

Connecting Secondary and Postsecondary Student Social Media Skills: Recommendations for Administrators

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Social media has become common ground for many high school and college students, and its use has the potential to impact learning. With fast response times and immediate availability of ideas and data, students change their perceptions about how education should be experienced. This study explored how high school and college students view the value of social media as a learning tool, and findings showed significantly different perceptions about how social media aids learning. These differences provide a foundation for discussion among educational leaders about the transition of students from high school to college and about how social media can be used effectively for instruction.

Social media have become common place both within the worlds of business and private life. These digital locations have evolved from niche communication tools, to common elements that promote public and private agendas, commerce, education, and transcend multiple social classes. Social media are used for multiple reasons, including romance, entertainment, education, professional networking, product sales, and an online etiquette has even emerged regarding how to appropriately interact online (Kryder, 2013). The core of social media “is the ability to share content with others” (Osterrieder, 2013, p. 26), and the skills to effectively moderate social media have begun to be well documented. These skills include a technical ability to navigate the internet, self-teach skills about uploading media, discern and learn about the nuances of particular software programs, and the abilities to write, read, and edit language at a level and in a manner consistent with the media, such as what is frequently used on Twitter (Guenard, Katz, Bruno, & Lipa, 2013; Kryder, 2013; Osterrieder, 2013).

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Social media has the ability to engulf an individual's interests. Much has been made about the role of social media in peer relationships, and whether or not extreme use of social media is good for a young person's education. In particular, there have been concerns expressed that social media or technology skills do not translate well to other academic areas or interests, or even among grade levels (Smith, 2008). This has been a common refrain in much of the public education sector, where the connection between secondary and postsecondary education has been described as inconsistent, broken, and in need of better and stronger articulation (Capps & Miller, 2006).

As Capps and Miller noted, there are multiple challenges for a student's progression from secondary school to higher education. As Common Core standards emerge and are set in place, the hope is that students are better prepared for college, and although the standards do offer levels of particular content knowledge, they do not reflect study skills, maturity, or developmental aspects of academic performance that are key indicators of collegiate success. Additionally, higher education has generally not performed well, and the majority of multi-ethnic students who arrive on campus do not graduate (Bowers, 1992), and nationally, only about 60% of those who begin higher education graduate within six years (Schneider, 2008).

The poor performance of secondary students moving into postsecondary education has prompted a growth in state-level policy mandates that incentivize higher education institutions to pay more attention to student graduation rates (Thaddieus & Thomas, 2011). One activity many institutions have embraced is the inclusion of a web- or technology-strategy that includes social media as a primary component (Dean, 2013). By embracing social media as a teaching tool, institutions strategize that they can improve student learning, integration, involvement, and commitment to the college experience. To do so, however, institutions must accurately identify how students are using social media, the expectations of technology, and how these might differ from student use and expectation at the secondary (high) school level. The current study was designed to identify how social media are being used by secondary students and postsecondary students, and to identify possible consistencies or gaps that might require the attention of both public school and collegiate administrators.

Background of the Study

The generation now widely referred to as "millennials" has been characterized as having relatively short attention spans, the result of which some have traced to the fast-paced world of technology (Howe & Strauss, 2007). And with 83% of the 18-29 population using social networking media (Walaski, 2013), the skills, experiences, and exposure of these individuals on campus must be addressed.

The influence of social media on higher education has manifested itself in several ways. Many institutions already take advantage of the power of social media to disseminate information in areas such as alumni relations, athletics, library information retrieval, special events, conferences, marketing, recruiting students, and news releases. Students use social media outside the classroom to socialize and network. Inside the classrooms, social media has been integrated to support both formal and informal learning, as faculty members tweet about research findings or class service-learning projects, reading updates are posted, changes to class assignments or meeting times and locations are changes that are shared, etc. Some faculty members even do quick surveys to test student learning and to try and identify if students are having problems with homework using Facebook. Other faculty members have

had students build wikis or blog pages to showcase their writing or engage in creative projects such as a potential professional portfolio outside of the learning management system (LMS). Examples of LMS include Canvas, Blackboard, Desire2Learn, and Moodle. This is mostly due to the fact that the traditional LMS systems that are connected with a particular course expire after a semester. In addition, on some campuses, faculty development services have begun building online learning communities for faculty with similar interest to share and contribute recommendations (Lu, Todd, & Miller, 2011).

