How Relevant Social Media As Educational Tools: Systematic Review

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Abstract

This paper presents a thorough literature review on social media as educational tools. It examines 30 papers from the Web of Science (WoS) as well as the Scopus database for themes. The review was carried out via the Preferred Reporting Items for Systematic Reviews (PRISMA) technique, which offers a holistic framework for systematic review as well as data collection. Furthermore, these studies considered in the review were published between 2018 and 2022. All articles are classified into two primary themes, which are 1) advantages and benefits and 2) problems, challenges, and disadvantages of social media as educational tools. In this work, these problems are examined in-depth and provided in the literature review. Instead of repeating the literature review and identifying the issue, an approach focusing on new ideas to bridge a gap about how to successfully integrate social media into the teaching and learning (TnL) process should be taken. In this paper, the authors summarize the most relevant information on the advantages, benefits, limitations, challenges, and problems that arise when integrating social media into education. Hence, social media and education can work together to improve collaborative and active learning, enhance interactions, engagements, and communication skills, encourage students' social-emotional wellbeing and motivation, as well as spread awareness, information, and new knowledge to the public. This research could pave the way for new ways to include social media in progressive education and make use of the thrilling advantages as educational tools as opposed to the negative effects.

Keywords: social media, tools, education, review.

1. HOW RELEVANT SOCIAL MEDIA AS EDUCATIONAL TOOLS: SYSTEMATIC REVIEW

Social media refers to a collection of online-based apps based on web technological advancements. The application development is widely used for information delivery and communication (Jung & C, 2019). The social media application is used with technological tools such as mobile phones, computers, and tablets.

Social media has evolved at a rapid speed during the previous decade. Twitter, Facebook, Tik Tok, as well as Instagram, among other social media platforms, have assisted us in various ways, notably with respect to communication. In challenging situations like a pandemic, using social media to quickly disseminate information from one region to another is unavoidable. People were taken aback when a complete lockdown was declared in March 2020, for instance, and social media platforms benefited them significantly in evaluating what would operate and what would not during the lockdown.

The integration of social media in education is not a new practice. Numerous instructors have included social media in the learning and teaching process. However, the use is still limited, and there is still a negative stigma in society towards social media utilization in education (Alenezi & Brinthaupt, 2022). There exist huge benefits to using social media as a learning tool such as enhance idea contribution and commitment of students to teaching and learning (TnL) activities (Azman et al., 2021), foster a sense of community (Sunar & Shaari, 2018), promote a student-centred approach (Hayes et al., 2020), increase student engagement, interaction, and motivation (Solomon, 2021), encourage creativity and improve academic outcomes (Hamat & Mahlan, 2020)

The systematic literature review presented in this research focuses on the influence of incorporating social media into education on students' social-emotional wellbeing and academic achievement.

The review also discussed the problems, challenges, and limitations in integrating social media in education. In addition, this review will fill a vacuum in the literature regarding effective ways to integrate social media into the (TnL) process. Moreover, existing systematic review studies on the subject do not dive into extensive detail concerning review methodologies, including article screening, keyword identification, as well as article eligibility. Furthermore, future researchers will not be able to regenerate the review, corroborate the interpretation, or verify the data scope highlighted in by these researches as a consequence.

This study is also relevant because it aids investigators in comprehending peer literature evaluations, which may aid them in determining the efficacy of adding social media into classroom activities. The major research question is addressed by the current systematic analysis, for instance, "What are the benefits and limits of utilizing social media as educational tools?". This review also discuss the activities and improvements to tactics for effectively integrating social media into the (TnL) process. Moreover, there are also recommendations and suggestions for future research on creating an interactive educational video on Tik Tok.

Material and Methods

There are numerous systematic reviews being undertaken throughout the world. Contrarily, there exists a paucity of studies about social media as educational tools discussing both positive and negative aspects in-depth and giving recommendations on how to successfully incorporate social media in the (TnL) process. To perform a systematic literature review, this research used the PRISMA approach (refer Figure 1).

Identification

Finding publications that are relevant to the review is the first stage in a systematic review. Using dictionaries, encyclopaedias, thesaurus, and earlier publications, the researchers first determined the keywords and related or comparable phrases. After selecting the essential terms, the researcher established search strings as portrayed in Table 1 for searching papers in the WOS as well as Scopus databases. The materials from both databases were successfully obtained by the researcher.

Screening

The screening step begins with identifying and eliminating duplicate items. In the first round of screening, 19 articles were eliminated. The remaining papers were then assessed to see if they met the inclusion requirements, which stipulated that the publications should report research findings because they are the major source of practical information. As a result, systematic reviews, meta-analyses, meta-synthesis, article reviews, book volumes, book series, conference proceedings, as well as book chapters were all eliminated. Furthermore, the sources have been written in English and must be published in the range of 2018 and 2022. A total of 288 publications were removed from the study as per the researchers' inclusion and exclusion criteria.

