SCOPE AND IMPLICATIONS OF SOCIAL MEDIA IN THE CONTEXT OF HIGHER EDUCATION: REVIEW OF RESEARCHES

Arun K.Gupta

Social media are extremely popular online destinations that offer users easy ways to build and maintain relationships with each other, and to disseminate information in an activity referred to as "social networking". Students, teachers, parents and organisations, in increasing numbers use tools available on social networking sites, to communicate with each other in a fast and cost effective manner. The use of social networking sites to support educational initiatives has also received much attention. Popular social networking sites such as Facebook, MySpace, Twitter, WhatsApp, Flickr, ResearchGate, YouTube, LinkedIn etc. demonstrates an emerging opportunity for students and educators within formal higher education contexts to share ideas, celebrate creativity and participate in an environment which offers immediate feedback from other members of the specific network. The present paper offers an introduction to social networking and emergence and growth of popular social networking sites. This is followed by an extensive review of researches on social media in the context of higher education. The scope and implications of social networking in educational context have also been discussed at length. Finally, major problems and issues involved in the use of social networking have been brought out. The inherent challenges and promises to optimize the use of social media in the context of higher education still require concerted efforts of educational technologies and academicians as conclusive evidence on the effective use of social media for attaining objectives of higher education is lacking at present.

KEYWORDS: Social Networking, Higher Education, Research Review

Arun K. Gupta \bowtie Chairman, Model Institute of Education and Research, Jammu

Email: arun@mier.in

WHAT IS SOCIAL NETWORKING?

The incorporation of social networks is a relatively new addition to higher education, involving the blending of formal and informal learning. Boyd and Ellison (2007) define social networking sites as web-based services that allow individuals to construct profiles, display user connections, and search and traverse within that list of connections. Livingston (2008) notes that —while social networking is to some degree displacing other forms of online communication (email, chat rooms, website creation), it incorporates others (instant messaging, blogging, music downloading) and remediates yet more (most notably, face to face and telephone communication). Thus, the typical features of a social network site include the ability to blog, share personal photos, documents, videos, and web resources, instant message (IM), plus integrate other add-in applications.

Commonly, the term "social networking sites" is used as an umbrella term for all social media and computer-mediated communication (Charles, Regina, Cecilia & Manuel; 2012). A social networking service is a platform to build social networks or social relations among people who, for example, share interests, activities, backgrounds or real-life connections. A social network service consists of a representation of each user (often a profile), his social links, and a variety of additional services. Social networking is a web-based service that allows individuals to create a public profile, to create a list of users with whom they can share connection, and view and cross the connections within the system. Most social network services are web-based and provide means for users to interact over the Internet, such as and instant messaging. Social network sites are varied and they incorporate new information and communication tools such as, mobile connectivity, photo/video/sharing and blogging. service is sometimes considered as a social network service, though in a broader sense, social network service usually means an individual-centred service whereas services are group-centred. Social networking sites allow users to share ideas, pictures, posts, activities, events, and interests with people in their network.

The main types of social networking services are those that contain category places (such as former school year or classmates), means to connect with friends (usually with self-descripting pages), and a recommendation system linked to trust. Popular methods now combine many of these, with American-based services such as; Facebook, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr and Twitter widely used worldwide; According to experts, the largest social networking users are in the Asian-Pacific regions with 615.9 million people. A 2013 survey found that 73% U.S. adults use social networking sites (Lunden, 2013).

Meti (2014) highlighted that the significance of social media in terms of higher education is to focus either on the very prosaic or the very profound growing number of educationists. Social media constitute an increasingly important context wherein individuals live their everyday lives. The most immediate significance of social media for higher education is the availability of the large number of the students who are entering university every year.

SOCIAL MEDIA IN THE CONTEXT OF HIGHER EDUCATION: REVIEW OF RESEARCHES

The use of social networking by students opens up a great opportunity for educational researchers. The literature and anecdotal evidences seem to suggest that learners spend a lot of time on social networking sites. This expenditure of resources and more importantly, time, on online social activities provides an insight into the online behaviour and preferences of young adults i.e. learners at tertiary education institutions. (Schlenkrich & Sewry, 2012)

Since the times, social networking sites have attracted a huge following among teenagers and also university students (Lenhart & Madden, 2007). As such, it is not surprising to find social networking sites making their way into the educational environments with many claiming that these social applications have even more potential to further improve learning and sharing of information among learners and teachers (Ferdig, 2007; Maloney, 2007 and Pence, 2007). These days, social networking sites are becoming so popular in the educational context that many educators are already exploring ways in which these tools can be used for teaching and learning (Schwartz, 2009; Boyd & Ellison, 2007; Selwyn, Crook, Carr, Carmichael, Noss & Laurillard, 2008). Several reports have come out in the last few years which have highlighted the extent to which newer technologies are becoming increasingly entrenched in the lives and educational experiences of modern students (Jones & Madden, 2002; Kvavik & Caruso, 2005; Selwyn et al., 2008).

Bryant (2007) has highlighted that mass uptake of social media by students has led to a considerable debate among educational researchers and academia. Many are arguing that since these social tools are being employed on a daily basis by the current generation of students entering universities, the integration of these technologies into teaching and learning is something which is expected by this generation of learners who are known as 'digital natives' (Prensky, 2001) or the 'net generation' (Oblinger & Oblinger, 2005; Tapscott, 2009). This is because they expect to learn using social networking technologies with the aim of preparing themselves for the requirements of their workplace of the future (Alexander, 2006; Strom & Strom, 2007, Prensky, 2001). This surge of interest to incorporate social media tools into education is also a result of their

characteristics such as interactivity and collaboration which allow for the coconstruction of knowledge in social settings as advocated by the socio-cultural theories of learning (Selwyn et al., 2008).

