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# | RESEARCH ARTICLE

# Incorporating Social-Media to Enhance Collaboration in Online Learning

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### **ABSTRACT**

Technology is advancing at a rapid pace, opening up new possibilities for learning. The majority of learning institution stakeholders, particularly professors and students, have cell phones and computers as well as active social media profiles. The rising use of social media, combined with the need to engage with people all over the world, is making it difficult to integrate social media into learning in a way that will complement the formal learning that takes place in educational institutions. This integration is especially important at stressful and difficult times, such as the Covid-19 period, which saw learning come to a halt for more than six months. As a result, the goal of this study was to look into social media integration in collaborative learning, which allows students to share learning content with others and tutors all over the world. The constructivism idea underpins this research. According to the article, social media plays a vital role in learning since it allows students to improve collaborative learning in the aforementioned scenarios. This research contributes to both theory and practice in a significant way.

## **KEYWORDS**

Social media integration, collaborative learning, online learning, learning content

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### 1. Introduction

The use of social media is becoming increasingly popular among individuals all around the world. On the planet, 2.5 billion people utilize the internet, with 8 billion of them having accounts on social media platforms (Venkatesh, 2020). In recent years, our extensive usage of social media has pervaded every aspect of our life. Many institutions and researchers have looked into the use of social media in education in particular. The majority of colleges throughout the world use social media to communicate with current and prospective students and alumni. Furthermore, social media is utilized as a learning aid. There are numerous examples in the literature of social media being used in a classroom setting to improve communication and collaboration. This article aims to look into the role of social media in cooperative learning.

Students in this digital age are now more strongly exposed to multiple developing technologies since the cyber world of new technology provides them with unique opportunities for cross-cultural contacts, learning, and self-exploration. According to Khan, Ashraf, Seinen, Khan, and Laar (2021), the net generations are now converging on a learner-focused pedagogy model centred on cooperation rather than traditional teacher-focused pedagogical practices. Since the cyber world of new technology provides them with unique opportunities for cross-cultural relationships, learning, and self-exploration, students in this digital age are now more firmly exposed to numerous developing technologies. The net generations, according to Khan, Ashraf, Seinen, Khan, and Laar (2021), are now convergent on a learner-focused pedagogy model centred on cooperation rather than traditional teacher-focused pedagogical approaches.

Collaborative learning is a method in which a group of students works together in an interactive setting to tackle a problem-solving task (Li et al., 2020). According to this approach, knowledge is formed within a population when members actively

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collaborate by sharing experiences in a shared context. Active contact with objects and others in a social setting is required for the production of meaning, learning, and knowledge acquisition. In this sense, social media and new technology are proving to be effective mediators of collaborative learning by offering educational assistance to students in the areas of developing creative thinking, sharing materials, and expertise in a virtual network. Abi-Rafeh et al. (2019) also concluded that social networking sites' conversational and collective qualities benefit students' overall learning by inspiring interpersonal skills such as social compliance, cooperation, and the development of gradual associations as critical parts of learning (Dwivedi et al., 2020).

The emergence of COVID-19 is a historically unusual phenomenon, with extraordinary lockdowns implemented throughout nations. To prevent the spread of COVID-19, some governments have imposed limits on residents' movements, banned social activities, and recommended individuals to stay at home (Laato et al., 2020). COVID-19 wreaked havoc on many parts of society, including the medical system, the economy, and education. Students were compelled to stay at home as educational institutions were forced to close. This resulted in procedural modifications in academic institutions' day-to-day functioning. As a result of the epidemic, digital advancements in the worldwide higher education sector have been made. Classes were cancelled at colleges and universities as administrators battled to transition courses to an online format in days or weeks. Educational institutions built official websites and programs to efficiently provide this online content, allowing students to continue their studies. To assist teachers in their transition to online learning, numerous academic institutions adopted "e-learning," a web-based learning environment for the transmission of knowledge and communication (McMurtrie, 2020). As a sort of social isolation, people spent more time on social media (SM) throughout the epidemic. SM sites reported a 61 percent increase in web traffic during the first three months of the COVID-19 outbreak compared to normal rates. Thanks to the growth of social networks and the increased online presence of many academic institutions, students enjoy live streaming services through SM (e.g., Instagram, Facebook), where they participate in regular discussions on trending topics and keep in touch with peers or instructors via online forums (Abi-Rafeh & Azzi, 2020). Individuals were able to participate in the conversion process connected to learning themes among peers and student-teacher relations via SM platforms. Furthermore, social media platforms have aided in the learning of new topics in relevant fields of study. Students all across the world use social media platforms as an alternative to face-to-face interactions.