Eligibility

The third stage was to see if the articles chosen for the review were eligible. Therefore, the titles, abstracts, and important points of the remaining 30 articles were reviewed. This process was taken to guarantee that the kept papers met the inclusion criteria for the study's goals. (refer Table 2)

Data Abstraction and Analysis

An inductive thematic analysis (Braun, V., & Clarke, 2006) was employed to determine appropriate themes. Two key themes emerged from the analysis, encompassing two wide thematic areas. The first theme is about the advantages and benefits of social media as educational tools, while the second theme is about the problems, challenges, and limitations of integrating social media as educational tools. This procedure had six steps: data familiarisation, data coding, identifying themes, reviewing themes, defining, labelling themes, as well as reporting the findings.

Result

Social media platforms have become a part of our lives. There are a lot of benefits of integration with respect to social media use in education. Contrarily, there are also disadvantages, problems, and challenges of social media use in education. Educators need to wisely set appropriate guidelines so that social media-integrated learning gets the utmost benefits. Note that 30 articles were extracted and analyzed using the search technique (refer table 3). All of the articles were divided into two main themes, namely benefits, advantages and downsides,

problems, as well as challenges. Each primary theme would be divided into several sub-themes, which were to enhance collaborative, active, and inquiry learning (9 articles), improve interactions, engagements, communication skills (8 articles), encourage student's social-emotional, wellbeing, and motivation (4 articles), public outreach: spread awareness, information, and knowledge (8 articles), addiction, distraction, and abuse (4 articles) , invade privacy, enhance cyberbullying, harassment, and spreading misleading information (3 articles) and limited internet coverage, lack of gadgets, and technical problem (2 articles).

Themes

1.0 Benefits and Advantages

1.1 Enhance Collaborative, Active, and Inquiry Learning: New Teaching Technique

Improved collaborative learning, which promotes groups of students to work together to address an issue, finish a task, or build a product, is one of the possible advantages of social media as educational tools. This is founded on the social constructivist principle that knowledge is formed via active interaction and the exchange of experiences among members of a group. According to research carried out in the United States and Europe, the ability to upload and download text, videos, images, and links, complete online assignments, and presentations, join wikis, blogs, social bookmarking, as well as forums for the sharing of information, opinions, and news alter students from passive receivers to active learners (Alenezi & Brinthaupt, 2022). Besides that, the move toward accepting learner-centered environments inside universities, according to Hamadi et al. (2021), is encouraging social media utilization as a learning tool in a classroom context. Rather than disseminating knowledge, the teacher in this (TnL) style functions as a facilitator of the learning process. Nevertheless, this strategy is classed as active learning, in contrast to passive learning, in which the learner makes a one-way effort.

A study was conducted to examine the present setting of employing social media as e-learning tools to boost learning at a rapidly growing institution in south Saudi Arabia. It also considered the advantages of social media tools utilization in higher education as well as the crucial role that these platforms may play in smoothing out the educational process. Participants in this study were ten lecturers.

As a consequence, some of the interviewees were quite enthusiastic about using social media as an e-learning tool, believing that they were extremely powerful instructional tools that should be incorporated into university curricula and that tutors must begin employing them to supplement other learning settings (Omar Alshehri, 2009). Meanwhile, Pérez (2018) concluded that the internet and social media applications' simple connectivity are revolutionizing learning settings to enable active learning by generating learning spaces that are not limited by time or location.

A case study showed that nursing students from Norway and Poland are more self-directed learners, reflecting more on the process of learning using technology and self-regulating their learning (Lopez V., 2018). As a result, students understand the significance of self-regulating their personal learning to reach targets, learn new things, as well as improve their skills. Here, collaborative learning is essential for students to become active participants in their own learning. Otherwise, about 92.5% of dental students from the University of Nebraska Medical Center (UNMC) College of Dentistry as well as University of Texas School of Dentistry (UTSD) believed that social media (Instagram) is more entertaining, convenient, and professional for anatomy study as well as review. It helped them to better comprehend anatomy (Vuvi H. Nguyen ,Elizabeth R. Lyden MS, 2021). Aside from that, dental students feel more at ease asking their professors questions via Instagram.

Other than that, a study exploring the dentistry students' attitudes toward utilizing social media as an educational tool in Saudi Arabia was also conducted. Based on this research's findings, learning through social media aided in obtaining more information on a variety of topics, making education more interesting, increasing access to new resources, strengthening innovation as well as creativity, and enhancing research abilities (Rajeh, MT; Sembawa, SN; Nassar, AA; Al Hebshi, SA; Aboalshamat, KT; Badri, 2021). Furthermore, a qualitative study found that the majority of students from the University of Malaya's Faculty of Business and Accountancy felt that YouTube is an excellent tool for enhancing learning if the video is related to the topic being discussed (Moghavvemi, S; Sulaiman, A; Jaafar, NI; Kasem, 2018). Moreover, Serrano-Estrada et al. (2021) concluded that students learned critical thinking and interpretive abilities, which are important cross-cutting skills for

comprehending the massive amount of data available in today's digitalized society. Beside that, Sinclair et al (2021) stated that researchers should integrate flexible, adaptive social media strategies into their studies to establish successful platforms for impactful as well as collaborative research and dissemination.

1.2 Improve Interactions, Engagements, and Communication Skills

Integrating social media into the (TnL) process can improve interactions, engagements, and communication skills among students, teachers, and peers. For example, (Garrido Martínez Salazar et al., 2021) posited that students are interested in using social networks as a teaching tool because they prefer visual content networks. This teacher-student connection may help to reinforce educational concepts and facilitate two-way communication.

