Use of social media applications in classroom: analysis from education perspective

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Abstract. The growing interest in research and technological advancement has opened doors of possibilities. Internet and virtual connectivity are such examples of possibilities. With its world wide web, the internet gave birth to social media that overthrew the old means of communication. Today, almost every field uses social media for various purposes. The field of education is no exception. Despite being popular for informal and entertainment use, social media is also used for a formal purpose like education. The current paper intends to review the use of social media in education. It presents the emergence of social media as a background that shall lead to its use in education. The paper reviewed three social media applications and their use in education in the light of previous studies. In doing so, some statistical data along with modes of use of social media in education have been discussed. It was found that social media applications like Twitter, Instagram and Facebook are helpful in achieving educational purposes. However, these benefits have been found to be surrounded by some drawbacks, a few of which the paper brought to light. Keeping in view the benefits and drawbacks of using social media in education, the paper proposed some recommendations. These recommendations revolve around promoting positive use of social media in education and mitigation of possible drawbacks. Finally, the paper draws a conclusion in the light of prior discussion and recommendations.

1. Introduction
The advancements in the field of information technology mark the beginning of a new age. Among other markers of this age is the internet. Internet, since its birth, has given way to a number of possibilities that once seemed to be a dream or fictitious. One of the most popular off-springs of the internet is social media. Today, social media has taken the world by storm and is significantly responsible for turning the world into a global village by making connectivity easier, cheaper, quicker and reliable. However, social media is not used for connectivity or communication alone. Rather, using these features of connectivity and communication that social media offers, it is used for advertising, business, entertainment, pedagogical and learning purposes as well. Being a popular means of communication among adolescents, social media is also used within the realm of academics. Students and teachers are using a number of social media applications, such as Facebook, Twitter, WhatsApp, etc. as an informal version of the learning management system.

2. Social Media
2.1 Emergence of Social Media
Communication trends are changing at a higher pace and are going through a process of growth. They are also becoming a novel and technologically getting better and improved. Interaction is one aspect of communication, and it is playing a significant role in teaching and students learning process regarding
individual learning and as well as teams [1]. Communication is diverse and, in this era social media is emerging as a primary communication tool for interaction. Social media provides a virtual communication platform by using technology for interaction.

In the past few years, Email (electronic mails) has been a contemporary and widely used source for virtual communication [2]. This source is useful for organisational structure. In education, it is a platform to keep students up to date with their academic activities. Researchers support the idea of using social media as a useful tool for direct learning for students in an education system. Social media as a beneficial tool for students in their academic activities for accomplishing tasks [3]. Researcher found that social media is emerging at a rapid pace as a virtual communication tool as student learning and academic performance trends have increased [4]. Communication served as an essential element for managing teams and their success [5]. Using a good communication medium or tool in a system can improve team relationships. Social media can be that tool, as today with technological changes; many applications are available for communication in a group or team. The occurrence of changes in working or learning environment required a change in communication mediums and social media has become significant in this regard. The emergence of social media started in the last decade, and an incredible surge has been experienced in the past six years [6]. Statistical data providers revealed that significant increase for Facebook user observed from 1000 million to 2300 million between 2012 and 2017. Among other social media applications, there was a substantial increase in the number of Twitter users from 138 million to 330 million between 2012 and 2017 [7].

2.2 Social Media Applications

In current times, social media applications are useful communication tools. The use of social media technologies refers to usage in our daily routine, education, communication and business etc. Researcher found that some companies and organisations use social media for various purposes, i.e. connecting people or knowledge management [8]. Using social media for education brings many benefits to students. In an education system, implementation of social media as a communication medium can assist students to have direct communication with teachers in classrooms, and it reduces the gap between students and mentors. Learning is a crucial aspect of any education system that can be achieved as a priority in the classroom by using learning strategies and useful communication tools. Social media can improve the learning experience for students by posting and sharing relevant material in classrooms [9]. By improving the learning experience, the performance of students and also their approach towards studies improves. However, not much data is available on how teaching perform relationship management [10].