Madge, Meek, Wellens and Hooley (2009) conducted a research study using an online survey among first year students (n= 213) of a British university focusing on Facebook. The findings showed that Facebook is mainly used as 'social glue' that helped students to settle into their university life. The students mainly thought of Facebook's use for social reasons and not for formal teaching purposes. Nevertheless, the students did sometimes use it for informal learning purposes such as micro management of their life as a student in university. This finding is similar to the study by Daalsgard (2008) who found that students were using social networking sites as a form to facilitate 'transparency' between students, a way in which they get insights into each others' work, ideas and creations. However, the 2008 ECAR study discovered that students are more interested in peer-to-peer interaction for both social and academic purposes in comparison to peer-to-tutor interaction (Salaway & Caruso, 2008), highlighting the concept of a 'personal online space'.

Roblyer, McDaniel, Webb, Herman, and Witty (2010), in their study, looked at faculty (n= 62) and students (n= 120) uses and perceptions of social networking sites in a mid-sized southern university in the United States. Their results indicate that students and faculty differ in their actual and anticipated use of social networking sites. While students are more likely to use social networking sites and are more open towards the instructional use of Facebook or other social networking sites to support classroom work, faculty members who are more likely to use older technologies such as e-mail. This can be explained by attributing to the idea of 'digital natives' growing up and being immersed in technology from a very young age, while faculty who are often made up of people much older are 'digital immigrants' (Prensky, 2001) to whom most of these technologies particularly the newer ones are 'alien'.

In contrast, there are others who point out that caution needs to be exercised against this trend of incorporating technology into teaching and learning just to fulfil the expectations of these students who have grown up using technology in their everyday lives (Kumar, 2010; Kennedy, Judd, Churchward & Krause, 2008; Oliver & Goerke, 2007). Donnison (2007), for example, has argued that the ubiquity of these social technologies is an inadequate reason to expect faculty to employ these in teaching and learning. Mason and Rennie (2008) also argued that when evaluating the use of social networking sites as either a viable or impractical tool for teaching, educators need to recognize that students' use of social networking sites may not always

be 'straightforward, steady or predictable'. They have cautioned that students may discontinue use of a specific social networking site and not become active users after some time, or even change to another social networking site.

Some researchers have also highlighted students' concern over academic use of social media tools in terms of issues of privacy and identity management (Hoare, 2007; Hewitt & Forte, 2006; Szwelnik, 2008). Additionally, some research findings seem to indicate that use of social networking sites is mainly for social purposes (Boyd & Ellison, 2007; Lampe et al., 2008; Madge et al., 2009) while some students confessed their unease at the idea of their instructors having a presence in what these students view as their 'private personal space' (Szwelnik, 2008). Sandars and Schroter (2007) found that although students might be familiar with the new technologies for certain purposes, this does not mean that the use of these technologies would be translated into its use for teaching and learning purposes.

Jothi, Neelamalar and Prasad (2011) determined the effectiveness of brand communication strategy followed in social networking sites mainly accessed by Indian (Chennai) users, through a survey. A survey was conducted randomly among Facebook, Twitter and Orkut user community, by sending questionnaires online. The finding indicated that the audiences respond more to interactive marketing than the traditional ads followed in Internet advertising. Communication strategy and user interaction are unique among each site. While Facebook was found to promote and to allow user interaction, Twitter was found to regularly feed posts regarding the brand and Orkut on the other hand was found to promote through click ads and promotional brand pages. Researchers concluded that social networking sites users of Facebook, Twitter and Orkut had become a personal, product and corporate branding hub in India.

Noshia (2011) in her paper entitled 'Use of Social Networking Sites (Facebook) in making awareness among the library and information Science professionals of University libraries of U.P: A case study' examined the effect of environment of social Networking Sites Facebook in learning. The results of the study found that majority of the respondents were using Facebook followed by Twitter, LinkedIn, Orkut and Yahoo. Her study revealed that 52% of respondents were agreeing that Facebook works as a platform to avoid barriers of location and nationality.

Singh and Gill (2011) in their paper entitled 'Use of Social Networking Sites by the research scholars: A study of Guru Nanak Dev University, Amritsar' determined the use and effectiveness of such applications and research by the research scholars. Their study reveals that majority of the respondents were

found to be aware and making use of such applications in their research affairs. The findings of the study also revealed that Facebook is the most popular SNSs by the all field of research scholars.

The research studies undertaken by Willems and Bateman (2011) on using Facebook in higher education have shown that it provides: an alternative learning management system (LMS) to the institutions' formal system; a social community for a geographically dispersed cohort; an opportunity for peer teaching; and a resource sharing opportunity, especially when the existing institutional LMS block certain media. Similarly, a number of pitfalls for both staff and students were identified. These included: deliberations over whether to 'friend' or 'not to friend'; issues surrounding the provision of an electronic identity, including privacy issues; identity theft and impersonations; public domain challenges and sharing of information; taking of things out of the particular context that they were working and sharing this information for less than savoury purposes; stalking and cyber bullying; virtual integrity; and issues relating to intellectual property (IP) and copyright.

Chakraborty (2012) in her paper entitled 'Activities and reasons for using Social Networking Sites by the research scholars in NEHU: A study on Facebook and Research Gate', attempted to study the activity and reasons for using SNSs by the research scholars of North Eastern Hill University. The findings of the study show that most of the researchers from social science background used SNSs for education and research point of view and scholars from pure science think that Social Networking sites have no role in research and education.

Hamat, Embi and Hassan (2012) conducted a nationwide survey on tertiary level students in Malaysia. The results from their study showed that social networking sites penetration is not at full 100% as initially assumed. The respondents spent most time online for social networking and learning. The results also indicated that while the respondents were using social networking sites for the purpose of informal learning activities, only half (50.3%) used it to get in touch with their lecturers in informal learning contexts. The respondents also reported spending more time on social networking sites for socializing rather than learning and they did not believe that the use of social networking sites was affecting their academic performance.

Echeng, Usoro and Majewski (2013) after undertaking a study on 'e' learning reported that perceived usefulness and prior knowledge affect the intention to use web 2.0 in 'e' learning in Nigeria. Giordano, Krishna and Hai (2013) have, on the other hand, emphasised that higher education and other not-for-profit organizations are using social media to enhance their visibility with

the public. Social media can be used to gain insight and foster communication among an organization's constituents (including employees) and other interested parties. Thus, the use of social media for marketing and fundraising strategies, through applications such as crowd sourcing and crowd funding assumes importance.

