Evaluation. This step ensures the suitability of the data or information obtained in the SLR. Explicit selection criteria were applied to include or exclude relevant studies, ensuring transparency in the process (see Figure 1).

The selection process goes through several stages, starting from Stage 1: Initial Screening. At this stage, 43,252 documents have met the specified requirements. Furthermore, in Stage 2: Field of study, 12,484 documents were relevant to social sciences. The next stage is Stage 3: Selecting specific keywords to ensure alignment with the research topic. The keywords used were "Facebook," which produced 22 documents; "Twitter," with 11 papers; "YouTube," with 17 recordings; and "WhatsApp," as many as 17 pieces. By going through this strict selection process, the research team ensured that the articles met the criteria for a systematic study of student motivation.

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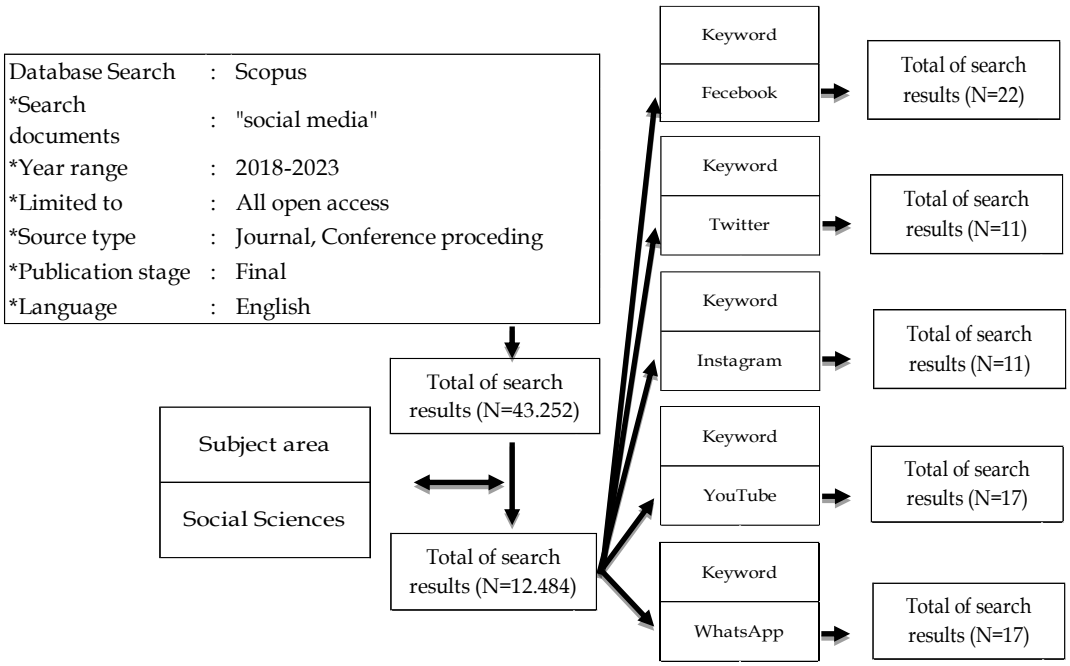

Figure 1. Review process for study selection

RESULTS AND DISCUSSION

The analysis results are presented in table form consisting of three parts, namely References, Important Information and Quotes. The Reference section provides information about the document author's name and the year the document was published. The Important Information section provides information regarding the results of the document. The Citations section includes information about the number of papers cited by others. The analysis results are then given an enriched meaning or interpretation by referring to, comparing, or contrasting with previous research findings.

Table 1. Facebook

References	Important Information	Citations
(Hegarty & Thompson, 2019)	Social media, such as Facebook, can be a driving force in achieving learning goals. Social media can help teachers evaluate the learning process and provide faster feedback. Furthermore, social media also increases students' independence and confidence in the learning process. Social media can support and encourage students to work collaboratively. By utilizing social media, student interaction and participation in learning becomes more interactive and allows students to develop social and collaborative skills.	27
(Tartari et al., 2019)	The use of the social network Facebook hurts academic achievement. This is due to the tendency of students to spend excessive time interacting with the platform, which results in reduced learning time that is more productive. Students are often tempted to engage in social and entertainment content on Facebook, diverting their attention from more important learning activities.	9
(Read et al., 2021)	Mobile Assisted Language Learning (MALL) powered by Facebook has great potential to enrich students' language learning experience. Through active engagement with this platform, students can build better understanding, increase motivation, and hone their learning skills while learning a language.	7
(Siddig, 2020)	Using social media platforms, including Facebook, in the learning process, students can experience increased understanding and meaningful learning experiences. This happens because social media allows students to interact	7

	with native speakers of the language being studied. This interaction allows students to improve their diction and pronunciation of words and phrases in that language.	
(Rueda, 2021)	The study results show that using Facebook can provide effective support in learning financial mathematics. The research found a positive relationship between three aspects of using the platform: sending messages, watching instructional videos, and doing exercises on Facebook.	3