#### 2. Literature Review

## 2.1 Social Media for Online Learning

COVID-19 was first identified on December 8, 2019, in Wuhan (Hubei Province, China) (Khan et al., 2020). It started in China and quickly spread throughout the world. According to UNESCO, the pandemic-related closure of academic institutes has impacted 890 million students in 114 nations. For some students, online learning has become a new normal, but it has also presented significant problems. There are big issues. According to Almaiah et al. (2020), online learning obstacles include not just infrastructure issues but also technical issues with online learning systems, change management problems, course design problems, e-learning self-issues, and monetary support issues. Many pupils in many nations do not have access to this form of education due to societal disparities (UNESCO, 2020). Over 144 countries shut down educational facilities, affecting 67.7% of students worldwide. Other nations have closed regional academic institutions, and if similar closures occur at the national level, millions of additional students will be affected. The concept of social distance has caused a slew of quick changes in higher education. In the past, students have never abruptly shifted from face-to-face education to digital remote learning. Academic institutions have had to adopt new ways of operating and communicating using digital technologies, as well as radically restructure their teaching models to fulfil pandemic-specific demand requirements. In the corporate and educational sectors, digital technologies are becoming more widely used, and increased digital technology use on a society level helps people all over the world to stay in touch.

The adoption of developing web technologies in the educational sector is fast rising. Because of the growing usage of social media in education, teachers and students must understand and embrace social media sites so that future instructional strategies can be developed and present course materials can be deployed on new technology-powered platforms (Bai et al., 2021). The Internet is rapidly being used by young people for social networking. Collaborative technology aids in the development of an online community in which people may communicate fast and easily. SM adoption in education has been studied in many settings. Only one small-scale study, however, has closely observed students' usage of SM for e-learning in higher education. In the case of a pandemic, higher education institutions can use e-learning technologies to manage, plan, deliver, and track students' academic learning and staff teaching activities. Furthermore, SM promotes student collaboration and participation while also helping them to improve their grades (Al-Rahmi et al., 2020). For a range of learning apps and other related resources, SM assimilation and use have become a prerequisite. Such capabilities are valued in SM technologies because they use Internet-based procedures to disseminate and exchange information and create a collaborative environment (Esam & Hashim, 2016).

Furthermore, the remarkable rise of mobile technology in current years has had a favourable impact on teacher-student engagement and collaboration. CL, open-loop feedback, and two-way communication are all distinctive properties of SM. Many

individuals may readily communicate their views, views, proficiencies, predictions, information, and knowledge via SM, thanks to these qualities (Al-Rahmi et al., 2018). Furthermore, using social media improves students' communication abilities, allowing them to collaborate and communicate despite geographical limits so improving their academic achievement (Berkani, 2020), and encouraging individuals to work in groups; as a result, members assist one another by correcting one another's mistakes, so enhancing their learning progress or performance. SM provides a forum for students and teachers to discuss and test their ideas with one another. It's also a good approach for kids to get feedback from their peers quickly. With all of these benefits, we feel SM is a powerful educational tool that may be utilized to enhance learning behaviour.

### 2.2 Collaborative Learning

According to UNESCO (2020), collaboration refers to the shared appointment of members in a harmonized effort to work together when solving a problem. Collaborative learning is also defined by Reed (2014) as a state in which two or more persons study something together, and further precisely in joint problem-solving. As cited by Dwivedi et al. (2020), even among specialists, there is difficulty in coming up with one meaning of collaborative learning. This difficulty in coming up with a common definition for CL is a result of several explanations. First, the number of connections between learners might vary from two to a thousand people, by diverse hypothetical and applied materials required to inspect communications happening at diverse levels. There is difficulty in describing what learning is. Further, detectives use "learning" to refer to numerous varied reasons of doing such as students learning development materials together for a trial; joint problem solving in which learning is expected to take place due to communications; learning as an "organic and/or social process" that takes charge over several years and "learning from concerted work, which refers to the all-time gaining of know-how within a specialized community".