Prasad and Prasad (2013) tried to assess the impact of use of Social Networking tools in higher education in India (Vignana Bharathi Institute of Technology Hyderabad, Andhra Pradesh). Tools including Google docs, Skype, Social Networks and Wikis were implemented in their institution. They prepared a blog named pmat07.blogspot.in. In this blog lecture notes, assignment, exam schedule with the help of Google docs and html code were posted and monitored students' responses in class. With the help of YouTube EDU, corresponding lecture videos were downloaded and played. Then marks of the students without the integration of online networking tools were compared with the marks after integration of online networking tools. Authors found significant improvement in the results. This indicated that use of Social Networking tools in higher education in India has played positive role in meeting students' needs and expectations.

Gupta, Singh and Marwaha (2013) assessed the purpose of usage of social media tools, specifically Facebook, blogs, Google groups, Skydrive and twitter by the students in distance education in Ghaziabad (India) for academic purposes. The study revealed that a majority of the students access various social media tools for information sharing and personal interaction. The academic performance of the students was found to be independent of the use of Facebook as a social media tool for academic purpose.

Jonjua (2013) has rightly observed that Indian education methodology needs a change and social media should be extensively utilized for the educational purposes. Now a days, it is primarily being used for the purpose of making presentations, assignments, updates, in-depth research and connectivity. The use of social media for making presentations was found to be the first priority among students than getting and making the assignment updates. The newly developed method by M/s Educomp is one of the most popular methods among students though methods like home schooling were also on the top priority list.

Kalia (2013) surveyed 100 students from Chitkara University, Chandigarh (India) in the age group of 18-25 years to understand their perception of using social media as an educational tool. She concluded that 60 percent students used social media for making presentations, 30% students used social media for preparing assignments while 10% used social media for research purposes.

Kumar and Kumar (2013) attempted to study the activities and reasons for using Social Networking Sites by the Post Graduate students and research scholars of Maharishi Dayanand University, Rohtak, India. The results revealed that Facebook was the most popular SNS among the all categories of respondents followed by Twitter. Majority of the respondents' i.e.73.33% use Mobiles for accessing SNSs followed by PCs; The main purposes of using SNSs were found entertainment by 92.66% of the respondents followed by sharing videos and pictures, instant message and find information; Majority of the respondents (46.67%) have between 10-49 friends followed by 33.33% of respondents who have between 50-100 friends; 47.33% of respondents faced very easy while using SNSs followed by 21.33% who found moderately easy; An important finding of this study was that the use of SNSs was time consuming; 50% respondents were found to be satisfied from the use of SNSs followed by partially satisfied and highly satisfied.

A study conducted by Karimi and Khodabandelou (2013) on Iranian undergraduate university students about the academic use of social networking sites reveals that students used social networking site (Facebook) for academic purpose. They believed that Facebook should be integrated into the higher education process in future as well as it has positive impact on higher education. The results from the study confirmed that there is no significant difference between male and female samples in the academic use of Facebook.

Singh and Kumar (2013) in their paper entitled 'Use of Social Networking Sites (SNSs) by the research scholars of Punjab University, Chandigarh: A Study' explored to study the activities and purposes for using SNSs by the scholars of Panjab University, Chandigarh. The findings of their study show that majority of the respondents were aware and making use of such applications in their research work. Their study also reveals that Facebook is the most popular SNSs by all categories of researchers.

Karimi, Khoabandelou, Ehsani and Ahmad (2014) examined the gratification sought and the gratification obtained from using social networking sites among Iranian, Malaysian, British and South African higher education students. Their findings showed differences in students' motivation to join and to use social network sites in each country. Thus, cultural differences may influence the uses and gratifications from social networking sites.

The aim of a study by Baliya, Kumar and Lata (2014), was to find out the effect of use of social networking sites (SNS) on the academic achievement of postgraduate students. The sample was selected randomly from universities and colleges located in different areas of Jammu district (India). A self-prepared scale was used to gather data about social networking sites usage of

postgraduate students. No significant relationship was found between scores of attitude towards SNS usage and scores of academic performance of low, middle and high achiever postgraduate students.

At the government of India level, the policy is to always encourage use of digital medium to establish a special bond with supporters. It is realized that people should always be kept abreast with Government agenda and what steps are being taken to sort out issues. This is so as people in a democratic set-up have every right to know what is being planned for them as they are the ones who have given the mandate. Every small decision is being shared; Cabinet Ministers keep on updating people about new development within their respective Ministries. The ministers in the central government use micro blogging sites to disseminate small information like updates on interministerial meet, some landmark decisions taken in the ministry and even some personal thought. (Central, 2014)

SOCIAL NETWORKING IN EDUCATIONAL CONTEXT: SCOPE AND IMPLICATIONS

Social networks and their educational uses are of interest to many researchers. According to Livingstone and Brake (2010), "Social networking sites, like much else on the Internet, represent a moving target for researchers and policy makers." Recent studies have shown that social network services provide opportunities within professional education, curriculum education, and learning.

1. Foster Participatory Culture: A participatory culture consists of a space that allows engagement, sharing, mentoring, and an opportunity for social interaction. Participants making use of social network services avail this opportunity. Informal learning, in the forms of participatory and social learning online, is an excellent tool for teachers to sneak in material and ideas that students will identify with. This motivates students to learn skills that would normally be taught in a formal setting in the more interesting and engaging environment of social learning. Sites like Twitter provide students with the opportunity to converse and collaborate with others in real time. Blogging represents a growing activity among professionals and students who appreciate blogs for their mix of informal commentary, links to resources and personal touch. Social networking sites offer people opportunities to share life experiences, vent frustrations, offer reflections on social issues and express themselves in a non-threatening atmosphere (Yap, Muirhead, & Keefer, 2005). Social networking sites also enable community involvement in locating expertise, sharing content and collaborating to build content, and allow knowledge workers to extend the range and scope of their professional relationships.