This paper reviews the use of three social media apps, i.e. Twitter, Facebook and Instagram. These applications are being used by almost everyone in developed countries and with the assumption that these applications are common in use in this era. Irrespective of background or level of education, people are into these social media applications.

2.2.1 Twitter

Technological developments brought changes in trends of using communication mediums. Studies have been conducted for social media technologies and its effectiveness. Twitter is a prominent social media platform that developed so quickly and grabbed the attention of users, especially students. Social media tools like Twitter help in performing educational tasks in classrooms [11], whereas positive correlation was found between use of social media and building of student relationship [12]. Using Twitter people interact with each other, share their ideas, thoughts and virtual content, includes videos. Images, news and other digital content. It is considered an excellent and friendly source of communication for users. Twitter can be accessed easily using a mobile phone or computer over the internet [9]. He also found that a significant no of the users, i.e. 76% use their mobiles to access Twitter [9]. Above stats shows that accessing Twitter today is not difficult. A study revealed the results that usage of Twitter has strong relation with student engagement, as students using this tool were more active and engaged with university activities as well as their social and personal activities [6]. This notion brings evidence that students become more social and engage themselves by sharing their thoughts and ideas by posts on
Twitter. Engagement of students depends on how teachers or mentors deal with students using Twitter, as this social media application can be used as one way or two-way communication [9]. According to their findings, it is not necessary that every instructor use Twitter as one-way communication because Twitter is more flexible as the user can turn on or off notifications using email or text. Thus, users have a choice to decide on the level of engagement they need.

2.2.2 Facebook

Facebook has the highest number of users among the social media applications. It allows users to share different types of media on the internet like images, videos, blog posts, web content and live video streaming. This tool became so handy in the recent past because it is more user-friendly than other applications. Facebook is more efficient and convenient for students if used as a learning tool [9]. Researchers believe that by using features of Facebook like groups and pages, LMS (Learning Management System) can be replaced. Facebook page and groups let the user have more privacy as there is no need to add a respective page or group owner as a friend and then get access to the content. Today Facebook became a platform for students to communicate with instructors without having many restrictions as compared to forums on websites.

The significant difference between forums and Facebook pages and groups is the approval process and privacy concern. For instance, study forums require a request from the student and after getting some information admin will approve, and student can have access to content. Whereas, Facebook pages and groups are flexible as students can directly like and get access to the content. Facebook is a revolution, as it is changing patterns in every domain for instance education, business and marketing sales etc. Researchers found that social media applications like Facebook has changed the dimensions of sales and marketing [13]. It provided more opportunities and ways to market products online. Sales strategies also improved in the recent past as people now are using Facebook and other social media applications. By posting advertisements on such applications provide more awareness and keep customers up to date.

2.2.3 Instagram

Instagram is more likely the same as Twitter in its usability. The difference is when it comes to the user’s preferences and usage. Instagram allows its users to share pictures, videos and other digital contents. Users today have set their choice for Instagram, more sharing of photos, irrespective of clicking specific objects. Every age group uses this social media application, but most prominent users are from a young age group. The use of this age group is more towards capturing pictures and sharing their experience with friends. The study shows that the number in its users increased at a great pace in the recent past and is increasing day by day. The number of users grew to 200 million by 2014 with some 60 million photos shared daily [9]. These stats show that it gained the attention of new users because it is user-friendly and provide privacy. In particular, privacy is an essential aspect of Instagram as it gives users the opportunity to make their content private and use view restrictions for users. Furthermore, DM (direct message) is also an excellent feature of Instagram for its user, and it enables to have a private conversation. Instagram also have video sharing feature that can be used for educational purposes by teachers, so they upload short videos containing study material and information for students. Another feature of using the hashtag “#” enables users to provide awareness to the viewers more effectively. It can also be helpful for the student if teachers provide them with the relevant information in a few words using the hashtag.

