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Social Media in the College Classroom

Summary: The power of social media in our global society has been labeled as a social revolution that is changing the way we live, work, communicate, and learn. College students are surrounded by and engrossed in social media. University professors are realizing the necessity of incorporating social media in their classrooms. Social media has become a major component of distance learning and massive open on-line courses (MOOCs) increasing the availability of a college education to students who could not previously afford it or who geographically had no access to it. The rising use of social media in college classrooms is changing the delivery of information and the formation of educational communities. In addition, it is advancing the democratization of universities and the opportunities for international students to experience a world-class education.

Keywords: social media, MOOCs, university classroom

Резюме (Марианна Ричардсон: Социальные технические средства обучения в высшем образовании): Сила социальных технических средств обучения в нашем глобальном обществе была отмечена как социальная революция, влияющая на то, как мы живем, работаем, общаемся и учимся. Студенты колледжа окружены социальными средствами обучения и постепенно погружаются в них. Профессоры университетов признают необходимость вовлечения социальных технических средств обучения в свои учебные занятия. Социальные средства обучения стали неотъемлемой частью заочного обучения и массовых открытых онлайн-курсов (МОДК) и повышают доступность высшего образования для студентов, которые раньше не могли себе это позволить, или не имели к нему доступа в географическом аспекте. Рост использования социальных технических средств обучения в школе влечет за собой изменение подготовки информации и организацию образовательных сообществ. Кроме того, технические средства обучения содействуют демократизации университетов и дают возможность иностранным студентам получить первоклассное образование.

Ключевые слова: социальные технические средства обучения, МОДК, аудитория

Zusammenfassung (Marianna Richardson: Soziale Medien in der Hochschulbildung): Die Macht der sozialen Medien in unserer globalen Gesellschaft wurde gekennzeichnet als eine soziale Revolution, die Einfluss hat auf die Art wie wir leben, arbeiten, kommunizieren und lernen. College-Studenten sind davon umgeben und vertiefen sich in den sozialen Medien. Universitätsprofessoren erkennen die Notwendigkeit der Einbeziehung sozialer Medien in ihren Lehrveranstaltungen. Soziale Medien sind zu einem wichtigen Bestandteil des Fernunterrichts und massenhafter Offener Online-Kurse (MOOCs) geworden; sie erhöhen die Verfügbarkeit einer Hochschulbildung für Studierende, die sie sich zuvor nicht leisten konnten, oder zu der sie geographisch keinen Zugang hatten. Die steigende Nutzung von sozialen Medien in der Schule verändert die Bereitstellung von Informationen und die Organisation von Bildungsgemeinschaften. Darüber hinaus fördert sie die Demokratisierung der Universitäten und die Möglichkeiten für internationale Studierende, eine erstklassige Ausbildung zu erhalten.

Schlüsselwörter: Soziale Medien, MOOCs, Hörsaal

Introduction

The power of social media in our global society has been labeled by some as a social revolution that is changing the way we live, work, communicate, and learn (Hinton & Hjorth, 2013; Prensky, 2001; Qualman, 2011). Social media can be defined as Internet applications that allow the creation and exchange of user-generated content, founded on the ideological foundations of Web 2.0, thus enabling content consumers to become content creators (Draskovic, Caic, & Kustrak, 2013; Kaplan & Haenlein, 2010). It has become a major communication vehicle for universities students (American

Association of University Professors, 2014; CLEX, 2009; Fisher, 2013; Qualman, 2011; Young, 2013). In an attempt to better communicate with students and to become more ecologically responsible, university professors and administrators are increasingly incorporating social media technologies in the college classroom. Yet, some professors are still questioning the validity of these technologies in their teaching. Understanding the variety of social media technologies available and their usefulness in the classroom will enable professors to make knowledgeable choices, rather than jumping on a technological bandwagon that may or may not strengthen learning and improve pedagogy. Globally, social media and Internet technologies have also advanced the democratization of university education, giving students educational opportunities previously inaccessible.

Social Media Technologies

Mayfield (2008, p. 5) lists the following as characteristics of social media applications: (1) social media encourages participation between contributors and viewers, (2) social media promotes openness in communication through voting, comments, and sharing, (3) social media advocates two-way conversations between multiple users rather than merely broadcasting information, (4) social media supports quick-forming communities, especially around a common interest, and (5) social media thrives on connectedness, bringing people together through common resources, links, sites, and media.