- 2. Provide Platform for Researchers: Researchers create new knowledge while using existing knowledge. Their activities often take place in a social context made up of informal exchanges, brainstorming, idea exploration and cross-fertilisation. Social networking allows researchers to draw from a social network of information and people outside of their traditional circle of friends. ResearchGate is an example of social networking platform for researchers.
- Provide Motivation and Learning Opportunities: Clyde (2005) believes that classroom blogging has the potential to motivate students, to build online collaboration, and enhance learning opportunities. Literacy in the classroom may be promoted through the use of storytelling and dialogue. Clyde (2005) describes a social networking site as an educational tool because it allows students to develop ideas and invite feedback. Social networking helps teachers promote reflective analysis and the emergence of a learning community that goes beyond the institutional walls. Mazer et al. (2007) found that participants who accessed the Facebook website of a teacher disclosed large amounts of information, anticipated higher levels of motivation and affective learning, indicating positive attitudes toward the course and the teacher. Teachers who personalise teaching through the use of humour, stories, enthusiasm, and selfdisclosure not only are perceived by their students to be effective in explaining course content (Mazer, Murphy & Simonds 2007), but create a positive teaching atmosphere. Social networking also offers educators an excellent platform to forge their own professional identity by sharing with other colleagues and debating ideas (Yap, Muirhead, & Keefer, 2005), allowing them to extend their professional relationships.
- 4. **Provoke Thoughtful Conversation:** Comments that students post on the site may provoke thoughtful conversation (Lipka, 2007). Social networking sites may provide helpful information to educators and help them deal with certain situations better. Students may also feel more comfortable approaching educators who are present and friendly or who interact casually with them on Facebook; it gives students the encouragement they need.
- 5. Promote Deepened Interpersonal Connections: A 14 week experimental study of 125 university students found increased grades and increased levels of traditional measures of engagement among students who used Twitter as a medium compared to their counterparts who did not (Junco et al., 2010). This study showed how Twitter can be leveraged to support students' academic engagement, psychosocial development, and promote good practices in undergraduate education, including enhanced faculty-student contact, cooperative and active learning, prompt feedback, maximal time on task,

communication of high expectations, and respect for diversity. The deliberate use of Twitter led to a culture of engagement that deepened interpersonal connections between students as well. These findings are also consistent with the teaching tips provided by Dunlap and Lowenthal (2009) who used Twitter as an additional social tool to supplement instruction and found that it can encourage free-flowing just-in-time interactions and enhance social presence when utilized in online courses.

- 6. Facilitate Recruitment of Participants: Burke, Marlow and Lento (2010) tried to go beyond a description of social media dynamics toward an exploration of the effects of social media use on specific outcomes. Using empirical data from a social media technology platform, nearly 1200 participants were recruited through an advertisement posted on Facebook.
- 7. Ensure Social Well Being: Researchers have also found a link between social networking site activity and specific measures of social well-being related feelings of connection and isolation. Social well-being has been defined as the aggregate of three components: 1) bridging social capital access to new information through a diverse set of acquaintances, 2) bonding social capital emotional support from close friends, and 3) loneliness the consequential exclusion from social involvement due to time spent online (Kraut et al., 1998). Social media activity, particularly friend count, was positively related to both forms of social capital and negatively related to loneliness. Users who engaged in more directed communication (the amount of posts, messages, and comments written and received, the frequency of tags and "likes," and the number of friends with whom communication was initiated) experienced higher levels of bonding social capital and lower levels of loneliness.
- 8. Facilitate Production of Social Capital: Researchers maintain that the professional use of network sites produce "social capital." For individuals, social capital allows a person to draw on resources from other members of the networks to which he or she belongs. These resources can take the form of useful information, personal relationships, or the capacity to organize groups. In addition, networks within these services can also be established or built by joining special interest groups that others have made, or creating one and asking others to join (Knobel & Lankshear, 2008). The social media activity, particularly friend count, was found to be positively related to both forms of social capital and negatively related to loneliness.
- 9. Promote Stronger Connection: Heiberger and Harper (2008) reported findings which suggest that students who had utilized social networking sites such as Facebook were more engaged in offline activities (i.e., studying, face-to-face interaction, work), and they also reported greater life satisfaction and

stronger connection to their institutions. In another example, a study of first-year students and social networking sites conducted by the Higher Education Research Institute (HERI) at the University of California Los Angeles in 2007 revealed no relationship between time spent on social media and the amount of time spent on academic endeavours, particularly when they compared students who had reported spending less than one hour on social networking sites daily and those who reported spending more than six hours. However, the study did find a positive relationship between more social media use and higher levels of campus social involvement. Students who were spending more time using social media reported a stronger connection with their institution, felt better about their social life, and were also spending more time on real-life social activities such as interacting with friends and participating in student clubs or groups.

- 10. Promote Exchange of User-Generated Content: McLuhan (1964; 1967) espoused the idea that it is not just the content of a message that is important. The medium itself exists in symbiotic relationship with the content. The medium the media technology and how it is used shapes the social norms and expectations within a community. Therefore, the medium creates its own structural changes to a community that affect how messages are received and perceived, thereby fundamentally infusing the content with particular parameters of meaning. Contemporary media as a whole has become boundless through the World Wide Web, and social networking in particular has given rise to contexts in which the exchange of user-generated content is king.
- 11. Facilitate Expression of Opinions in Large Fora: Social media technology has restored agency to users. Social media technology allows users to be discerning about what media they engage in based on its relevance to their lives. It also allows users to express their opinions in large forums. As an opposing example, had the same university which created a profile on Twitter provided 1) links to students with discounts to the campus bookstore; 2) weather and emergency alerts; or 3) answered financial aid concerns, their impact on actual student engagement would have possibly produced more powerful results.
- **12. Stimulate Social Behaviour:** The underlying premise and plan of action to accomplish measurable social media technology goals or social media engagement strategy may influence an institution's ability to stimulate social behaviour. For example, sharing can serve as the umbrella under which all social messages can be communicated. For colleges and universities, using social media technology as an engagement tool for students may yield more positive results for institutions that have pre-existing high-quality

programmes, services, and initiatives, supported by a sound engagement strategy, through which social media technology can amplify their work.