In prospective cohort research examining structural as well as social determinants on health trajectories within 599 teenagers in a California agricultural community, Thomas et al. (2020) investigated the human-centered, Instagram-based outreach effort effectiveness and engagement. It focuses on participant retention, improving participant experiences, and raising study awareness in the community. According to the findings of the pilot project, Instagram (a social media platform) is a promising technique for encouraging adolescent engagement as well as involvement in current research, specifically if the material is developed with youths as partners.

Integrating numerous social media platforms into course instruction may enhance student interest, interaction, and involvement while also offering students and instructors various research and communication platforms. This may be utilized to boost the sense of community within an online group, according to Woods et al. (2019). The goal of this research was to discover if various groups of students had varied views on utilizing social media for class assignments. Furthermore, the suggestions aim to aid instructors who are keen on employing social media for class assignments to understand how different student groups feel about it.

Problem-based learning (PBL), which is a student-centered approach, is one of the most popular activities in (TnL). Students learn about a subject by solving an open-ended issue in groups. As a result, social network analysis is a great tool for consistently monitoring interactions in an online PBL setting when practising PBL. It may be advantageous to use social network analysis to find vital information about the group, the course, as well as individual students. This discovery could be helpful in the learning analytics context, enabling teachers to keep track of their students' actions and improve student-teacher interaction (Saqr, M; Alamro, 2019).

Learning at a university in another nation can widen one's intellectual and professional perspectives while also allowing one to engage with people from other cultural and social backgrounds. Sleeman et al. (2020) observed that international students at the university endure acculturation and adjustment challenges due to anxiety, stress, as well as loneliness, according to his research. As a result, educators can utilize social media in the classroom to provide international students with greater opportunities and confidence in using the internet to communicate with their classmates. These outcomes have consequences for the choice of digital platforms for social media pedagogical use, as well as how this can affect foreign student teaching in higher education to develop connections.

Teachers from all over the world are using a variety of social media platforms to communicate with one another, share ideas, and curate resources. A small-scale exploratory study with 15 teachers from Belgium, Australia, and the United States was undertaken to see how ICT specialists use social media for professional learning and the way socio-technical affordances affect how they interact online. Here, the socio-technical affordances of users' relational contacts, capabilities, and goals for utilizing social media platforms are all socio-technical affordances. Prestridge et al. (2021) propose three categories to explain how instructors reason and act having like-minded colleagues on social media, namely competitive, non-competitive, as well as anti-competitive. Furthermore, cultural values at the national and school levels were discovered to impact how these teachers saw and implemented online collaboration opportunities.

Adults with hearing loss may benefit from social media as well as eHealth. However, it is uncertain if their utilization of social media, smart devices, and apps is similar to the general population. Adults having hearing loss were prone to agree that utilizing social media to communicate with family and friends was a good idea, according to van Wier et al.

(2021). Besides that, they also agreed that using social media can perform their work excellently.

1.3 Encourage Student's Social-emotional Wellbeing and Motivation

Figueras-Maz et al. (2021) found that the passion and motivation required for a successful collegiate learning process might be catalyzed by social media. According to Pérez (2018), motivation can justify why people choose a certain activity, how long they are determined to stick with it, and how much work they put into it. Internal and/or external motivation go hand in hand with effective learning performance.

Yu et al. (2022) investigated the mobile learning technologies as well as social media tools' impacts on student engagement and English learning results. The author concluded that when compared to social networking tools, mobile learning technologies have the potential to enhance social, behavioural, emotional, as well as cognitive involvement and also English learning outcomes.

The most frequent use of social media applications during online learning is the 'WhatsApp' application. At University, KSA, an investigation was done to determine university students' perceptions, attitudes, and practises about the WhatsApp (social media) utilization in (TnL) activities. Agarwal and Alrowaili (2020) revealed that the majority of the students responded that they believe they will gain from (TnL) through WhatsApp and have both positive and negative experiences. As a result, among Saudi Arabian university students, WhatsApp remains the most prominent social media platform. The results of this research could be utilized to provide suggestions to authorities as well as medical educators about how to include social media platforms, including WhatsApp, in students' (TnL) activities.

1.4 Public Outreach: Spread Awareness, Information, and Knowledge

Owing to the growing number of social media users, various conferences, scientific journals, as well as medical societies have created accounts to showcase their events, education, research, as well as news. Not only are these platforms (social media) being utilized in novel ways to broadcast research findings, but they are also being used to create and disseminate new knowledge by empowering research collaborations (Deeken A.H., Mukhopadhyay S., 2020). Meanwhile, Chatterjee et al. (2020) conclude that stakeholders in higher education institutions in India have become motivated and see the significance of information sharing and have begun to employ social media to improve the knowledge exchange effect.

Social media is also an option as a medium to spread awareness and information on health education to the public. Nowadays, an increasing number of people are using social media to seek medical and nutritional advice about their ailments (Theodoridis et al., 2020). As an example, a study shows that there are now 48 Twitter accounts dedicated to rheumatology, which disseminate current guidelines and relevant events.

