Use of Social Media in Higher Education:  
A Systematic Literature Review

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Abstract
With the growing popularity of social media, institutes of higher education are exploring ways to use it effectively for various education related purposes. However, there is a dearth of research in this domain. The present paper is based on an extensive literature survey of the papers on use of social media in higher education. It summarizes some of the important findings and suggests furture direction for research.

Keywords: Social media, Higher education, Pedagogy, Literature review, Teaching.

Introduction:
Like many other industries, the education sector has also been affected by the invasion of social media. Advances in technology in recent years have changed the learning behaviors of learners and reshaped teaching methods. Thus educators and researchers are being compelled to find out ways and means by which social media technologies have affected the education system, and explore avenues to ensure positive outcomes of its impact (Saini & Abraham, 2018).

In order to understand the present state of research on the use of social media in higher education, a literature survey has been conducted. The objective was to find out the research gaps and explore direction of future research.

Review Methodology:
A literature search was conducted in different management databases to find out the most relevant and significant studies. The search was done in majorly three phases in order to arrive at the most relevant papers. In the first phase a broad search was conducted, which resulted in 25,465 articles from Scopus and 34238 articles from EBSCOhost. In the second stage a refined search was made, by combining various keywords used in the first stage. Once again, the search was done on abstracts, keywords and title of the articles published between 2000 – 2019. The result was 481 in Scopus and 721 in Ebscohost. After removal of all duplicate articles from the result, total of 324 unique articles were found out. Among these, 139 studies employed some form of quantitative methods, and rest were qualitative studies.

Findings / Discussion
As the Government of India has recently proposed a National Education Policy for further improvement of the education system in the country, we thought it appropriate to divide the research papers into national and international categories. Under each of these two categories, similar themes and subthemes have been identified, on which some research has been conducted.

Research Studies Abroad (International Level):
The research studies have broadly focused on teachers, students, technological platforms in use, subjects, courses, level of education, pedagogy or use of social media for marketing and administrative purposes.

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• **Students:**

Born into a world of computing, the present and future generations of students are comfortable using social media and other digital platforms. Understanding the modes and drivers of student participation can provide insights into how universities and instructors can be socially ready for this change (Mikum et al., 2018). For example, individual learning style (i.e. participatory, collaborative, or independent) may affect the adoption of social media technologies for learning purposes (Balakrishnan and Gan, 2016).

Researchers have attempted to understand student perspectives on the inclusion of social media in higher education and to establish whether the inclusion of social media sites can impact students’ motivation and goal orientation (Cooke, 2017). Many students view social media as a key means of the educational experience, alongside face-to-face meetings and learning management systems. They use social media for brief questions and answers, and to coordinate group work (Hrastinski and Aghaee, 2012).

Although the vast majority of the students use social media frequently, very few felt that they could use such media to support their studies (Hrastinski and Aghaee, 2012). Facebook and Twitter have been found to augment participants’ learning experience by providing an environment to connect with others through enhanced communication, easily share resources and provide a space to post personal feelings or reflections of learning in an informal and quick manner (Liu et al., 2016).

• **Teachers:**

Similar to students, teachers also use social media for personal and educational reasons. Use of social media and other internet applications for discovering educational resources are gradually increasing (Hunter and Hall, 2018). Several studies have been conducted on teachers to understand their perception of social media as an academic tool to aid classroom teaching or disseminate research studies (Rochez, 2015).

Researchers have found that in spite of their willingness to use social media for networking, sharing and promoting their own work and that of others, many researchers prefer to stay away from online platforms in conducting and disseminating their work (Rochez, 2015). Although teachers acknowledged positive impact of social media on teaching and learning, they would prefer not to effectively incorporate social media in education settings (Faizi, 2018).

• **Technology:**

Massive Open Online Courses (MOOCs) have been a topic of much debate for their potential to transform higher education by opening access to a large mass of people. Impressive headline figures on MOOC enrolments often contrast with extremely low course completion rates (Freitas, Morgan, and Gibson, 2015). Research work revealed that lecturers in transnational higher education perceived MOOCs unsuitable for accredited prior learning. However, they believed that MOOC might be useful as a supplementary resource for student learning and for professional development (Annabi and Wilkins, 2016).

Apart from MOOC, researchers have also attempted to study influence of other social media platforms, like microblogging sites, purely academic social network sites etc. Social media and mobile computing created opportunities for interaction and collaboration, besides allowing students to engage in content creation and communication with the assistance of constant connectivity (Gikas and Grant, 2013).

Researchers attempted to validate the relationship between the use of social networking sites, academic engagement and knowledge sharing using websites solely designed for academic activities (Koranteng and Wiafe, 2018). The findings revealed that academic social networking sites supported indicators of the social capital dimensions, e.g. social interaction ties, trust, reciprocity, identification, shared language and shared vision. Microblogging, on the other hand, may encourage engagement, participation, collaborative learning and reflective thinking under different learning settings (Gao, Luo, and Zhang, 2012). Blogs may allow for fast sharing of research methods, results and conclusions in an open and transparent manner in the form of reliable evidence-based information via new media in response to emerging issues. They can also support other traditional goals of higher education institutions, by facilitating teaching, learning and outreach (Powell, Jacob, and Chapman, 2012).

• **Subjects & Topic of Study:**

Researchers have attempted to understand the potential of various social media in specific fields / subjects of study, although these studies are quite limited in number. Hamid et al. (2017) emphasized that the
explosion of social media, such as Facebook, among higher education students has great potential in widely disseminating awareness about environmental sustainability. Educational institutes may engage students by promoting through social media the sustainability practices conducted at the university level. Social media may also be leveraged to inform the staff regarding the university policy and assist in their quest to become full-fledged green universities.