13. Promote Transparency in Governance: The Internet can be a potent medium for administrators/politicians/authorities to not just communicate with the public at large, but also bring in transparency in operations, Facebook Chief Operating Officer Sheryl Sandberg (Deccan Chronicle, 2014) said. People always like the two-way dialogue so that more transparency seeps in the whole process of governance. At the same time, it's healthy for a democracy when idea is shared with Janta before reaching out at some major decision. Talking about the medium, head of the IT says, "It's about participative Government, with ideas and tracking of progress."

SOCIAL NETWORKING: PROBLEMS AND ISSUES

- 1. Time Consumption in Non-Academic Activities: Given the high-volume usage of social networking sites, an obvious and popular concern among faculty, administrators, and parents is the widespread notion that students spend far too much time on non-academic activities related to the Internet and social media. Articles in popular newspapers, periodicals, and blogs have raised related concerns to this issue (Bart, 2009; Ingram, 2011; Ojalvo, 2011; Schulten, 2009). The most salient concern among scholars, educators, and the public however is related to the effects of social networking sites such as Facebook on the time earmarked for studying and offline activities.
- **2. Distraction:** As most social media are regarded as sources of entertainment, popular opinion believes that these serve only as a distraction and yet another impediment to academic achievement. Studies on Facebook usage and GPA (Grade Point Average) corroborate this fear (Hernandez, 2011; Junco, In Press; Kirschner & Karpinksi, 2010; Phillips, 2011). In particular, findings indicate that how social media are used may matter more than how much it is used.
- 3. Lack of Privacy: Concerns have also been expressed regarding preserving of personal privacy on social networking sites. Private information, typically the user profile, posted on a social networking site is often violated (Houghton & Jonson, 2010). Although mechanisms are available to limit privacy violations, not all sites offer such mechanisms, and, if they are, they are not always/consistently known to be followed by users. Access to various pieces/levels of information is at the discretion of users, should they know about or elect to adopt associated protection mechanisms. Despite a manifest need for explicit privacy policies and data protection mechanisms, privacy

within social networking sites is often not expected or is undefined or difficult to find and interpret (Lawler & Molluzzo, 2011). Globally, tech companies including Google, Yahoo and Facebook have raised concerns about privacy of user data, especially in the light of surveillance by the US government (Deccan Chronicle, 2014).

- **4. Social and Network Security:** Social networking sites are easy to join, lack basic security measures and are easy for third parties to access (Gross & Acquisti, 2005). Risks include identity theft, online and physical stalking, embarrassment, as wells as fraudulent profile pages and messages, defamation, and theft of artwork or intellectual property. The safety of young users is also a primary concern as sexual predators attempt to make contact with unsuspecting teenagers (Dwyer, Hiltz & Passerini, 2007). Internet predators and cyber bullying are also features of social networking site use.
- **5.** Legal and Regulatory Matters: Social networking sites can be used to perform a variety of activities that would be considered illegal in many jurisdictions. Online bullying, theft of intellectual property, identity fraud, defamation of character, privacy infringement and slander are examples of these. Unfortunately, established laws and regulations do not apply to social networking sites.
- **6. Suspect Information Quality:** Not all weblogs carry reliable, current information. Some weblogs are created for the sole purpose of providing an online platform for the views, rankings and creative works of the blogger Clyde (2005). Desisto and Smith (2008) believe that this will be less of an issue for experienced users, but insist that new users be educated on information reliability and quality.
- **7. Managing Personal and Professional Time:** Social networking has the potential to affect student productivity and work/life balance (Bradley, 2007). Teachers and lecturers are often distressed by the lack of concentration and interest displayed by students who have constant access to social networking sites. Many organisations are concerned with managing productivity in more loosely structured network environments, especially in organisations where the nature of work is not collaborative or their cultural environment does not recognise the importance of social interactions (Bradley, 2007).
- **8. Cultural Barriers:** Social networking is unlikely to work in organisations with a strong command-and-control culture. These traditional, hierarchical organisations may feel threatened by the amount of trust and equality that is required in order for social networking to be effective. Social networking

holds the potential to destroy hierarchies and departments. Barriers can also form between cultures inclined towards technology and those that battle to adopt new technologies.

- **9. Lack of Professionalism:** Students often post information on their social networking sites that they do not necessarily want their professors to see (Hewitt & Forte, 2006). Students indicate that the student/faculty relationship should remain professional and should not be personal or sociable. Teachers' own credibility might also be at stake depending on their profile content and their in/ability to control profile content (Mazer et al, 2007). Researchers therefore, urge teachers to proceed with caution while using social networking sites.
- **10. Negatively Affects Student Academic Achievement:** One study has corroborated the idea that social media technology negatively affects student academic achievement. A relatively small study of Facebook usage and GPA among 219 students at a large public Midwestern university found the average self-reported GPA of Facebook users to be significantly lower than that of non-Facebook users (Kirschner & Karpinksi, 2010).
- 11. Ambiguity over Appropriate or Desirable Norms of Conduct: Lewis et al. (2008) have argued that when a new technology (such as Facebook) is released, there is a high degree of ambiguity over appropriate or desirable norms of conduct—the very definition of this space as public or private is contested. College students, faculty, staff, parents, and Facebook itself each have different and potentially conflicting interests in the way the technology is used. Students are certainly aware that the information they post is "public". However, all may not recognize the full extent and possible consequences of this display. Slowly but surely, excitement turns into precaution. The technology spreads throughout the population, and users provide more data on their profiles—all the while maintaining the rather permissive default privacy settings, not yet having reason to do otherwise. Therefore, users move from excitement and ambiguity to self-regulation, rather than the regulation being imposed by someone like institutions, faculty, or parents.
- 12. Technological Divide: Challenges may continue to be faced due to the ever-expanding technological divide between generations of students and university faculty and administrators. As digital natives flood colleges and universities, they bring with them an increasingly high demand for socially engaging information from their institutions. Actors within postsecondary institutions are challenged to not only understand the aforementioned perils of social media technology, but also to consider their potential to affect

change. Colleges and universities, then, are faced with either attempting to protect existing institutions by resisting these emerging technologies and the changes these may foster among students or embrace the uncertain future to which they are leading.