Blouet (2019) proposed that learning communities employ social media as well as reality television to properly evaluate portrayals of racism and slavery. Then the authors conclude that popular media can be used to better comprehend different stakeholder perspectives on racism as well as slavery in educational contexts. With regards to having pedagogical approaches and learning activities, critical analysis and engagement of popular beliefs and treatments concerning burial and death in the context of slavery may assist in effective (TnL) of historical and present constructions of racism and race.

Considering the importance of social media in spreading awareness and information about sexual education and knowledge, the Institute of Clinical Sexology in Rome has developed a technical tool utilized during sexual education classes. In the long term, a key strategy should be devised to support the safer use of social media in sexual education interventions, in which youth, as well as experts, collaborate to enrich sentiments as well as emotions rather than simply increase information. Notwithstanding adolescent interest in sexual health, an absence of clarity, scientifically supported online sex education material may result in the rise of sexuality-related ambiguity and anxiety (Todaro E., Silvaggi M., Aversa F., Rossi V., Nimbi F.M., Rossi R., 2018).

Several adult and paediatric diabetes units in the United Kingdom employ telemedicine, digital technology, or social media in their services to disseminate knowledge, information and raise awareness about the consequences of diabetes. According to Ng (2018), new digital and technological initiatives, as well as social media, can dramatically enhance education, health outcomes, as well as patient participation within a paediatric diabetes programme.

Apart from that, a study was done in the United States to widen and assess a software tool (Trial Promoter) that would aid education research as well as health promotion by automating elements of the dissemination, creation, as well as assessment of large numbers of social media health messages and user replies. According to Reuter et al. (2019), a software solution can efficiently enable the generation, distribution, and evaluation of hundreds of health promotion messages and user comments across various social media platforms with the highest degree of functional accuracy and minimal human involvement. Here, the tool possesses the potential to aid social media-enabled health promotion research and practise in two ways. Firstly, this is done by enabling large numbers of messages to be evaluated to establish evidence-based health communication. Secondly, by offering public health organizations a tool to boost their health education message output while also managing user comments.

Similarly, Lyson et al. (2019) discovered that brief engagement in an online social media platform and receipt of personalized health messages could enhance human papillomavirus (HPV) knowledge. The majority of participants had a high degree of awareness, knowledge, and participation in beneficial behaviours related to cervical cancer prevention, according to the findings.

2. Disadvantages, Problems, and Challenges

2.1 Addiction, Distraction, and Abuse

One of the disadvantages of using social media in education is that it causes addiction to the point of neglecting to learn. Certain undergraduate students in Kuwait, for instance, may be addicted to social media, which is a type of Internet spectrum addiction illness. Salience, mood modulation, tolerance, withdrawal, conflict, and relapse are essential features of social media addiction, leading to symptoms typically linked with substance abuse (Alenezi & Brinthaupt, 2022). Meanwhile, Hamadi et al. (2021) agreed that students might only be familiar with the usage of social media for personal reasons, not as a tool for education. As a result, it is critical that they learn how to use technology in the classroom. Furthermore, inappropriate online behaviour should not be accepted on social media accounts used for classroom instruction.

As per a study by Figueras-Maz et al. (2021), many young people "are beginning to be more conscious of the negative effects of frequent usage. They believe that it distracts them, that they lose focus, compels them to spend more time studying, receive lower grades, as well as possesses a negative effect on their academic results." The most common negatives of adopting social media in education, according to Rajeh et al. (Rajeh, MT; Sembawa, SN; Nassar, AA; Al Hebshi, SA; Aboalshamat, KT; Badri, 2021), are a diversion from studying, increased addictive potential, more time spent, and worries about losing direct contact with instructors.

2.2 Invade Privacy, Enhance Cyberbullying, Harassment, and Spreading Misleading Information

Apart from the positive effects, Alshehri (2009) also revealed that distraction, opposition to Islamic religious beliefs, privacy concerns, and cyberbullying were the most significant impediments to using these tools in the classroom. Online bullying, receiving unpleasant or dangerous messages or images, other types of distraction, as well as social media addiction, as per Sarwar et al. (2019), all divert students' focus away from the desired learning outcomes. Students are also exposed to material and conversations filled with anger and violence as a result of cyberbullying. Moreover, harassment or cyberbullying, sexting, depression, and inadvertent exposure to unwelcome sexual content are among the problems associated with the widespread use of social media (Todaro E., Silvaggi M., Aversa F., Rossi V., Nimbi F.M., Rossi R., 2018).

2.3 Limited Internet Coverage, Lack of Gadgets, and Technical Problem

On the contrary, Aburagaga et al. (2020) propose that social networks should be considered among the delivery platforms for online education because of their ease of use and familiarity among the younger generations. This is because it necessitates significant expenditures on various technologies, online education platforms, as well as infrastructure, causing it to be challenging for many developing countries to implement their online education strategies. In addition, there is a paucity of internet connectivity, facilities, and gadgets, which are some of the variables that can make it difficult to integrate social media into education. Furthermore, Sinclair et al. (2021) found that creating and maintaining a multi-layered online forum for information exchange as well as coproduction is difficult.

Among the technical factors is an understanding of the versatility and functioning of social media analytics.