Social work education may be provided by supporting approaches through social media that give ownership to young people themselves whilst promoting sustainability and continuity (Franklin, Hossain, and Coren, 2016). Thus, young pupils may gain their voice and find the education more interesting and engaging.

- **Pedagogy:**

  Many researchers have focused on MOOC because of its emerging importance in fast dissemination of knowledge among a large number of people. Benefits of using MOOC with classroom based teaching were identified by Bralić and Divjak (2018). Course materials and learning experiences have been found to directly, positively and significantly affect MOOC courses, which in turn significantly impact students’ use social networks sites (Karajeh et al., 2018). However, lack of student motivation to learn generally plays a significant role in student attrition and dropouts in MOOCs. Social learning strategies and self-regulated learning have been found to assist in promoting the learning in MOOCs (Magen-Nagar and Cohen, 2017).

  Studies revealed that content, accessibility, and interactivity significantly influence students’ motivation to learn (Deshpande and Chukhlomin, 2017). Considering students’ views on the use of technology in a university course deployment and from the students’ personal opinions about a pilot course in a Web 2.0 learning environment, Karvounidis et al. (2018) strived to derive significant factors that should be taken into account in the deployment of these technologies to achieve the maximum possible benefits. Mikum et al. (2018) researched on the value of participation by liking and sharing which are available to read-only participants and ‘lurkers’ alike.

- **Marketing & Administrative:**

  Higher education institutions show increased interest in the potential of social media as a marketing tool. Le at al. (2018) found that reputation, career prospect, learning and teaching, administration and student life are the five major information requirements for prospective students while using social media. Students are mostly interested in social interaction and information seeking in social media, while the content contributed by this group is limited to photo and video sharing. In spite of high penetration of social media among future students, the impact of these in the choice of study and institution is relatively low compared to more traditional forms of university marketing (Constantinides and Stagno, 2011).

  In the U.S., most of the institutional tweets have been found to be monologic, expressing neutral or positive sentiment, directed towards dissemination of information (vs. eliciting action) by linking to a relatively limited and insular ecosystem of web resources (Kimmons, Veletsianos, and Woodward, 2017). Rowe (2014) attempted to develop a categorization model for dealing with inappropriate or irresponsible comments that have been detected or reported in the university setting. The interactions received (e.g. retweets and favorites) and type of content posted (e.g. original tweets, retweets and replies) on social media vary by also by the curator type. Student curators have been found to be more likely to gain interactions from other students in comparison to staff (Marie Condie et al., 2018).

**Research Studies in India (National Level):**

Research studies in the area of social media for education related purposes in India is at a very nascent stage. Upon searching Scopus online database with the keywords “Social Media”, “Education” and “India” only 56 journal papers were obtained. Relevant research papers from this search are summarized below to provide an understanding of the work performed in this domain.

- **Students:**

  As India continues to experiment with more creative methods for teaching and learning, Bharucha (2018a) pointed out that the country is at an embryonic stage compared to advanced nations. Bharucha (2018b) emphasized that the students’ experience should be paramount when incorporating social media in higher education.
Vijayakumar et al. (2017) as well as Sankari and Sripriya (2018) focused on the positive and negative aspects of social networking site in education, influence of social media in learners’ academic performance, ways to use social media in learning system and the barriers of using social media in education.

- **Pedagogy:**
  
  Study conducted by Madan et al. (2016) predicted that social networking on Facebook and higher education could work in parallel. The case-based research study conducted by Saurabh and Sairam (2013) provided information to academicians in enhancing the quality of education by using social media.

- **Technology:**
  
  Jena (2018) developed a model to automatically detect students’ learning styles based on their personal, academic and social media data. This research suggested that by capturing and analysing appropriate data from social media to identify students’ learning styles teachers, educators and administrators can work together with students for overall improvement of their learning outcomes.

- **Marketing & Administrative:**
  
  Upon conducting research based on publicly available data in social media sites of top 300+ higher education institutions in India, Tripathi (2018) commented that these institutions are slow to adopt social media. Rejeesh and Anupama (2017) found that social media and data mining enabled pre-counseling session techniques enhanced effectiveness of distance education counseling sessions.

**Conclusion and Directions for Future Research:**

Researchers have unanimously suggested empirical research on the use of social media as its usage continues to grow in higher education (Chugh & Ruhi, 2018). The most prevalent topic in this domain is based on research on common uses. The technology’s effectiveness at improving student learning is arguably the least common type of research conducted related to social media in higher education (Greenhow & Askari, 2017).

Further insight into the different factors that drive students with different learning styles to use social media will help educators use this technology to assist learning more effectively (Balakrishnan & Gan, 2016). Hamid et al. (2017) have suggested that future studies develop relevant frameworks to propose an effective use of social media in higher education, supported by theories and by using quantitative, qualitative or mixed-method-based research. Marie Condie et al. (2018) pointed at the dearth of literature related to social media use at the departmental level within Higher Education Institutions (HEIs).

Upon searching different databases for research studies related to use of social media in higher education in Indian context, the lacuna in this domain becomes highly visible. Therefore, the need for an extensive study regarding use of social media for its effective use as a driver of innovation in higher education becomes evident. Researchers should focus on the different stakeholders in higher education, their expectations, and the motivating or hindering factors that influence adoption of social media as a driver of innovation in higher education.

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**Selected References**

7. *The full list of references is available from the first author upon request.*