13. Dynamics of Users: Challenges of social media technologies are also becoming more significant when we consider not just the technology itself, but also the dynamics of the users of the technology. For many administrators and faculty in higher education, understanding the phenomenon of social media technology, and the manifold uses therein, is a challenge in and of itself. For instance, to some, social media technology represents a cure-all solution for some systemic issues and individual programmes and personnel shortcomings. The misleading belief that any one social media technology can itself rectify pre-existing issues at a structural level may therefore be a misnomer.

CONCLUSIONS

Unlike the communication functions of other online technologies, social media technology in particular has provided a virtual landscape mirroring familiar elements of community as we understood and experienced it prior to the existence of such technologies. Social media technology links people together in ways that resemble traditional feelings of connection, belonging, loosely defined memberships, exchange of feelings and ideas, and the reporting of experiences and actions. Indeed, some suggest social media technology has suddenly lowered the costs of collaborating, sharing, and producing, thus providing revolutionary new forms of interaction and problem-solving (Shirky, 2010).

Today, "digital natives" — young people born into a world of laptops and cell phones, text messaging and tweeting — spend, on an average, more than eight hours a day exposed to digital technology (Lin, 2008). As a result, digital natives may experience fundamentally different brain development that favours constant communication and multitasking (Prensky, 2001; Small & Vorgan, 2009). Given this insight, social media technologies are reshaping the way students communicate generally and within their college communities. Postsecondary institutions should consider more opportunities to seek creative ways to use social media technology in effort to reach out to students and strengthen their ties to the institution. More than ever, educators need to know how to skilfully negotiate these technologies to develop academic college-based networks that can help students succeed.

Major educational implication of social media is actually changing nature of learners' relationships with information and knowledge. Certainly, it could be argued that social media support forms of knowledge consumption and knowledge construction that are very different to the epistemological principles of formal education and individualized instruction. From this perspective, learning can be seen as an individual's ability to connect to specialized information nodes and sources as and when required. Yet many educationists believe that universities are in a good position to utilize social media practices to support the collective creation of knowledge amongst students and the wider community. Many universities are now striving to develop ways of using social media to support these new forms of learning. It is clear that social media tools and applications present a challenge to the concept of the formal educational establishment as it currently exists. In this sense, social media are also significant in terms of their implications for the nature and form of higher education provision. The continued growth of social media presents a set of clear challenges to the future nature of higher education provision and practice. Yet as with many previous new technologies, academic discussion and debate remains largely speculative rather than well formed and certain.

NOTES

The author is grateful to Dr. Ankur Gupta, Co-Investigator, UGC-Major Research Project, Dr. Nishta Rana, Dr. Mool Raj and Mr. Pranav Gandotra for their valuable assistance in preparing this paper.

REFERENCES

- Alexander, B. (2006). Web 2.0: A new wave of innovation for teaching and learning—*EDUCAUSE Review*, 41, 32-44.
- Baliya, J.N., Kumar P., & Lata, P. (2014). Effect of use of social networking sites on the academic achievements of post-graduate students. *International Journal of Behavioural Social and Movement Sciences*, 3(1). 74-81.
- Bart, M. (2009). Do College Students Spend too much Time on Facebook and other Social Networking Sites? Retrieved July 25, 2014 from http://www.facultyfocus.com/articles/trends-in-higher-education/do-college-studentsspend-too-much-time-on-facebook-youtubeand-other-social-networking-sites/.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: definition, history and scholarship. *Journal of Computer Mediated Communication*, 13(1), 210-230.

- Bradley, A.J. (2007). *Key Issues in the Enterprise Application of Web 2.0 Practices, Technologies, Products and Services*. Retrieved July 14, 2014 from https://www.gartner.com/doc/507237/key-issues-enterprise-application-web.
- Bryant, L. (2007). *Emerging trends in social software for education*. British Educational Communications and Technology Agency. Coventry: Becta
- Burke, M., Marlow, C., & Lento, T. (2010). Social Network Activity and Social Well-Being. Retrieved July 7, 2014 from http://www.cameronmarlow.com/media/burke-2010-social-well-being.pdf.
- Chakraborty, N. (2012). *Activities and Reasons for Using Social Networking Sites by Research Scholars in NEHU: A Study on Facebook and Research Gate.* 8th Convention Planner. Sikkim University Gangtok, Retrieved March 7, 2014 from http://ir.inflibnet.ac.in/handle/1944/1666.
- Charles, H.F.D., Regina, D.A., Cecilia, R.A., & Manuel, S.G.C. (2012). Social Media in Higher Education: A Literature Review and Research Directions. From the Selected Works of Charles H.F. Davis III. The Center for the Study of Higher Education at The University of Arizona and Claremont Graduate University.
- Clyde, L.A. (2005). Educational blogging. *Teacher Librarian*, 32(3), 43–45.
- Dalsgaard, C. (2008). *Social Networking Sites: Transparency in Online Education*. Retrieved July 2, 2014 from http://eunis.dk/papers/p41.pdf.
- Donnisson, S. (2007). Digital generation pre-service teachers as change agents: a paradox. *Australian Journal of Teacher Education*, 32(4), 1-12.
- Dwyer, C., Hiltz, S.R., & Passerini, K. (2007). Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace. *Thirteenth Americas Conference on Information Systems*, Keystone, Colorado. 9–12 August.
- Echeng, R., Usoro, A., & Majewski, G. (2013). Acceptance of Web 2.0 in Learning in Higher Education: A Case Study Nigeria. *International Journal of Advanced Computer Science and Applications*, 4(10), 146-151.
- Facebook Statistics by Country (2012). Retrieved July 2, 2014 from http://www.socialbakers.com/facebook-statistics/.
- Ferdig, R.E. (2007). Editorial: examining social software in teacher education. Journal of Technology and Teacher Education, 15(1), 5-10.
- Gross, R., & Acquisti, A. (2005) Information Revelation and Privacy in Online Social Networks (The Facebook case). *In: Proceedings of the ACM Workshop on Privacy in the Electric Society (WPES)*, pp 71–80.
- Gupta, P., Singh, B., & Marwaha, T. (2013). Relationship between social media and academic performance in distance education. *Universal Journal of Educational Research*. 1(3), 185-190.