Table 1: Social Media Categories, Explanations, and Application Examples

CATEGORIES	EXPLANATIONS	EXAMPLES
COMMUNICATION	Exchanging user-generated content on and Internet platform for communication	Email, texting, IM, online chat
FILE SHARING	Exchanging files on an Internet platform as an individual or a group for review or discussion	Google Docs, Dropbox, Microsoft OneDrive
VIDEO CHAT	Communicating with others through video, rather than text, as a group of people or two individuals	Skype, Google Hangouts, FaceTime
SOCIAL NETWORKS	Forming social networks by creating a profile and building a network of friends and contacts	MySpace, Facebook, LinkedIn
CONTENT COMMUNITIES	Similar to social networks, but based on a content (i.e., photos, videos, newsfeeds)	Flickr (photos), Digg (news), YouTube (videos)
BLOGS	An online journal written by identified author(s) and commented on by readers	Blogger, Wordpress, TypePad (blog publishers)
MICROBLOGGING	Similar to blogging, but limited to a very short message (ex. Twitter has 140 character limit)	Twitter, Pownce, Jaiku
WIKIS	Website which allows people to contribute and edit its content	Wikipedia, Wikia, WikiHow, Wikinews
PODCASTS	Audio or video files published on the Internet for subscription	Apple iTunes, Podcast Alley, Audacity (publish a podcast)
FORUMS	Discussion around a topic of interest with each sub-topic as a separate thread	Forums, Slack
GAMING COMMUNITIES OR VIRTUAL REALITY	Video games which are played in Internet teams or in virtual reality	World of Warcraft, Second Life
HYBRID COMBINATIONS OR MASH-UPS	Using content from more than one source to create a single service or application	District Taxi Fare Estimator, Dangerous Roads on Earth

Table 1 (Maynard, 2008) illustrates categories of social media currently available along with social media applications. These categories should not be viewed as discrete or separate from each other. Instead, many of the examples could be placed in multiple categories. For example, Reddit is an application which can be used both as a content community and as a forum. YouTube is a content community which also plays video and audio podcasts for viewers. The list is constantly changing as new social media applications explode on the Internet scene daily, while others fade away.

Universities have already incorporated many of these technologies for faculty and student use. Online learning management systems (e.g., Canvas, Blackboard, and individual programs developed by private institutions) have become the standard for online grading and communication with students. Most systems allow online submission of assignments and permit instructors to give online feedback to students about their work. Some of these programs incorporate video chat and digital dialogue features to encourage student discussion groups and faculty-led discussions without the participants having to be physically together at the same time or place. This online communication and feedback from the instructor fosters an online relationship between faculty and students.

Turner and Thompson (2014) studied first-year college students trying to determine why some university students are successful and others drop out, never finishing their degree. A critical component for success was the instructor-student relationship. The broad implications of this study are that “students who develop an interactive relationship with the instructor increase the chances of academic success” (Turner & Thompson, 2014, p. 101). Students are in need of new teaching techniques, strategies, and programs which “foster a more collaborative learning environment that motivates millennial students to be self-reflective and active participants in constructing knowledge” (Turner & Thompson, 2014, p. 95).

In order to support these social media technologies, universities must have effective communications networks with standard protocols and compatible software. A basic key to success is building and maintaining a campus communications infrastructure that can handle the ever-increasing use by students and faculty (Lewis, 2015) and the evolution of their technological demands. Even in the United States, universities are scrambling for funds to re-tool existing hardware, and experimenting with creative solutions to solve existing technological limitations in classrooms.

Jon Nichols (2015) describes well the challenges some colleges and universities are facing with server storage, wireless access, malware on school computers, and hardware obsolescence. Nichols bemoans how many of his lessons plans had to be changed unexpectedly because the server went down or the LCD projector didn't work. His most difficult experience was submitting midterm grades using paper forms because the course management platform the college was using went down. Nichols tries to use technology as a teaching tool, but when technology fails, he refocuses his efforts on improving his teaching, rather than relying on the “glitzy package of technology” (Nichols, 2015).