3. DISCUSSION

Through a systematic literature review, this research's goal is to investigate social media's benefits and limitations as an educational tool. In addition, the recognized problem's solution measures are discussed. Although many previous studies have discussed integrating social media in education, this study is more current, and it uses the systematic literature review method to examine both advantages and downsides. This study begins by establishing the central theme of social media as educational tools. Given the previously reported statistics, there are some primary considerations that would be intriguing to study in this regard. The main obstacle is balancing the advantage of social media use with its negative consequences to maximize the benefits connected with it in (TnL).

First, the integration role of social media in (TnL) during pandemic covid 19 gives many benefits and advantages. The world changed in March 2020, and no educators were prepared for the year ahead. During the pandemic, however, the majority of them used social media as a creative remote learning tool. Certain teachers used Facebook's live video capability to engage with students, according to Sunoqrot et al. (2020). Others used TikTok, the most famous social networking site these days, to contribute their lessons. Therefore, social media has become a crucial supporting tool for teachers to deliver lessons smoothly. For example, distance learning for individual learning will be more effective and thus facilitate access to learning materials from teachers to students (Noryana Mohd Nor, Corrienna Abdul Talib, Nur Wahidah Abd Hakim, Marlina Ali, 2019)

Social media utilization provides possibilities to improve collaborative, active, and inquiry learning. For example, teachers conducting a brainstorming activity with their students on social media can improve teamwork skills to enhance students' analysis as well as problem-solving skills. Educators can use social media platforms to increase student learning and actively engage students in a collaborative learning community, which is in line with these advantages (Alenezi & Brinthaupt, 2022). Teachers can assist students in developing high creativity levels by motivating them to experiment with familiar content in new methods (Sarwar et al.,

2019). Furthermore, incorporating social media into the (TnL) process necessitates exhibiting 21st-century abilities, strengthening social relationships, and creating a cohesive classroom community (Solomon, 2021).

There are, nevertheless, challenges to solve. Several students identify it is challenging to participate in digital learning since they lack technology or reliable internet access. Moreover, this disparity persists within nations as well as between income levels within countries (Aburagaga et al., 2020). Even though 95% of students in Norway, Switzerland, as well as Austria, possess computer access for schooling, only 34% of pupils in Indonesia have computer access for schooling, as per OECD (PISA 2018 Assessment and Analytical Framework, 2019) data. Meanwhile, in the United States, there exists a significant disparity between those wealthy and poor families. Even though virtually all wealthy 15-year-olds said they had access to a computer, about 25% of low-income families did not. In comparison, certain governments and schools, such as those in New South Wales, Australia, have offered digital gadgets to students in need. However, others fear that the pandemic may have widened the digital divide.

Another barrier is the privacy implications of employing social media in the classroom (Solomon, 2021). Even though social media platforms offer teachers a convenient way to engage with students remotely, the privacy forum urges that they raise questions about equity and may breach student privacy rules. Various social media platforms, for example, expressly prevent children under the age of 13 from signing up since they gather user data for targeted advertising, a practise that breaches the federal Children's Online Privacy Protection Act (Complying with COPPA: Frequently Asked Questions | Federal Trade Commission, n.d.). Furthermore, publishing lessons on Facebook or any other social media platform may disadvantage students who do not have an account or have trouble streaming videos at home due to poor internet connectivity.

In addition to describing the downsides of using social media as educational tools, the systematic literature review also proposed actions that can be implemented to overcome the problem under the subtheme of invading privacy, boosting cyberbullying, harassment, and propagating fake news. Researchers come out with suggestions such as teachers should set guidelines and proper

procedures for social media usage in learning (Woods K., Gomez M., 2019). Each institution is proposed to build its own e-learning platform for students and teachers (Aburagaga et al., 2020). Teachers register an official social media account for (TnL) use without using their personal accounts (Hayes et al., 2020) and rivetingly, (Yu, ZG; Yu, LH; Xu, QY; Xu, W; Wu, 2022) suggests developing mobile learning games to improve learning outcomes as well as student engagement rather than employing social media.

4.   CONCLUSION

In conclusion, there are many pros and cons of integrating social media in education. However, an educator should wisely use all available facilities to get the maximum benefits to help students master the learning objectives (Solomon, 2021). Social media utilization is simpler, appropriate, and saves time and money compared to other e-learning apps. Undoubtedly, many e-learning applications have been created but are still unable to meet the minimum socio-economic needs of all students. Most e-learning applications are not user-friendly for secondary and primary school students since they do not possess computers or tablets. Most secondary and primary school students only own low spec cell phones. When only using mobile phones, the e-learning applications cannot be fully functional to enable students to learn well.

The integration of social media in education can support lifelong learning (Hayes et al., 2020). This is because the learning videos uploaded or shared with students can be watched anytime and anywhere. Parents can also watch the videos with the students to help them perform the academic assignments as a family activity. This can indirectly improve family relationships.

The authors suggest several methods and techniques for more effective ways to integrate social media in education:

Selection of Appropriate Social Media Platforms

Various social media platforms are evolving in line with the advancement of web technology. However, students are currently more inclined to use the Tik Tok application. In 2020, Tik Tok was the most downloaded app, with users spending an average of 41 minutes each day on it. Its users are mostly between 14 and 30, influencing this app as a potential educational tool (Khlaif & Salha, 2021).