- Hamat, A., Embi, M. A., & Hassan, H. A. (2012). The use of social networking sites among Malaysian university students. *International Education Studies*, 5(3), 55-66.
- Hernandez, D. (2011). *Too much Facebook Time may be Unhealthy for Kids*. Retreived August 25, 2014 from http://articles.latimes.com/2011/aug/06/news/la-hebfacebook-teens-20110806.
- Hewitt, A., & Forte, A. (2006). Crossing Boundaries: Identity Management and Student/Faculty Relationships on the Facebook, In: *Proceeding of Computer Supported Cooperative Work*, Banff, Alberta, Canada, 4-8 November. Retrieved August 8, 2014 from http://www.mendeley.com/research/crossing-boundaries-identity-management-and-studentfaculty-relationships-on-the-facebook-2/.
- Hoare, S. (2007). Students tell universities: Get out of MySpace! *Guardian, 5 November*. Retrieved July 8, 2014 from http://www.guardian.co.uk/education/2007/nov/05/link.students.
- Houghton, D.J., & Johnson, A.N. (2010). Privacy, social network sites, and social relations. *Journal of Technology in Human Services*, 28, 74–94.
- Ingram, M. (2011). Students using Facebook in your Class? Better try a bit harder.

 Retrieved October 25, 2011 from http://gigaom.com/2011/10/24/students-using-facebook-in-your class-better-try-a-bit-harder/.
- Jones, S., & Madden, M. (2002). The internet goes to college: how students are living in the future with today's technology. Pew Internet and American Life Project Washington, D.C. Sept. 15, 2002. Pew Research Center, Washington, D.C.
- Jonjua, M. (2013). Social Media: A pioneering educational tool. *National Monthly Refereed Journal of Research in Arts and Education*. 2(9).
- Jothi, P.S., Neelamalar, M., & Prasad, R.S. (2011). Analysis of social networking sites: a study on effective communication strategy in developing brand communication. *Journal of Media and Communication Studies*. 3(7), 234-242.
- Junco, R., Heibergert, G., & Loken, E. (2010). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27, 119-132.
- Kalia, G. (2013). A research paper on social media: An innovative educational tool. *Issues and Ideas in Education*, 1, 43-50.
- Karimi, L., & Khodabandelou, R. (2013). Perspective of Iranian university students about academic use of social networking sites: A study of facebook. *International Journal of Academic Research in Progressive Education and Development*. 2(3), 113-123.
- Karimi, L., Khodabandelou, R., Ehsani, M., & Ahmad, M. (2014). Applying

- Kennedy, G.E., Judd, T.S., Churchward, A., & Krause, K. (2008). First year students' experiences with technology: Are they really digital natives—*Australasian Journal of Educational Technology*, 24(1):108-122.
- Kirschner, P.A., & Karpinksi, A.C. (2010). Facebook and academic performance. *Computers in Human Behaviour*. doi:10.1016/j.chb.2010.03.024.
- Knobel, M., & Lankshear, C. (2008). *Digital Literacy and Participation in Online Social Networking Spaces*. New York: Peter Lang.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological wellbeing—*American Psychologist*, 53(9), 1017-1031.
- Kumar, A., & Kumar, R. (2013). Use of Social Networking Sites (SNSs): A study of Maharishi Dayanand University, Rohtak, India. *Library Philosophy and Practice (e-journal)*. Retrieved August 10, 2014 from http://digitalcommons.unl.edu/libphilprac/1000.
- Kvavik, R.B., & Carusa, J.B. (2005). *ECAR study of students and information technology, 2005: Convenience, connection, control, and learning.*Retrieved August 10, 2014 from http://connect.educause.edu/Library/Abstract/ECARStudyofStudentsandInf/41159.
- Lampe, C., Ellison, N., & Steinfield, C. (2008). Changes in use and perception of Facebook. In Proceedings of the 2008 *Conference on Computer-Supported Cooperative Work* (CSCW 2008). Retrieved August 11, 2014 f r o m h t t p s://www.msu.edu/~nellison/LampeEllisonSteinfield2008.pdf.
- Lawler, J.P., & Molluzzo, J.C. (2011). A survey of first-year college student perceptions of privacy in social networking. *Journal of Computing Sciences in Colleges*, 26(3), 36–41.
- Lenhart, A., & Madden, M. (2007). Social networking websites and teens: An overview. Pew Internet and American Life Project Report. Retrieved August 11, 2014 from http://www.pewinternet.org/PPF/r/198/report_dispaly.asp.
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). *Social Media and Young Adults. Pew Internet and American Life Project.* Retrieved July 25, 2011, from http://pweinternetorg/reports/2010/socialmedia-and-young-adults.aspx.
- Lewis, K., Kaufman, J., & Christakis, N. (2008). The Taste for Privacy: An analysis of college student privacy settings in an online social