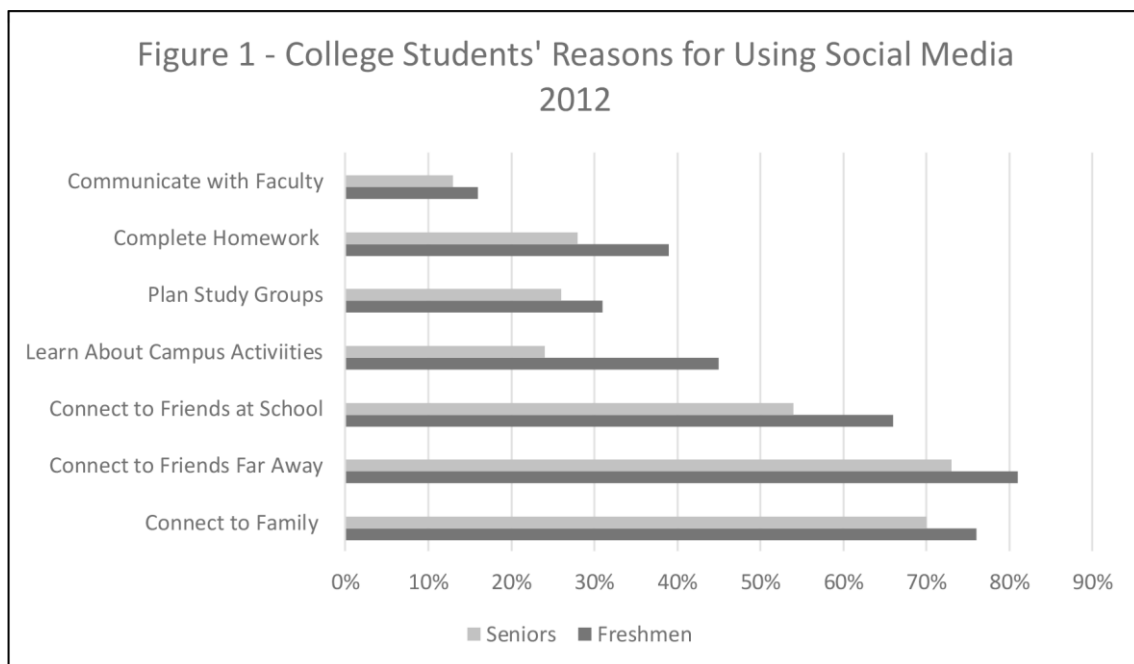
Especially in developing countries, building and maintaining the technology and infrastructure for social media applications can be a particularly difficult problem. In Nigeria, students and professors reported that Internet services improved their quality of teaching (77.5%) and research output (79.1 %), yet the unreliability of electric power made technology difficult to use (Okafor, Imhonopi, & Urim, 2011). A student pointed out: “If you have a deadline to meet in sending a paper for publication, you may not have electricity to type the paper, not to talk of sending it via the Internet” (Okafor, Imhonopi & Urim, 2011, p. 145). Ajegbomogun and Popoola (2013) did a similar Nigerian study two years later with the same complaint of inconsistency of public electric power, as well as telecommunication support problems. The need for these Internet services far exceeds what is currently available in developing countries (Armah, 2009).

The Internet and social media will continue to remain a remarkable force for all universities, promoting research and academic development. Expanding computer labs, training users more effectively, introducing users to scholarly discussion groups and bulletin boards in a variety of disciplines, promoting Internet sites on topical issues, and anticipating future Internet library requirements will stimulate scholarship worldwide. Students and professors can ask questions to further clarify concepts and ideas with experts around the world through texting, emailing, and video chatting. Those interested in similar subjects may discuss their ideas on blogs, forums, and wikis, thus fostering a global academic community.

Student Use of Social Media

Young adults between the ages of 18 and 25 have been surrounded by social media since childhood. For many of these young people, social media is the way they communicate with each other and encompasses the way they interact with their world. These behaviors spill over into the university classroom, as these students try to communicate and learn with other students and their professors. Students walk down the university hallways with their eyes on their cell phones often texting, watching the latest YouTube video, or following their friends on Facebook. Social media has become their method of communication and the most popular activity on the Web (Qualman, 2011, p. 3).

Students are more likely to leave home without their purse or wallet, than without their smart phone (Fisher, 2012, p. 30). Students depend upon their smart phones to tell them where to go for their next class, what homework to do, what information to study, when to study with a TA, where to buy books and other supplies, and how much money to spend. Students are also doing their academic work on smartphones and tablets rather than desktop computers. A survey of college students done by Educause Center for Analysis and Research found that nearly half of university students used tablets for their academic work in 2014, compared with just 12 percent two years earlier (Biemiller, 2014). Also, 68 percent of students reported using smartphones to do academic work in 2014, as compared to 42 percent of students who did so in 2012 (Biemiller, 2014, p. 58).



Every year, the use of social media is increasing among college students. Young (2013) surveyed

19,000 students at 42 institutions in the United States in 2012. Figure 1 represents the results of this data (Young, 2013, p. 4). In every category, freshmen students used social media to a greater extent than senior students. In the figure, both freshmen and seniors used social media the most to connect with friends outside of college, to connect with friends at the college, and to connect with family. For college-related purposes like group study, homework assignments, and obtaining information about campus activities, the difference in social media use between freshmen and seniors was a 3% to 21% increase depending on the category (Young, 2013, p. 6). University administrations and professors need to pay significant attention to the role social media plays in the classroom as this trend continues.

The Clash of the Generations

The generation of students currently attending college has been given many labels, including Millennials (Monaco & Martin, 2007), Generation Y (Shaw & Fairhurst, 2008), and Digital Natives (Prensky, 2001). Overgeneralizations should be made cautiously, especially when discussing an entire generation; however, many research studies have found trends of behavior that should be noted and dealt with when working with current university students. Millennials are collaborative, tend toward optimism, are willing to try new technologies and are more comfortable with ambiguity and uncertain outcomes than previous generations (O'Brien 2007, p. 6). Professors need to step out of their comfort zones and meet students where they are. Students want to teach and learn from each other rather than having an expert lecture to them, and they should have the opportunity to teach each other. Students do not feel the need to memorize information as much as knowing where to find and retrieve pertinent facts. Rather than talking at students, professors need to talk with them and work to provide a more constructivist learning environment (Cunningham, 2007). Shared learning experiences are highly valued by these students.