Hegarty and Thompson (2019) stated that Facebook encourages the achievement of learning goals by increasing students' independence and self-confidence, especially in collaborative learning. Facebook also helps teachers trigger the learning process and provide feedback more quickly. Furthermore, Facebook can increase understanding and meaningful learning experiences because students can interact, send messages, watch learning videos, and do exercises (Rueda, 2021; Siddig, 2020). These findings are in line with the research results of Alwreikat, (2023), Datko, (2021), Mahajan and Mahender (2021), Orioque, (2021), who reported that Facebook can facilitate the learning process. Additionally, Read et al. (2021) highlight the great potential of Mobile Assisted Language Learning (MALL), supported by Facebook, to enrich students' language learning experiences. With active engagement in this platform, students can build better understanding, increase motivation, and hone learning skills while deepening language understanding.

However, different results were presented by Tartari et al. (2019), who state that the use of Facebook can be detrimental to students' academic achievement. This is because students spend too much time interacting on these platforms, thereby reducing time that can be used to study more productively. Students are often drawn to social and entertainment content on Facebook, thereby diverting their attention from more important learning activities. Similar findings were also reported by Valdez and Datu (2022), who stated that excessive use of social media can predict a negative impact on academic achievement.

Based on research described by Alwreikat (2023), Datko (2021), Hegarty and Thompson (2019), Mahajan and Mahender (2021), Orioque (2021), Read et al., (2021), Rueda (2021), Siddig (2020), it appears that the use of Facebook has a positive impact on achieving learning goals and academic performance. However, it is essential to note the conflicting findings from the research of Tartari et al. (2019) and Valdez and Datu (2022), who stated that using Facebook could hurt students' academic achievement. Therefore, teachers can use Facebook features that support the learning process, such as providing exercise feedback and motivating students to participate in online discussions. However, teachers also need to monitor and manage the time spent by students. Furthermore, teachers can also provide guidelines or limits regarding the use of Facebook to ensure that students remain focused on more productive learning activities.

Table 2. Twitter

References	Important Information	Citations
(Casal & Bravo, 2019)	A learning strategy that encourages the teacher's role as a facilitator, facilitating students' independent learning, is more effective when supported by social media, such as Twitter. By adopting this role, teachers can provide the necessary support and guidance to motivate students to participate more actively and engage in the learning process through social media.	35
(Taskiran et al., 2018)	Most Turkish students have a positive view of using Twitter in the context of language learning. They stated that tweeting messages on this platform had helped better facilitate their language learning experience. By integrating this social media into the learning environment, teachers can take advantage of the potential for more dynamic and interactive learning.	17
(Liu, 2018)	In the learning process, Twitter can increase student involvement, such as increasing participation and interaction in the learning process. Furthermore, Twitter can facilitate two-way communication between students and teachers	8

	and provide technology-based learning support. Thus, using Twitter can improve the quality of learning and student learning experience.	
(Peters et al., 2019)	There are differences in the use of social networking platforms such as Twitter in different learning processes, namely online and offline. Twitter integration in learning can provide unique benefits depending on the context in which it is used. By understanding the differences in the use of Twitter in online and offline learning, teachers can use appropriate learning strategies according to the ongoing learning context.	6
(Raja et al., 2021)	The findings show that over 75% of students believe that online digital interactive media such as Twitter is very important and helpful in language learning. In addition, the average reading comprehension test score showed a positive correlation between students' perceptions and reading comprehension ability.	1

In this series of research, Twitter has a vital role in enriching students' learning experiences and facilitating various aspects of learning. Liu, (2018) statement, which is in line with Casal, (2019), Luo et al. (2019), and Zheng and Dallaghan, (2022), stated that Twitter could increase student involvement in the learning process, including increasing active participation and interaction in learning. Additionally, Twitter enables two-way communication between students and teachers, creates more open exchange channels, and supports technology-based learning (Fischer et al., 2019; Liu, 2018).

Raja et al. (2021) emphasize that online digital interactive media such as Twitter play an important role in language learning. Taskiran et al. (2018), and Deaves et al. (2019), Fischer et al. (2019), López et al. (2020), stated that Twitter can provide new and more exciting learning experiences for students, creating a more dynamic learning atmosphere. Peters et al. (2019), Barzabal et al. (2020), and Casal and Bravo, (2019) emphasize that Twitter can also support the learning strategies that teachers apply in their learning context. Twitter has proven to be a valuable tool in assisting the effective learning process.