2.3 Education and Social Media

Education trends are changing in the last few years, as education providers are more focused on new strategies. In this way, technology is also playing a very significant role in the education sector. In 30 years back, delivering education was very different as their students and teachers were using paper and managing things manually. In modern age since social media penetrated in our systems, this tool is used for best practices in the education sector, and research into how specific social media is used is ongoing. However, there are not many empirical data available for social media influence on education systems, or how students manage their academic activities. Researchers are of the opinion that social media
applications are handy for student and teaching-learning. Whereas, researcher narrates that there is not much influence of social media in education [6]. Another study shows that students and teachers using social media in their academic tasks are getting benefits from it [3]. Whereas, change in the trend of using social media as a communication tool for the educational purpose witnessed improvement in learning and educational activities were observed [4]. Social media in education create effective teams of a student in academic tasks and help to make learning process efficient as students get opportunities to share their opinions, ideas and give feedback in a group [5].

Education systems work more efficiently when students are more engaged and directed for learning. In 1984, Alexander Astin proposed a developmental theory, in which he focused on college students and studied their involvement in academic activities. This “involvement” was later termed to “student engagement”. In his research, he elaborates engagement as “the amount of physical and psychological energy that the student devotes to the academic experience” [14]. Today, this engagement is defined as the investment of time and efforts by students and their academic activities in an educational system to achieve the outcome [15]. There is not much research done on the relationship between social media and student engagement. Few studies found a connection between engagement and the use of technology by students. The notion that students using technology are more likely to engage themselves in college and academic activities are being increasingly supported. This supports the idea that students using technology social media are more involved in educational activities.

A research study results revealed that using Twitter for education has a positive effect on students engagement, and also the contact between students and the head of the faculty improved [12]. Twitter as a social media tool is used in the learning and education sectors in most of the research conducted recently. Researchers found that Twitter as a supportive teaching tool, teacher and students chose Twitter as a learning space as well as sharing information in their study domain [16]. The study shows that the use of Twitter demonstrates the effectiveness of social media in education information exchange. Students are actively engaging themselves in classrooms by using social media applications [17]. Results show that such tool used by teachers create a good learning environment, improves student interaction, participation in class and study discussion. From literature and discussion on past research results, it is evident that social media is a reliable communication tool that makes education structure very efficient for both students and teachers.

**DML (Digital Mediated Learning):** In this century, technology is significant globally and also crucial for education and learning. Today educational institutes are more focused on using technology as part of their learning systems. Digitally-Mediated Learning (DML) is attracting attention by researchers around the world, because of its benefits for students in any education system. Knowing the value of DML, institutions like the University of Barcelona is offering a postgrad course for DML ("Universität De Barcelona," 2018). The need for this learning system increased because of students’ limitations to access educational institutions physically [18]. This system can assist students in a study group to utilise online resources. As physical availability not required for such a system, it is more convenient for the student to complete their work remotely. Teachers can access resources flexibly while preparing study material for students. "The Internet is, inexorably, becoming the dominant infrastructure for knowledge . . . as a global platform for knowledge exchange between people" [19]. Using social media on the internet as a platform, the learning system is becoming more powerful and useful for students and teachers. One study is supporting the above notion that Social Networking Sites (SNS) are more useful for student learning perspectives [18]. Social media applications like Facebook, Twitter and Instagram, are choices of students according to their preferences. Using SNS, students and teachers given a platform that is more uniform and convenient for exchanging information. Students and teachers can have customisation in SNS, whom they want to share information with [20]. SNS is incorporated in DML; students can achieve their study and academic goals because this system allows privacy, permission option with whom students want to share information and also provide a platform (one stop) or distant learning point for students. On the other hand, researchers are of the view that there are many benefits of social media and DML, but it also brings challenges and problems for its users [21]. Using technology
is very important for keeping ourselves up to date and aware, but one should have to stay aware of drawbacks.

3. Drawbacks of Using Social Media

Use of social media applications as a communication tool is considered to be a significant technological development nowadays. Knowing the fact that it is beneficial for students’ learning and sharing information in the classroom, there are also a few drawbacks. Implementation of a virtual education structure that enables SNS that includes Twitter, Facebook and Instagram raise few issues for teachers in the classroom. These include privacy concern of students on information sharing, more time spent on phones and other electronic gadgets, and sometimes distraction from studies.