The clash of the generations may be seen as professors are unable or unwilling to change their educational methodologies to teach a new generation of students. The use of social media applications (such as, blogs, Facebook, Twitter, LinkedIn, YouTube, etc.) can help students to readily access educational material, and consequently, to enjoy greater success in the classroom. These students want to be more open about who they are and understand who their teachers are. Social media has allowed them to show their thoughts and actions in a digital world where all can see (Qualman, 2011, p. 126).

Digital Immigrants Teaching Digital Natives

Fourteen years ago, Marc Prensky (2001) labeled young adults as Digital Natives distinguishing them from older adults whom he labeled as Digital Immigrants (p. 1). Now, many of these same Digital Natives are becoming faculty and are teaching in the college classroom themselves. However, Digital Immigrants are still a part of most colleges and universities. They have learned to adapt to their new digital environment, but they will always retain an accent to some degree (such as, printing out digital information, or phoning someone to make sure a text was received). Prensky (2001) makes the statement that "our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language" (p. 2). Further emphasizing his point, Prensky (2001) states: "Today's students are no longer the people our educational system was designed to teach" (p. 1).

In a recent survey done in the United States by the Bill and Melinda Gates Foundation, professors were asked if they used various technologies and innovative techniques as a part of their teaching

(In brief, 2015). The survey targeted such technologies as social media, clickers, hybrid courses, discussion forums, and flipped classrooms. Only 40 percent of the professors who responded acknowledged using or being interested in learning about these technologies and innovative teaching techniques. Only half of those professors (20 percent of the respondents) had actually used any of them. Innovation may be sweeping higher education, but not all faculty members are embracing it in the classroom (In brief, 2015).

Some professors remain skeptical of the instructional validity of social media use in the university classroom. Draskovic, Caic, and Kustrak (2013) did a qualitative study interviewing Croatian university students and professors to find out their preferences in using social media in the college classroom. The students were motivated to use social media to interact with professors and to interact with other students. The professors were more skeptical because of “their belief that the lecturer-student relationship needs to remain professional, which implies the use of formal communication channels” (Draskovic, Caic, & Kustrak, 2013, p. 337). These professors who were interviewed also had a more limited understanding and general unfamiliarity with the various aspects and forms of social media available to them in the classroom. A similar problem could also be preventing other university professors around the globe from social media and Internet use in the classroom.

Digital Encouragement for All

Digital Natives continue to become college and university professors and embrace new technologies in education (O’ Brien, 2007, p. 6). These professors feel comfortable using social media to establish educational communities with their students and promote instructor-student and student-student relationships through the use of digital platforms in the college classroom. Professors become students, too, as they learn from their students about the latest app for their cell phone or the latest relevant Tweet on Twitter for their subject domain and incorporate this information into the university classroom. Universities have started forming centers to concentrate on the use of social media for student engagement in academic courses and programs, along with instruction for professors wanting or needing additional training.

In 2005, Hurricane Katrina forced instructors at Southern University of New Orleans (SUNO) to quickly incorporate online instruction using social media as their students were scattered across the western United States. Instructors and administrators soon realized “the danger of losing these students permanently if they did not reach them and work with them to continue and complete their programs of study” (Ralph & Ralph, 2013, p. 450). Instructors were trained in online technologies and if they met the rigorous standards set by the university, they were given a laptop and monetary incentives to continue their online innovations. In 2009, SUNO established the Center for Excellence in Teaching and Learning to study advantages and challenges of social media use.

Focusing on the audience of those born in the digital age, Harvard professors and students started the Digital Native Project (Berkman Center, 2010) as an appendage to the Berkman Center for Internet and Society. The purpose of the center is to encourage creative ways for society to better understand and harness digital fluency by using social media and digital communication. Palfrey and Gasser’s (2008) book, *Born Digital*, became the basis of a social media campaign run by students at the Berkman Center. The purpose of this book is “to separate what we need to worry about from what’s not so scary, what we ought to resist from what we ought to embrace” (Palfrey & Gasser, 2008, p. 9). Each chapter explores the different activities used by Digital Natives while on social media, such as defining an identity, becoming an activist, pirating information, turning into an aggressor, innovating new ideas, and learning information. The thirteen chapters were turned into short social media clips by students to be used as learning and discussion platforms for other students.

Social Media Technologies in the University Classroom

Many university professors are realizing the power of social media as a learning tool and shifting the way they teach. Professors are changing their educational methodologies in a variety of subject areas in college campuses across the United States. The following paragraphs highlight a few examples of American university professors who have started to integrate social media applications in their curriculum.