The biggest benefit of the TikTok app over other social media platforms is that the videos can be viewed without needing to download the app. Additionally, Tik Tok videos can be easily disseminated on other social media platforms, for instance, Instagram Stories, Instagram, Twitter, Facebook stories, as well as WhatsApp. Therefore, educators can take the initiative to use this application in the (TnL) process:

Attractive and Creative Use of video with an Easy-to-understand Content

Teachers can create unique and entertaining videos to post on social media sites to engage students. However, many educators, especially the older generation, have insufficient information and communications technology (ICT) skills (Noryana Mohd Nor, Corrienna Abdul Talib, Nur Wahidah Abd Hakim, Marlina Ali, 2019). This somehow fuels the generational divide over the usage of social media in the classroom. However, when employing the Tik Tok app, educators can easily produce interesting videos just at their fingertips. The video content should also be easy to understand, achieve learning objectives, be suitable for students' self-learning, and be used as a reference to solve the assignments.

Teaching Aids: From educator to Educator

Educators can collaborate in producing creative instructional videos. Many teachers produce instructional videos for their students and can also be used by fellow teachers. Such efforts help educators who have moderate media technology skills.

Lastly, the recommendation for future studies. Future research should focus on effectiveness or usefulness creating an interactive educational video especially for science subject on Tik Tok as well as Tik Tok is become a potential educational social media platform.

Conflicts of Interest

The author asserts that they have no conflicting interests to disclose in this study.

Availability of Data Material

All data are available to access.

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Table 1. The Search Strings

| Scopus | TITLE (("social media" OR "social network") AND (education OR study OR learn OR tuition) AND (tool* OR material* OR device OR gadget)) AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018)) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j") |

Web of Science	TI= (("social media" OR "social network") AND (education OR study OR learn OR tuition) AND (tool* OR material* OR device OR gadget))

Table 2. The Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2018-2022	< 2018
Publication stage	Final	Article in press
Literature type	Journal (only research articles)	Journal (book chapter, conference proceeding)

Table 3. Finding with Regards to the Search Criteria

NO	Author	Year	Journal	Title	Scopus	WoS	Primary theme	Sub-theme
1.	Alenezi W., Brinthaupt T.M	2022	Contemporary Educational Technology	The Use of social media as a Tool for Learning: Perspectives of Students in the Faculty of Education at Kuwait University	/		Benefits and advantages	Enhance collaborative, active, and inquiry learning
							Limitations, problems, and challenges	Addiction, distraction, and abuse
2.	Hamadi M., El-Den J., Azam S., Sriratanaviriyakul N.C.	2021	Research and Practice in Technology Enhanced Learning	A novel framework for integrating social media as a cooperative learning tool in higher education classrooms	/	/	Benefits and advantages	Enhance collaborative, active, and inquiry learning
							Limitations, problems, and challenges	Addiction, distraction, and abuse
3.	Garrido Martínez Salazar F., García Fernández P.M., Gambra Arzoz M.I., Moreno Villares J.M., Sánchez Carpintero R.	2021	Educacion Medica	Preferences of the students of the Medicine Degree in relation to the use of social networks as an education tool	/		Benefits and advantages	Improve interactions, engagements, and communication skills
4.	Figueras-Maz M., Grandío-Pérez M.M., Mateus J. C.	2021	Communication and Society	Students' perceptions on social media teaching tools in higher education settings	/		Benefits and advantages	Encourage student's social-emotional wellbeing and motivation
							Disadvantages, problems, and challenges	Addiction, distraction, and abuse

5.	Deeken A.H., Mukhopadhyay S., Jiang X.S.	2020	Histopathology	Social media in academics and research: 21st-century tools to turbocharge education, collaboration, and dissemination of research findings	/		Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
6.	Chatterjee S., Rana N.P., Dwivedi Y.K.	2020	Journal of Knowledge Management	Social media as a tool of knowledge sharing in academia: an empirical study using valance, instrumentality, and expectancy (VIE) approach		/	Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
7.	Theodoridis X., Pittas S., Bogdanos D.P., Grammatikopoulou M.G.	2020	Mediterranean Journal of Rheumatology	Social Media as Tools to Study Dietary Habits of Patients with Rheumatic Diseases: Learning from Relevant Work on Inflammatory Bowel Diseases	/		Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
8.	Aburagaga I., Agoyi M., Elgedawy I.	2020	IEEE Access	Assessing Faculty's Use of Social	/	/	Disadvantages, problems,	limited internet coverage

				Network Tools in Libyan Higher Education via a Technology Acceptance Model			and challenges	and lack of gadget
9.	Thomas V.L., Chavez M., Browne E.N., Minnis A.M.	2020	Digital Health	Instagram as a tool for study engagement and community building among adolescents: A social media pilot study	/	/	Benefits and advantages	Improve interactions, engagements, and communication skills
10.	Blouet H.	2019	Journal of African Diaspora Archaeology and Heritage	Past Reality Meets Reality Television and social media: Southern Charm as a Tool in Education, Outreach, and Scholarship	/		Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
11	Woods K., Gomez M., Arnold M.G.	2019	International Journal of Web-Based Learning and Teaching Technologies	Using social media as a tool for learning in higher education	/		Benefits and advantages	Improve interactions, engagements, and communication skills
12.	Omar Alshehri,	2019	International Journal of Information and Education Technology	Usage and perceptions of social media tools among higher education instructors	/		Benefits and advantages	Enhance collaborative, active, and inquiry learning
							Disadvantages,	Invade privacy,