3.1 Information Overload

Use of social media applications is helpful in our daily routines if used correctly and for a specific time. Spending more time on such applications, the user usually visits different platforms for acquiring and sharing information. According to one study, findings revealed access to use of social media leads to information overload. Users get more sources of information and load their memory with an enormous amount of information [22]. This is especially true for students while using social media and they become insecure in delivering ideas or information during school activities because of the authenticity concern.

3.2 Internet Addiction

Excessive access to social media applications by teenagers, may lead to addiction to the internet. Research studies brought this notion in the light that today students are using mobile phones more than required. A research study revealed that in EU students, it was surprising that 72.3% of students were addicted to the internet and social media applications [22]. Students utilize more resources like mobiles or computers and that gets them addicted to the internet [9]. This may reduce the quality of performance of students and affect their attention and intent for performing in their studies.

3.3 Privacy Concern

The biggest drawback of using social media applications like Facebook, Twitter etc. is the concerns on privacy by the users. Different studies show similar results about privacy concerns. A study revealed that the majority of students used separate Twitter accounts for their journalism class [23]. They were of the view that their private accounts are for friends and family and they were comfortable with a separate account for study purposes. Privacy concern is not negligible, as a survey conducted in 2012 by Pearson in 2010, showed that nearly 70% teachers were of the view that using social media is very challenging regarding maintaining privacy over the internet [24].

4. Discussion, Implications and Recommendations

In the light of the above discussions, the researcher presents conclusions and some recommendations based on initial study understandings. As revealed by the literature above, social media is widely used by people from all sectors — the field of education benefits from social media [5, 9]. Keeping this popularity of social media in view, there is a need to tailor social media applications and their access within the academic institutions. Another way could be to intrinsically culture customise the learners and teachers towards positive and constructive use of social media, i.e. for educational needs. This may help in promoting more positive use of this favourite tool in the field of education.

Furthermore, the above review foregrounded adolescents’ groups to be the largest group that uses social media [9, 12]. Keeping this in view, on an institutional level, workshops could be run to guide and educate students about the use of social media from an educational perspective. This might be achieved by showing them the face of social media that could be used for enlightenment and knowledge. Also, since adolescents use social media the most, there is a most probably need to keep the educational use of social media interactive, lively, handy, rewarding and fun.

Moreover, viewing the popularity of social media among students, it might be recommended to develop applications on the structure of social media. Such applications that have features and an interface of applications like Facebook, Twitter and Instagram, but a target of educational outcomes. Such applications might be introduced to replace contemporary learning management systems (LMS) running in institutions. Or, they could also run parallel to the running LMS. However, it should be kept in consideration while developing such apps that the target is to create a social media fun looking application that gives positive learning and teaching outcomes.

Concerning the issue of privacy discussed above, while using social media [9], one probable solution has already been provided in the form of suggesting the use of SNS. Besides this, within institutions, there can be
further measures taken such as limiting access, log in with multiple access keys, specifying user domains and other such solutions. For this purpose, IT experts can be consulted who can ensure the maximum privacy of users.

Finally, it is recommended to motivate learners to gather knowledge and learning from authentic works of other researchers and scholars. Creating such an attitude shall minimise the amount of time they spend on using social media applications. However, there is a need for making learners own and realise a powerful motivation to consult authentic sources of information than relying on unauthentic ones, such as social media.

5. Conclusion
Social media has secured a very prominent place in the lives of people today. As evident from the above discussion, students and their academic needs have also found themselves taking help from social media. Researchers have today revealed that applications like Instagram, Facebook and Twitter, do serve academic purposes, although informally. However, considering the drawbacks of social media, there is a need to recognise the difference between constructive-destructive use. Nevertheless, keeping in view its popularity, there is a need to take serious and constructive steps to make social media a useful tool in the field of education.

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