Doctoral candidates in mechanical engineering at Purdue University are pleasantly surprised when they take Dr. Charles M. Krousgrill's *Mechanics and Vibrations* course to find social media tools in place to help them be successful in the class. Dr. Krousgrill has a blog for his course (independent from the university course site) with all the course material readily available online in an easier social media framework. As students work on engineering and mathematical problems listed for the course, they are encouraged to discuss their solutions together and help each other when they are stumped. Thus, the students work together remotely to figure out the answers. Dr. Krousgrill is able to monitor these discussions and he enters into the conversations periodically. An educational community has been formed through social media without face-to-face lab time, study sessions, or formal office hours. One graduate student commented:

Even though the class was challenging, I was able to figure out problems easier with the help of the group. Sometimes, I would be stuck on a problem late at night or early in the morning, but I could write something on the blog and other students would help me out. Also, Dr. Krousgrill responded quickly to students' questions. (David Richardson, personal communication, December 24, 2014)

Dr. Andrew D. Maynard is a professor of Environmental Health Sciences and Director of the Risk Science Center at the University of Michigan. He uses social media to communicate with his students in the university classroom and has a blog for each of the courses he teaches. He has even developed a course entitled, *Communicating Science through Social Media* (EHS665), during which he teaches other science educators how to incorporate social media in their lessons. Maynard has his own YouTube Channel, entitled *Risk Bites*, which provides short, interesting videos about the science behind human health risks (Maynard, 2015).

Dr. Joshua Eyler is the Director of the Center of Teaching Excellence at Rice University and teaches humanities courses incorporating Twitter as a part of his course expectations. Students are required to Tweet five times a week over the course of the semester for the purposes of furthering student engagement in the course material and extending students' discussion beyond the classroom. A specific hashtag was given for the course and Eyler used an online archiving tool to keep track of Twitter activity. He also gave three specific guidelines the Tweets must follow: "(1) They must have something to do with the class (i.e., a response to the reading, a link to a related article, a question, etc.), (2) They must be substantive, and (3) They must be respectful" (Eyler, 2013, para. 3).

Eyler claims that social media has changed the way he teaches. He does understand there may be elements of social media which could present potential drawbacks, but he feels these can be mitigated by establishing clear expectations. He also expressed the concern that social media could seem like busy work to students if the relevancy of these platforms to the students' coursework is not explained clearly.

At Brigham Young University's Marriott School of Business, advertising and marketing classes analyze companies' use of social media in promoting their products and business. Dr. Kurt Sandholtz teaches an advanced writing course for business majors. He has begun to require his students to have

a LinkedIn profile, along with their written paper resume. Students are also required to write a formal business article as well as a blog post and Twitter version of their article. Business students need to be able to write in these different platforms using a writing style that varies between a formal article, a blog post, and a Tweet (Kurt Sandholtz, personal communication, March 17, 2015). Groups in these classes are also encouraged to use Google Docs or Microsoft OneDrive as a vehicle to write and edit their group report. Students with a variety of schedules are still able to communicate with each other by using email, texting, and online chat. One of their projects is a mock individual interview, in which they video tape themselves and post for all teachers and students to view and give feedback.

Under the direction of Sandholtz, Lisa Thomas, an adjunct professor also teaching management communications, has developed short animated features on a YouTube channel entitled *BYU MCOM* to teach students basic business grammar. By using a social media platform, a tedious part of the curriculum (such as punctuation, subject-verb agreement, sentence structure, active versus passive voice) becomes much more stimulating and attractive to students (BYU MCOM, 2015).

A Few Words of Caution

These are just a few anecdotal examples of the many professors in a variety of ages and stages in their careers who are actively changing their teaching styles by incorporating social media. A few words of caution may be helpful before moving forward with social media use in the college classroom.

First, as universities slowly move in the direction of using social media technologies for communication, instructors need ready access to relevant instruction geared to their level of expertise. Instructors who use social media applications before they are proficient may confuse and complicate student learning. Kentaro Toyama (2015) observes that the value students place on any technology is in direct proportion to the instructor's capability to use it. Because social media is constantly changing, continuous professional development should be given to instructors to keep them aware of new ways to incorporate social media technologies into their teaching (Ralph & Ralph, 2013, p. 451). The formation of university centers for digital instruction is just one example of tools being created to assist college professors.

Second, social media technologies do not need to be used in every class all the time (Lin, Hoffman, & Borengasser, 2013). As Eylar (2013) stated previously, the relevance of social media assignments needs to be made clear to students. If not, social media can seem like busy work rather than a necessary part of the curriculum. Lara Burton, who teaches computer science at Brigham Young University, made the point:

I worry that sometimes people jump to use a technology because it is new. I call that the 'shiny' effect. 'It's shiny! I want it!' I approach technology more by asking the question: 'How can this serve my needs and the needs of my students?' (personal communication, April 12, 2015)

Third, social media does not always improve learning (Toyama, 2015). Jensen, Kummer, and Godoy (2015) compared two freshman biology classes with the same instructor, lectures, assignments, activities, and classrooms. The differences between the two classes were when and where students were given the lectures and application activities. For one class, the students watched the lectures online and had social media discussions with active learning activities happening in the classroom. The other class was traditionally taught with the lectures and learning only happening in a classroom.