The results of the analysis above are in accordance with the report by Abdullah et al. (2022), Abney et al. (2019), Ataeifar et al. (2019), Bhatt and Yadav (2019) who reported that Twitter contributed significantly to improving students' language skills. Peters et al. (2019) stated the benefits of using Twitter in the learning process both online and offline, namely that Twitter can optimize the design of learning strategies that are more appropriate to diverse learning contexts. Therefore, the use of Twitter is an essential component of learning.

Table 3. Instagram

References	Important Information	Citations
(Miñano et al., 2019)	Social media platforms such as Instagram can significantly impact female students' perceptions, particularly regarding the standards of beauty and aesthetics promoted within them. In a social media environment dominated by carefully curated images and videos, female students can be exposed to an ideal body image.	44
(Sari & Wahyudin, 2019)	The study results show that most students show highly positive perceptions of using Instagram in learning because Instagram's social network influences their motivation, engagement, and attitudes. However, there were also obstacles, such as miscommunication regarding the material and assignment instructions.	14
(Ritonga et al., 2020)	This study found a shift in maharah qira'ah learning by using e-learning from a student centre to a media centre like Instagram. That is, depending on technology is more significant than dependence on teachers. This study also found that students preferred learning mahara qira'ah using conventional methods compared to e-learning, even though the teacher explains the material in-depth and gives assignments	11

	that support student learning.	
(Ramazanova et al., 2022)	The study established that social media platforms such as Instagram could be an excellent medium for teaching students in distance learning if teachers know how to use their potential in educational work.	2
(Černá & Borkovcová, 2023)	The use of social media, including Instagram, has experienced a significant decline after the pandemic due to changes in the learning process. During a pandemic, when many educational institutions are shifting to online or remote learning, using social media in learning has become more common and necessary to stay connected and interact with students.	0

Sari and Wahyudin, (2019), in line with Alfadda et al. (2022), found that students responded positively to the use of Instagram in the learning process. This finding is supported by Ramazanova et al. (2022), Marcella and Samofalova, (2022), and Navandar et al. (2021), which states that Instagram can be a very effective medium in distance learning, especially if teachers can optimize Instagram's potential in their educational tasks. Therefore, teachers can utilize Instagram as a tool that can increase student motivation, engagement and learning attitudes.

However, Ritonga et al. (2020) reported that the use of e-learning that relies on media, including Instagram, can change the focus of student learning to become more dependent on technology rather than the role of the teacher. Alfadda et al. (2022), and Sari and Wahyudin, (2019), also reported that there were obstacles to using Instagram in learning, such as miscommunication regarding material and assignment instructions. Furthermore, Miñano et al. (2019), supported by Adella and Rukmini, (2021) and Raja et al. (2021), highlight the impact of Instagram on students' perceptions. This shows that Instagram not only influences learning aspects but also students' social and psychological aspects.

Post-pandemic, Černá and Borkovcová (2023) reported that Instagram usage experienced a significant decline, perhaps due to changes in the learning process influenced by the pandemic. This shows the need to evaluate and adapt strategies for using Instagram in the ever-changing context of distance learning. So, to increase the effectiveness of using Instagram in the learning process, it is necessary to carry out content management training and interaction with students as well as adjust learning strategies.

Table 4. YouTube

References	Important Information	Citations
(Quintana et al., 2020)	All students rated YouTube videos as the primary resource for improving academic performance. Furthermore, students rate YouTube users better than teachers. But students prefer to interact with teachers rather than YouTubers in learning and acquiring STEM competencies.	19
(Ahmed, 2020)	Social media like youtube allows free interaction with native speakers of a language. This way, students will improve their diction and pronunciation of words and phrases. This will greatly enhance the learning process.	7
(Marçal et al., 2020)	The study results show that alternative teaching or learning methods, such as online videos, can support learning and achieve learning objectives.	5
(Jarrah & Alzubi, 2021)	Gender and study level proved significant about the effectiveness of Web 2.0, such as youtube, in the language learning process. Furthermore, the teacher pays attention to this in the learning process.	3
(Sasongko et al., 2022)	Learning using online platforms such as YouTube can face several technical problems that can affect the learning process. Some common problems that may occur are slow internet connection, out of quota, network or server interference, and power failure.	2

Marçal et al. (2020), with support from the statement of Barlis et al. (2023) and , Taieh et al. (2022), said that alternative teaching methods, such as online videos, are effective in supporting the learning process and achieving learning goals. Another relevant finding comes from Quintana et al. (2020), supported by the report of Ahmad and Obeidallah, (2019), Nomura et al. (2021) and Taieh et al. (2022) who reported that students consider YouTube videos as the main source that helps them improve academic performance. Ahmed, (2020) suggests that YouTube allows direct interaction with native speakers of a language, which can improve students' diction and pronunciation skills of words and phrases, thereby improving the learning process. Apart from that, the use of YouTube in the learning process is considered better than traditional methods. Additional findings from Jarrah and Alzubi (2021) state that factors such as gender and learning level can have a significant impact on the effectiveness of using Web platforms such as YouTube in learning.