According to Sarwar et al. (2021), there are four key essentials of collaborative learning: the capability to interact simultaneously, positivity and interdependence, accountability at an individual level as well as capability to ensure equality in participation. This contrasts the traditional approach to an environment where the teacher is expected to deliver the talk as the students listen; collaborative learning, therefore, provides active participation for all the learners at a similar time. The capability of social media to improve the interactivity among students and teachers and enhance collaboration for the benefit of all was recognized in its earlier stages of development (Gunasagaran et al., 2019).

Sites such as Gaggle.net have provided extended collaborative features for enabling the incorporation of social media for joint learning. The paid version of Gaggle.net has several features that improve the social media experience for learning (Bralić & Divjak, 2018). This online collaborative system consists of a social wall that looks and works just like Facebook, as well as an email account, a digital online locker, blogging, and a variety of other services, which are all available. One of the key reasons why such social networking sites are worth the time and favoured by educationists is the exemplary security features it offers to students. These include the ability to filter slang words, abusive words or foul language, pornographic content, and many more (Mergel, 2016). It is an ideal system with which students can be educated on how they can use social media professionally and enhance their interaction/communication skills as well as academically, helping them prepare for the job market upon completion of their studies. The students are thus able to enjoy having the social aspect of it while their teachers appreciate the capability of such systems to help them acceptably and safely reach their students. The teachers can also upload assignments into set drop-boxes that are only accessible by their students. Further, teachers are notified when their students complete and upload their assignments and submit, and this record is safely kept through the logs of the system; teachers can also mark these assignments online and avail student performance reports in real-time totally without the need for printing anything.

The capability to access YouTube videos directly from these social media sites is a great innovation for teachers/tutors, with the available filters; tutors can display any educational video without being affected by the filters. As this is a cloud-based system, anybody can get through their account anyplace they are as long as they are connected to the Internet; this means that learners can get through their social site at homegrown and at the same time attend to their exercise and projects (Almaiah et al., 2020). One can add records to the student's digital locker and work in co-operation, without necessarily being in the same area together at any given time. When educators generate "sittings" within the system, it alongside generates a session on the social platform for the students registered in that course, in such a way that they can dialogue with each other, share pictures, communicate with each other, among other functionalities of social media. Such abilities create a very constructive experience for all students and staff (Qi, 2019).

## 3. Existing Social Media Integration Frameworks

Several authors have delivered rich content on the benefits and the positive impact of social media and learning. Supportive frameworks for the incorporation of social media for joint learning have taken effect in different parts of the world and have born fruits on academic achievement (Rahman et al., 2019). Some of the existing research frameworks in literature which can be considered essential for research on the integration of social media for collaborative learning are discussed.

#### 3.1 Social Media Measurement Framework

The social media measurement structure was proposed by Agostino and Arnaboldi (2016). The framework defines four key components of social media measurement, namely: strategy, metrics, organization, and technology. It proposes that the key starting point for the adoption of any new technology in an organization is the strategy in that the organization must first define what it plans to accomplish and the approach it will take to achieve its objectives. After the strategy is laid out, the organization must define checkpoints of success, that is, how it will measure the progress of the implementation of the technology in question (metrics). The third critical component is organization- this involves the internal assessment of organizational factors and structures that will be critical in influencing the success of the adoption. This can be an assessment of the organizational readiness for the given technology. It looks at the resources available within the organization to support adoption and tries to assess how capable they are to fully support the adoption process; if these resources are not fully available, then the question on whether the organization can be able to acquire the same must be answered. This may also include the availability of personnel and skills necessary to support the adoption process. Finally, the final component is technology. This involves the selection and implementation of the right tool that fits within the organizational requirements for adoption.

## 3.2 Social Media Framework for Continued Engagement

The framework was proposed by Kumar and Nanda (2019). It considers the numerous social media platforms (Twitter, Facebook, YouTube, and Pinterest in this case) and considers how each of them can be incorporated into the education matrix, as well as identifies the point of incorporation of students into the system. The framework specifies how students can participate in responding to fast answer questions (FAQ) via social media sites, raise queries using their accounts on social media accounts as well as receive necessary notifications through their group accounts and inbox. This online interaction is meant to enable potential students to feel a sense of belonging even before they join the university. In general, the framework simply focuses on student engagement and not the integration component; thus, its applicability to assist institutions of higher learning in integrating social media for collaborative learning does not come out as one of its objectives.