- network. Journal of Computer-Mediated Communication, 14, 79-100.
- Lin, J. (2008). *Research shows that Internet is Rewiring Our Brains*. Retrieved 10 July, 2014 from http://www.today.ucla.edu/portal/ut/081015_gary-small-ibrain.aspx.
- Lipka, S. (2007). For professors, friending can be fraught. *Chronicle of Higher Education*, 54(15), A1-A28.
- Livingston, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media and Society*, *10*(3), 393-411.
- Lunden, I. (2013). 73% of U.S. Adults Use Social Networks, Pinterest Passes Twitter in Popularity, Facebook stays on Top. Retrieved 10 July, 2014 http://techcrunch.com/2013/12/30/pew-social-networking/.
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: It is more for socialising and talking to friends about work than for actually doing work. *Learning, Media and Technology*, 34 (2), 141–155.
- Madhusudhan, M. (2012). Use of social networking sites by research scholars of the university of Delhi: A study. *The International Information and Library Review* 44 (2): 100–113.
- Maloney, E. (2007). What Web 2.0 can teach us about learning—*The Chronicle of Higher Education*, 53(18), 26.
- Mason, R., & Rennie, F. (2008). *E-learning and social network handbook: Resources for higher education*. Madison Ave, New York: Routledge.
- Mazer, J.P., Murphy, R.E., & Simonds, C.J. (2007). I'll see you on —facebook: The effects of computer- mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1–17.
- McLuhan, M. (1964). *Understanding Media: The Extensions of Man.* New York: McGraw Hill.
- Meti, V. (2014). The Use of Social Media in Higher Education for Sustainable Development. Paper Presented at national seminar on "Education for Sustainable Development" organized on March 28 & 29, 2014 by Department of Education, Mysore University, Mysore & SIO Karnataka, Bangalore, Karnataka, India. Retrieved July 27, 2014 from http://vijaymeti.wordpress.com/2014/03/30/the-use-of-social-media-in-higher-education-for-sustainable-development/.
- Naushia, P. (2011). Use of social networking sites (facebook) in making awareness among the library and information science professionals of university of U.P.: A Case Study. *International Journal of Digital Library Services*. 1(1), 9-17.
- Oblinger, D., & Oblinger, J. (2005). *Is it age or IT: First steps towards understanding the net generation.* In D. Oblinger and J. Oblinger (Eds.),

- Ojalvo, H. E. (2011). *How Facebook use correlates with student outcomes*. Retrieved on July 25, 2014, from The New York Times: http://learning.blogs.nytimes.com/2011/10/21/q-anda-how-facebook-usecorrelates-with-studentoutcomes/.
- Oliver, B., & Goerke, V. (2007). Australian undergraduates' use and ownership of emerging technologies: Implications and opportunities for creating engaging learning experiences for the Net Generation. *Australasian Journal of Educational Technology*, 23(2), 171-186.
- Pence, H. E. (2007). Preparing for the real web generation. *Journal of Educational Technology Systems*, 35(3), 347-356.
- Phillips, C. (2011). Social media use: How much is too much? Retrieved, October 25, 2011, from Millennial Marketing: http://millennialmarketing.com/2011/01/social-mediause-how-much-is-too-much/.
- Prasad, E., & Prasad, R. (2013). Social networks and online communities in higher education. *International Journal of Scientific and Engineering Research*, 4(1).
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6.
- Roblyer, M.D., McDaniel, M., Webb, M., Herman, J., & Witty, J.C. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education*, 13(3):134-140.
- Sandars, J., & Schroter, S. (2007). Web 2.0 technologies for undergraduate and postgraduate medical education: An online survey. *Postgraduate Medical Journal*, 83, 759-762.
- Schlenkrich, L., & Sewry, D. A. (2012). Factors for successful use of social networking sites in higher education. *South African Computer Journal*, 49(12), 12-24.
- Schulten, K. (2009). *Do You Spend too much Time on Facebook?* Retrieved April 21, 2014 from http://learning.blogs.nytimes.com/2009/12/21/do-youspend-too-much-time-on-facebook/.
- Schwartz, H.L. (2009). Facebook: The new classroom commons—*The Chronicle of Higher Education*. Retrieved on June 25, 2014 from http://gradstudies.carlow.edu/pdf/schwartz-chronicle_9-28-09.pdf.
- Selwyn, N., Crook, C., Carr, D., Carmichael, P., Noss, R., & Laurillard, D. (2008). Education 2.0—Designing the web for teaching and learning. *Teaching and Learning Research Programme*. Retrieved March 12, 2014 from http://www.tlrp.org/tel/files/2008/11/tel_comm_final.pdf.

- Shirky, C. (2010). Cognitive Surplus. New York: Penguin Press.
- Singh, H., & Kumar, A. (2013). Use of social networking sites (SNSs) by the research scholars of Panjab University, Chandigarh: A Study. 58th International Conference on: Next Generation Libraries: New insights and Universal Access to Knowledge, 682-691.
- Singh, K.P., & Gill, M. S. (2011). Use of social networking sites by the research scholars: A study of Guru Nanak Dev University, Amritsar. *Library Herald*, 49(3), 229-241.
- Small, G., & Vorgan, G. (2009). *iBrain: Surviving the technological alteration of the modern mind*. New York: Harper Collins.
- Strom, R.D., & Strom, P.S. (2007). *New directions for teaching, learning, and assessment*. Netherlands: Springer Verlag.
- Szwelnik, A. (2008). Embracing the Web 2.0 Culture in Business Education: The New Face of Facebook. The Higher Education Academy, BMAF Subject Centre. Retrieved from http://www.heacademy.ac.uk/assets/bmaf/documents/projects/TRDG_projects/trdg_0708/finalreports_0708/Alice_Szwelnik_OBU_web.doc.
- Tapscott, D. (2009). *Grown up Digital: How the Net Generation is changing your World.* New York: McGraw-Hill.
- Tebbutt, D. (2006). Genie in a bottle. *Information World Review*, 224, 19-21.
- Willems, J., & Bateman, D. (2011). The potentials and pitfalls of social networking sites such as Facebook in higher education contexts. In G. Williams, P. Statham, N. Brown and B. Cleland (Eds.), *Changing Demands, Changing Directions*. Proceedings Ascilite Hobart 2011. (pp.1329-1331).
- Yap, R., Muirhead, B., & Keefer, J. (2005). Blog RUBRIC: Designing your business blog. *International Journal of Instructional Technology and Distance Learning*, 2(11), 53-59.