However, other findings suggest that although YouTube is considered a valuable resource in learning, students prefer interacting with teachers rather than YouTubers when learning and gaining competency in STEM fields. This statement is in accordance with research by Sasongko et al. (2022), which received support from Küçükakkaş and İnce (2022) they stated that using YouTube in learning can cause several technical obstacles that affect the learning process, such as slow internet connections, data quota limitations, network or server disruptions, and power outages. Therefore, it is necessary to consider overcoming these technical obstacles to ensure the effective use of online video platforms in learning contexts.

Table 5. WhatsApp

References	Important Information	Citations
(Almahasees et al., 2021)	Online learning, such as using WhatsApp, also has a negative impact compared to face-to-face learning and teaching. This is because the challenges of online learning lie in adjusting to online education, especially for deaf and hard-of-hearing students, lack of interaction and motivation, technical and internet issues, data privacy, and security. Furthermore, the advantages of online learning are independent learning, low costs, convenience, and flexibility.	138
(Girmen & Kaya, 2019)	Using the Flipped Classroom Model (FCM) supported by social media such as WhatsApp in the learning process can develop students' learning abilities, learning skills, motivation, and social skills.	21
(Robles et al., 2019)	The use of WhatsApp in the learning process can reduce the quality of interaction between students and teachers in the learning process. Because in the learning process, there are not only knowledge construction relationships but also social presence and interdependence between teachers and students.	20
(Khan et al., 2021)	The research findings show that using the WhatsApp application for vocabulary development gets a positive response from students. The WhatsApp application has the potential to be an effective tool in helping students improve vocabulary and language comprehension.	15
(Atmojo et al., 2020)	The study results show that the science learning process can occur online using the WhatsApp group application. It can further improve self-learning ability, self-awareness, and student achievement.	12

Research conducted by Khan et al. (2021), with support from the research results of Alahmadi et al. (2023) and Tahounehchi, (2021), shows that using WhatsApp in a learning context can help develop students' vocabulary and get a positive response from them. The WhatsApp application has the potential to be an effective tool in helping students improve their language comprehension and vocabulary. Atmojo et al. (2020), supported by Alshaibani and Qusti (2021), Arulchelvan and Yunus, (2020), Binti and Latif, (2020), Bouzaiane and Dayananda, (2023), and Mulyatiningsih et al. (2023), stated that the science subject learning process can take

place successfully online through the use of WhatsApp groups, which can further improve students' independent learning abilities, increase their self-awareness, and enrich overall learning. Girmen and Kaya, (2019) stated that the Flipped Classroom (FCM) learning approach supported by WhatsApp could develop students' learning abilities, such as study skills, motivation and social skills. The advantages of this method include more affordable costs, easy access, and a high degree of flexibility.

On the other hand, Almahasees et al. (2021) found that online learning using WhatsApp for deaf students did not have a significant positive impact compared to face-to-face learning. This can be seen from the low level of interaction, lack of motivation to learn, and technical obstacles such as internet connection problems, data privacy, and student security. Furthermore, Robles et al. (2019) emphasize that the use of WhatsApp in the learning process can reduce the quality of interaction between students and teachers. This is caused by a focus that is too strong on knowledge construction so that it can ignore aspects of social presence and interdependence between teachers and students in the learning process. As a solution, it is necessary to develop strategies that are more careful and adaptable to the needs of students with various levels of ability and learning needs.

CONCLUSION

Research findings show that social media, such as Facebook, Twitter, Instagram, YouTube, and WhatsApp, have a significant role in supporting learning objectives. Social media facilitates two-way communication between students and teachers, allowing teachers to evaluate the learning process and provide feedback more quickly. Social media can also increase student motivation, promote activeness in the learning process, and develop student learning independence. However, it should be noted that the use of social media also carries certain risks. Negative impacts include decreased interaction between teachers and students, miscommunication regarding learning materials, technical problems such as internet connections, and data privacy issues. Students are often tempted to spend too much time interacting on social media platforms, reducing the time that could be spent on more productive learning activities. They can be distracted by social content and entertainment, resulting in reduced focus on more essential learning activities. Therefore, it is recommended that future teachers and researchers design learning models or strategies that are integrated with social media. This step aims to maximize the positive potential of social media in increasing student activity in the learning process and overcoming the risks and challenges that may arise from its use. Integrating social media in a learning context can be directed at optimizing its positive benefits, while considering solutions to effectively manage its negative impacts.

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All authors contributed equally to the conception and design of the study.

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