							problems, and challenges	enhance cyberbullying, harassment, and spreading misleading information
13	Todaro E., Silvaggi M., Aversa F., Rossi V., Nimbi F.M., Rossi R., Simonelli C.	2018	Sexologies	Are social media a problem or a tool? New strategies for sexual education	/	/	Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
							Disadvantages, problems, and challenges	Invade privacy, enhance cyberbullying, harassment, and spreading misleading information
14	Lopez V., Cleary M.	2018	Issues in Mental Health Nursing	Using social media in Nursing Education: An Emerging Teaching Tool	/		Benefits and advantages	Improve interactions, engagements, and communication skills
15	Pérez A.G.	2018	Bordon, Revista de Pedagogia	Social networks as tools to enrich learning environments in higher education	/		Benefits and advantages	Enhance collaborative, active, and inquiry learning
								Encourage student's social-emotional wellbeing and motivation
16	Vuvi H. Nguyen, Elizabeth R.	2021	Journal of Dental Education	Using Instagram as a tool to	/		Benefits and advantages	Enhance collaborative, active,

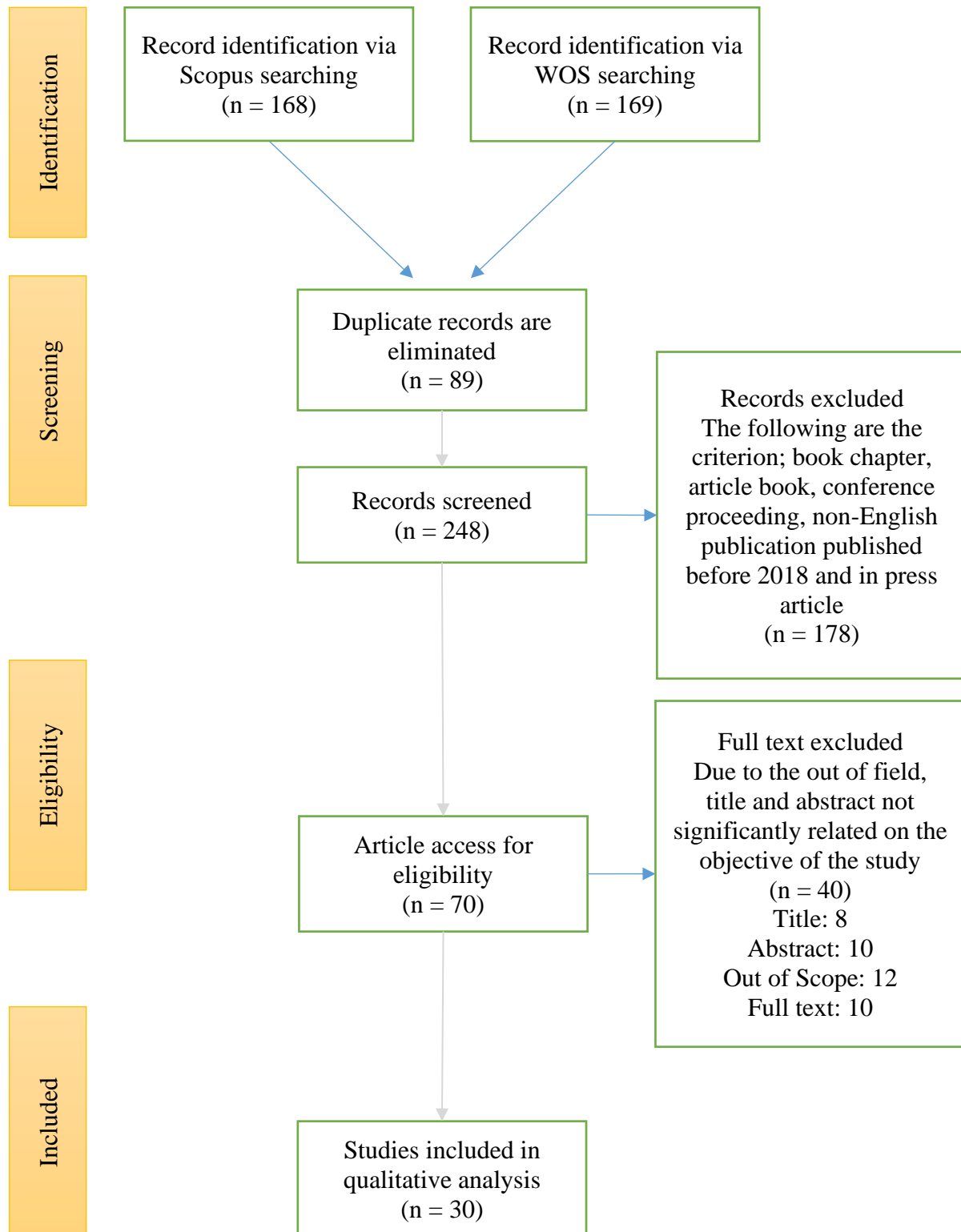|								
	Lyden, Shayla D. Yoachim			enhance anatomy learning at two US dental schools				and inquiry learning
17.	Rajeh, MT; Sembawa, SN; Nassar, AA; Al Hebshi, SA; Aboalshamat, KT; Badri, MK	2021	Journal of Dental Education	Social media as a learning tool: Dental students' perspectives	/		Benefits and advantages	Enhance collaborative, active, and inquiry learning
							Disadvantages, problems, and challenges	Addiction, distraction, and abuse
18.	Moghavvemi, S; Sulaiman, A; Jaafar, NI; Kasem, N	2018	International Journal Of Management Education	Social media as a complementary learning tool for teaching and learning: The case of YouTube	/	/	Benefits and advantages	Enhance collaborative, active, and inquiry learning
19.	Yu, ZG; Yu, LH; Xu, QY; Xu, W; Wu, P	2022	Technology Pedagogy and Education	Effects of mobile learning technologies and social media tools on student engagement and learning outcomes of English learning		/	Benefits and advantages	Encourage student's social-emotional wellbeing and motivation
20	Saqr, M; Alamro, A	2019	Bmc Medical Education	The role of social network analysis as a learning analytics tool in online problem-based learning		/	Benefits and advantages	Improve interactions, engagements, and communication skills