The academic performance of the students was not statistically different between these two classes based on their exam scores. In an interview about the study, Kummer said, “the key to successful learning gains is likely more attributable to active learning, a teaching model where students are actively involved in the process, constructing knowledge themselves instead of just listening” (Hollingshead, 2015, para. 3).

In response to this article, a university student commented that the researchers were missing the point. The student wrote:

The underlying premise should be that we are all unique individuals and we live in a day and age where technology makes it very possible to personalize how we learn. Instead of asking how best to teach this generic ‘student,’ maybe we should ask how to best accommodate individuals. (Hollingshead, 2015, comment 2)

Technology does allow universities to give students the opportunity to choose the kind of pedagogical venues they feel most comfortable with (e.g., flipped classroom, online classes, traditional classrooms). Professors should also be encouraged to choose the teaching style which best fit their strengths and their abilities to teach.

Another impediment of social media use is acquiring the necessary hardware, which seems to be ever increasing in speed, storage, and cost. As previously discussed, this obstacle plagues both developed and developing countries. Consistent upgrades are necessary for students, faculty members, and universities causing a financial burden and strain on all members of the educational community. Striking a balance between needs and wants for technology in the college classroom is a crucial compromise that needs to be reached at all college campuses (Stuart, 2014).

The key to using social media wisely in the classroom is keeping the focus on the student, rather than on technology. David Lewis (2015), who is Lehman Librarian at Columbia University, discusses the fundamental change universities are currently going through in transforming instruction and scholarly communication digitally and reminds professors that “we need to recognize that though technological development will force changes, we can shape the way technology is used” (p. 307). Educational professionals should remember that their primary responsibility is to teach content using the best pedagogical practices rather than becoming excessively engrossed in social media tools for teaching.

Changing Educational Communities

A generation ago, educational communities at the college level were based on an on-campus experience at an accredited college or university. Technology is causing these traditional educational communities to expand and morph into many different directions. Online courses have been around for decades and are offered by many universities. More recently, massive open online courses [MOOCs] have become a conundrum for many educators in higher education. Most of these computer-based educational communities use some form of social media (e.g. blogs, podcasts, forums, content communities, and social networks) to establish a sense of cohesion as a class, to establish student-to-student and faculty-to-student interconnection, and to establish a dynamic (rather than static) learning community.

MOOCs are not a social media platform themselves, but they are a way of delivering course content

to large groups of people. Armando Fox is the faculty director of UC Berkley's MOOCLab which extends existing online education programs with MOOC research and practice. Fox expresses the opinion that "if MOOCs are used as a supplement to classroom teaching rather than being viewed as a replacement for it, they can increase instructor leverage, students' throughput, student mastery, and student engagement" (Fox, 2013, p. 38). He uses a university model of education termed small private online courses [SPOCs] which incorporate MOOCs along with limited classroom instruction and discussion in small groups or small-group lab work done in a university classroom. Fox (2013) tries to dispel many myths and prejudices held by the academic community against the use of MOOCs; the biggest concern for academics being that "universities will use MOOCs to lower costs by firing faculty and teaching assistants, thus sacrificing educational quality" (p. 38).

In a pilot program at San Jose State University in California, students studied MOOC lectures by MIT professors and homework assignments created by Anant Agarwal, CEO of edX online. This work was done by students at home on their own schedule. Faculty and teaching assistants spent classroom time working with students on lab and design problems rather than on lectures and homework. These students' test scores were compared with the students of the previous cohort who had been taught using the more traditional university delivery system. On the first exam, the SPOC students received grades averaging 5 percentage points higher than the traditionally-taught students; on the second exam, their average grade was 10 points higher. The most striking difference was the comparison between the numbers of students who received credit for the course (a "C" grade or better) which rose from 59 percent to 91 percent (Fox, 2013, p. 39; Lewin & Markoff, 2013, B1; Lucas, 2014, p. 34).

Other universities are allowing MOOC's to be used as a part of their academic program if the tests associated with these classes are physically proctored at the university or other monitored sites allowing for tighter controls on the validity of the test results as an indicator of students' knowledge. Georgia Tech has announced a professional Master of Science degree in computer science earned through MOOCs and proctoring centers across the country (Lucas, 2014, p. 32). The tuition for the program is an inexpensive \$6,600 for three years of course work as compared to the \$44,000 price tag for the same degree for residential students (Belkins, 2013).

In addition, Belkins reported a startling increase of U.S. residents applying for this MOOC program (reaching 79%) as compared to the applicants for the residential program for the same degree (only 9% of whom are U.S. citizens). Sebastian Thrun, the CEO of Udacity which is one of the many companies partnering with Georgia Tech to help sponsor this program, said, "There is a really huge number of people in this country that would love to get an education while having a job or raising a family or staying at home," (Belkins, 2013).