#### 3.3 The Social Media Governance Framework

The Social Media Governance structure was developed by Tyler, Katsaros, Meares, and Venkatesh (2021). The framework offers a list of aspects in line with a broader understanding of the implementation and regulatory frameworks. The framework defines the key regulatory components as consisting of guidelines, performance indicators (metrics), and clear-cut responsibilities as the most important factors that are essential for the successful social media integration process and success of social media usage. The research concludes that organizations that want to avoid activism and being controlled by the growth of social media communications need to invest more resources in the structural development of their internal social media communication systems and ensure close alignment with the internal aspects of the firm (Raspopovic et al., 2017). This framework is thus only limited to the governance aspect of the social media integration process and thus cannot be fully considered as a framework for the overall integration of social media.

## 3.4 Constructivism Theory

Bruner's (1966) account of discovery learning and Piaget and Inhelder's (1969) developmental perspectives on "constructivists," who established various mechanisms by Sarwar et al. by which learners assimilate knowledge, are mostly credited with the notion of constructivism. Learning, according to constructivism, is an active and contextual process of developing new understandings based on present knowledge in the context of social interactions. People actively develop their descriptions of objective reality based on their personal experiences and ideas, according to Bruner's primary assumptions. The new information is linked to what they already know. As a result, mental representations are subjective (Hoover, 1996). Other people, in the form of social intervention, have an impact on the learning process, which is aided by community and culture.

Individuals assimilate new information and experience into their existing framework to learn new things. Learners actively develop their unique expertise by using activities or group discussions to connect new ideas to current topics. According to Vygotsky (1978), cognitive development begins on a social level and then progresses to the individual level. Individual knowledge has its origins in interactions with their environment and other individuals. As a result, collaborative learning is supported by giving opportunities for group members to share diverse points of view and engage in meaningful discussions (Bhattacharjee, 2015). Students are expected to work mostly in groups in constructivist classrooms to create an interactive learning environment. Social media, with its quickly expanding new media and technology capabilities, effectively challenges traditional educational techniques by shattering classroom barriers and establishing new knowledge hubs (Rambe, 2012). The authors also used constructivism theory in this study since it works well with the technical affordances that social media presents.

#### 4. Conclusion

The paper concludes that institutional governance includes the administration and policies in place to govern the usage of social media in learning institutions. There are existing policies in place on the general utilization of the Internet and not specific to social media usage. This means that there are no guidelines on social media usage in general other than the guidelines and policies that govern the use of information systems in these institutions. The state of infrastructure in learning institutions based on the institutional investment is moderate. The paper concludes that the existing technological structures in learning institutions have the capability of supporting a framework for social media incorporation in joint learning. This is inferred from the availability of reliable internet connection, the allowed free use of social media as well as some available computer resources.

The paper concludes that the integration of the social platforms into the learning process is an additional channel of knowledge dissemination and that lecturers who are already successful in operating traditionally should not abandon their traditional way of operation hastily in favour of the social networks. Rather, social networks give them a comparative advantage over traditional approaches. Integrating social networks helps them leverage the advantages that Social Networks offer in addition to the already established successes in the traditional approaches.

### 5. Recommendations

Learning institutions must take advantage of the numerous advantages that social media provides to help their students, particularly in significant academic activities such as teaching, research, and knowledge transfer. To get the most out of social media, educational institutions should consider and encourage students to use it for official communication such as studying, research, information sharing, and knowledge sharing. Students should also be encouraged to join professional social media sites like LinkedIn to build networks and interactions with other professionals.

Comprehensive social media policies, including sections on information sharing, should be developed by educational institutions. These regulations would provide substantial guidance to students on what should be shared on social media and how to protect their privacy. Students stated that they believe social media is insecure and that they are concerned about their privacy and the privacy of their posted information. The usage of social media for knowledge exchange can be made easier if the tools are properly manned, and policies are in place. These rules would help prevent incidents of infringement and abuse from emerging, allowing for more effective knowledge exchange.

Education on social media should be taught in schools. Students will have a better understanding of social media technologies and their capabilities as a result of this study. Students should be taught how to utilize social media efficiently in an official setting, while the unskilled should be taught how to become social media literate to improve knowledge sharing.

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