21.	Sarwar, B; Zulfiqar, S; Aziz, S; Chandia, KE	2019	Journal Of Educational Computing Research	Usage of social media Tools for Collaborative Learning: The Effect on Learning Success with the Moderating Role of Cyberbullying		/	Disadvantages, problems, and challenges	Invade privacy, enhance cyberbullying, harassment, and spreading misleading information
22.	Sleeman, J; Lang, C; Dakich, E	2020	Australasian Journal of Educational Technology	These findings have consequences for the selection of digital platforms for pedagogical use of social media, as well as how this may affect the teaching of international students in higher education in order to foster connections.	/		Benefits and advantages	Improve interactions, engagements, and communication skills
23.	Prestridge, S; Utami, LP; Main, K	2021	Teacher Development	A cross-cultural comparison: the socio-technical affordances of social media as a professional learning tool for teachers	/		Benefits and advantages	Improve interactions, engagements, and communication skills
24.	Ng, SM	2018	Practical Diabetes	Technology, telemedicine and social		/	Benefits and advantages	Public Outreach: spread

				media are tools to improve health outcomes, education and patient engagement in a paediatric diabetes service				awareness, information, and knowledge
25.	Reuter, K; MacLennan, A; Le, N; Unger, JB; Kaiser, EM; Angyan, P	2019	JMIR Public Health and Surveillance	A Software Tool Aimed at Automating the Generation, Distribution, and Assessment of Social Media Messages for Health Promotion and Education Research		/	Benefits and advantages	Enhance collaborative, active, and inquiry learning
26.	Reuter, K; MacLennan, A; Le, N; Unger, JB; Kaiser, EM; Angyan, P	2019	Jmir Public Health And Surveillance	A Software Tool Aimed at Automating the Generation, Distribution, and Assessment of Social Media Messages for Health Promotion and Education Research		/	Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
27.	Agarwal, A; Alrowaili, MG	2020	Pakistan Journal of Medical &	Prospects and Challenges of social		/	Benefits and advantages	Encourage student's social-emotional

			Health Sciences	media (WhatsApp) usage over University Learning Managemen t System (LMS) as an E-learning tool among University students, Kingdom of Saudi Arabia (KSA)				wellbeing and motivation
28	Lyson, HC; Le, GM; Zhang, JW; Rivadeneira, N; Lyles, C; Radcliffe, K; Pasick, RJ; Sawaya, G; Sarkar, U; Centola, D	201 9	Journal Of Cancer Education	Social Media as a Tool to Promote Health Awareness: Results from an Online Cervical Cancer Prevention Study		/	Benefits and advantages	Public Outreach: spread awareness, information, and knowledge
29	Van Wier, M.F., Urry, E., Lissenberg-Witte, B.I., Kramer, S.E.	202 1	Journal of Medical Internet Research	A Comparison of the Use of Smart Devices, Apps, and social media between adults with and without Hearing Impairment: Cross-sectional Web-Based Study	/		Benefits and advantages	Improve interactions, engagements , and communicat ion skills
30 .	Sinclair, M., McCullough, J.E.M., Elliott, D.,Machado,	202 1	JMIR Pediatrics and Parenting	Using social media as a research tool for a bespoke	/		Benefits and advantages	Enhance collaborative , active, and inquiry learning

	A., Páramo-Rodríguez, L.			web-based platform for stakeholders of children with congenital anomalies: Development study			Disadvantages, problems, and challenges	

Figure 1. Flow Diagram of the Proposed Searching Study

Identification	Record identification via Scopus searching (n = 168)

Record identification via WOS searching (n = 169)

Screening

Duplicate records are eliminated (n = 89)

Records screened (n = 248)

Records excluded
The following are the criterion; book chapter, article book, conference proceeding, non-English publication published before 2018 and in press article (n = 178)

Eligibility

Article access for eligibility (n = 70)

Full text excluded
Due to the out of field, title and abstract not significantly related on the objective of the study (n = 40)
Title: 8
Abstract: 10
Out of Scope: 12
Full text: 10

Included

Studies included in qualitative analysis (n = 30)

Source: Moher et al. (2009).