These experimental models of universities and college communities are used to enlarge classrooms beyond the boundaries of four walls. University buildings are replaced by global pockets of students meeting together for instruction, usually over the Internet and communicating often using social media (e.g. Generation Rwanda, Kepler University, International Network for Higher Education in Africa, and African Virtual University). Some of these experiments are being started as free (or nearly free) on-line services for students seeking an education who may not have the money nor the time for a traditional residential college experience (e.g., Coursera, edX, Khan Academy, MOOC2Degree, and MOOC University).

Table 2: Technology-Enabled Teaching with Possible Opportunities and Difficulties

Technology-Enabled Teaching	Opportunities	Difficulties
Asynchronous online courses offered by for-profit universities by faculty with little or no faculty-student interactions	This model gives more students the opportunity of taking classes and is less money for the university.	Fewer Ph.D. faculty are needed and the quality and delivery of the education is lessened.
Synchronous online courses with online interaction between faculty; possibly combined with short residence sessions	This model reaches students unable to come to a physical campus, yet gives them opportunities to work with university faculty.	School facilities would not be as well used (which could be viewed by the institution as an opportunity or a problem).
A university program featuring MOOC's and physical proctoring of exams.	Similar to Georgia Tech's program, many more students can afford this program.	Other universities may be concerned with the competition for students.
Integrate MOOC's into the traditional classroom taught by capable Ph.D. faculty and/or blend physical classes with video-lectures and multimedia homework using social media to connect with faculty.	These teaching techniques will improve the quality of courses meeting physically at universities while allowing more students greater accessibility to content.	Faculty would need to be trained and changes made in campus classrooms.
Free MOOCs with asynchronous videos and interactive sessions via Google Hangouts for a small number of participants and faculty.	This model allows instruction for underserved populations with increased flexibility and enhancing educational opportunities around the world.	The quality of this college education may be questioned leading to graduates finding it difficult to find jobs.
New models for universities; such as, Project Minerva, MOOC degree programs, and a MOOC university	Increased flexibility for students and the democratization of a college education for all students who want to learn. Students will need to accept more responsibility for their own learning.	These new universities will incur start-up costs and will need to establish their brand and reputation for quality. Some of these universities may fail. If they become successful, fewer Ph.D. faculty will be needed.

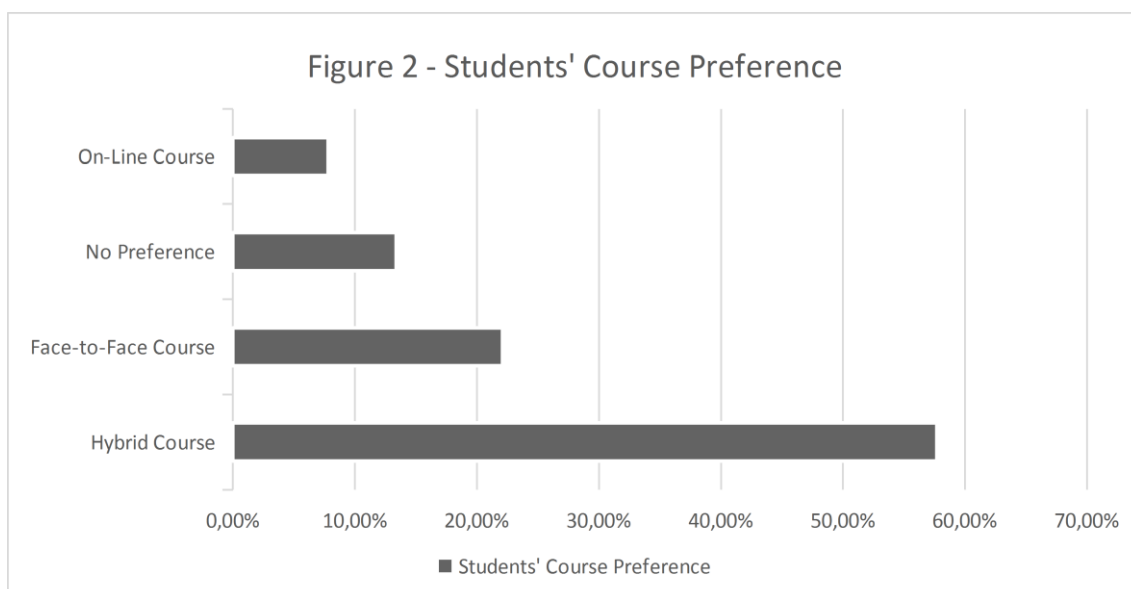
Table 2 goes into further detail about each of these models along with the possible opportunities and difficulties with each one (Lucas, 2014, p. 33-34). As shown in this table, the opportunities listed for these different educational models center largely upon greater flexibility of time and place, affordable classes, the democratization of a college education for all who want to learn, accessibility of content, and the opportunity for students to take classes from professors who usually only teach at expensive, top-tiered universities.

Most of the difficulties of these educational models center upon issues affecting the administration and faculty at universities. University administrators are concerned with the competition for students, the decreased quality of education because of limited interaction with other students and faculty, money needed to upgrade the technology in campus classrooms, and the possible demise of traditional college campuses. Faculty members are concerned with the need for new training,

changes to curriculum and teaching delivery, and the possible lack of Ph.D. faculty jobs.

University administrators and professors need to figure out which type of course delivery current students really want. A national survey asked 112,585 college students at 251 sites between the months of February and April of 2013 concerning the type of course they prefer (Young, 2013, p. 14). They were asked to choose between courses with no online components, hybrid courses (combining face-to-face classroom instruction with online activities), and courses that are completely online. Figure 2 displays the students' preferences.

The largest percentage of students (57.7%) said they preferred hybrid courses while less than half as many students (22.1%) preferred courses with no online components at all. The smallest group of students were those who preferred a completely online courses (7.8%). A relatively small group of students did not have a course preference (13.4%) (Young, 2013, p. 13). These figures beg the question whether students would go the way of the MOOC, if they could afford to choose another type of course. For some students, they do not have this choice.



During the same survey, more than 100 professors who teach MOOCs were asked how they felt about their MOOC course. More than three quarters (79%) of the professors believe that MOOCs are worth the hype and have intrinsic value, but nearly three quarters of these same professors (72%) also believe that students who succeed in their MOOC do not deserve formal credit from their institution. Another two-thirds of the professors (66%) believe that their institution will eventually grant formal credit to students who do succeed in the MOOC (Young, 2013, pp. 14-15). In 2014, 2,800 academic leaders were again surveyed and only 16% of them felt MOOCs are a sustainable way to offer college courses, while 51% felt they were not (Kolovich, 2015).

Another criticism of MOOCs is that those who are well-educated and who already have great jobs are those who disproportionately complete MOOC courses. Toyama (2015) argues that MOOCs help the educationally rich get richer without making a significant difference in helping those who are educationally poor. He concludes: "More technology only magnifies socioeconomic disparity" (Toyama, 2015, final para.).

The MOOC hype has faded recently as it has become clear that this particular breed of online course

will not change the economics of mainstream higher education. MOOCs will never replace face-to-face instruction, but more learners can be reached, leading to a net social and economic benefit. Kolovich (2015) lists the positive impacts of MOOCs as (a) helping recruit potential students to explore the possibility of a college education, (b) nudging more colleges to integrate social media and other online technologies into courses, and (c) advertising and increasing the visibility of specific institutions that have had very popular MOOCs on the Internet. The popularity of these other university educational models also may force universities to “control their costs better and lessen the steep rise in tuition” (Cusumano 2013, p. 27; Young, 2015) which has become such an economic strain on families and individuals trying to receive a higher education.

Conclusion

Cultivating a partnership between students and teachers is the key to social media success in the university classroom. Since social media is the major communication tool of college students, Jackson (2011) expressed the need for instructors to “allow [them]selves to be part of the conversation, or it is one more way school becomes irrelevant” (p. 40). Professors can be a part of the conversation by understanding the social media technologies available to them and their appropriate use in the classroom.

Open discussions and theoretical studies will continue to expand the limits of technology in all subject areas while professors and students continue asking questions; such as, “Why can’t we do this?” and “When can we have the technology to do that?” (O’Brien, 2007, p. 6). Universities will continue to push the envelope of technology.

The democratization of information and the global restructuring of universities may seem to be a modern phenomenon. Yet, Longstaff (2014) argues that historically, universities consistently go through a cyclical model of change “where waves of inclusivity alternate with bouts of exclusivity” (p. 167). The first universities were accessible and mobile communities. The origin of a campus-based education as a place of learning has only developed over time (Byrd, 2001, p. 289). Current university changes simply represent the latest reincarnation of higher education. Perhaps, technology will “invoke a wholesale shift to the boundless model” (Longstaff, 2014, p. 117) of a university education being offered to any student in the world who wants to learn.

Some educational theorists are worried about the college classroom itself disappearing. Frey (2013) estimates that over 50% of colleges will collapse by 2030 because of the rising cost of a college education and the cheaper alternatives which are becoming more available through the Internet. Vardi (2014) is wringing his hands over the possible dissolution of higher education because of MOOCs. In sharp contrast, Morson and Schapiro’s (2015) predictions are bullish as they contemplate universities in 2040:

A college degree will continue to be a great economic investment, and enrollments will increase to record levels. American higher education has long been the model for the world, and 25 years into the future, we are confident that will still be the case. (final para.)

Personally, I am not worried about the fate of university and college campuses. Face-to-face communication and learning will always have a place in education. University classrooms with four walls, whiteboards, chairs, and desks are not going away—they are just changing. Looking forward, faculty and administrators should focus on teaching content and on the needs of the individual student. Using social media in this context can and will continue to enhance, rather than detract, from a university education.

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