Beyond the purely social purposes of social media, many students have re-purposed these social sites for academic activities (Lampe, Wohn, Vitak, Ellison, & Wash, 2011; Tess, 2013). This brings positive benefits to connect with other students with course-related work (Dahlstrom, de Boor, Grunwald, & Vockley, 2011). In a national study by EDUCAUSE, more than half of U.S. college students indicated using social media for purposes such as communicating with fellow students about course work (Salaway, Caruso, & Nelson, 2008). The study-related knowledge exchange on social networking sites is also an international phenomenon. Wodzicki, Schwämmlein and Moskaliuk (2012) examined study-related knowledge exchange via StudiVZ, the German equivalent of Facebook, among undergraduate students. They reported about one fifth of participants exchanged study-related knowledge through StudiVZ. Most students were first year students seeking social interaction and integration as they acclimated to their new environment.

Despite the increasing re-purpose of social media for academic use, the majority of higher education institutions still rely on traditional LMS. These LMS do not capitalize on the communication or pedagogical opportunities of social media. For example, students can create, manage and update a cloud based learning space that facilitates their own individual learning activities, reflections, and building connections to peers, experts in the fields and social networks across time and space nationally and internationally (Dabbagh & Kitsantas, 2011; McGloughlin & Lee, 2010; Valjataga, Pata, & Tammets, 2011). Traditional LMS, although increasingly sophisticated, tend to be confined to a few users who are registered in a formal class, asking students to log into a restricted space with restricted information.

According to Hrastinski (2012), students regard social media as one of three key means of the educational experience, along with face-to-face meetings and the use of learning management systems, and are mainly used for brief questions and answers and to coordinate group work. He argued that teaching strategy plays a key role in supporting students in moving from using social media to support coordination and information sharing to also using such media for collaborative learning.

Technology has been increasingly integrated throughout both the K-12 and higher education experience and curriculum. Although research has emphasized the importance of integrating technology into student learning, the use of technology can only be effective if teachers themselves possess the expertise to use technology in a meaningful way in the classroom. This teacher competence related to technology has been a key element in teacher-education standards as well as a primary focus of faculty development on college campuses. This teacher and faculty competence has been a historical challenge for education leaders, dating to the introduction of audiovisual supplements to instruction and includes movements as varied as the use of instructional television, computers in the classroom, the Internet (Reiser, 2001). Part of the challenge for administrators is the evolving understanding of how technology accentuates student learning. Rapid changes and advancement in technology can hamper research and a comprehension of what technologies can do for student learning.

Baylor and Richie (2002) conducted a comprehensive study of 94 secondary school classrooms from four states in different geographic regions of the country. The study provided an investigation into the impact of seven factors related to school technology (planning, leadership, curriculum alignment, professional development, technology use, teacher openness to change, and teacher non-school computer use) on five dependent measures in the areas of teacher skill (technology competency and technology integration), teacher morale, and perceived student learning (impact on student content acquisition and higher order thinking skills acquisition). The author found technology impact on content acquisition was predicted by the strength of leadership, and teacher openness to change. The key conclusion to the study was that school administrators have a significant role in student learning.

A significant problem associated with technology's integration in education is the uneven application of both technology as a learning aid and technology as a resource. Although many institutions and individuals have ready access to multiple technologies, there are an equal number of individuals with limited to poor or no access to technology. In 1995, the U.S. National Telecommunications Infrastructure Administration (NTIA) issued the first of four reports under the title "Falling Through the Net." These manuscripts reported on the disparity of what they termed the 'digital divide' in America, a concept that refers to the gap between people who have the resources to access technology and those for whom technology is either non-existent or a rare to seldom used resource. Variables highlighted in the report include: socioeconomic status (rich/poor), racial identifiers (white/minority), geographic lifestyle (urban/rural), and education (highly/none). Recent studies have revealed the digital divide as a symptom of a larger and more complex problem, poverty and inequality across the American citizenry. The divide persists due to market forces, unequal investment in infrastructure, discrimination, insufficient policy efforts, and culture and content (Warschauer, 2003; Agarwal, Animesh, & Prasad, 2009). These elements are particularly important to consider as both K-12 schools and college and universities push to expand technology (such as online learning), despite recognition that in many ways technologically enhanced learning can exclude a large portion of the population (Bok, 2009).

So although technology is widely available to many in America, and social media has become increasingly embedded in individual practices and preferences, there is still little understanding of how technology improves student learning. This is as true in the secondary school as it is on the college campus, and there is a growing need to create baseline data about how at least students see technology applications, like social media, as impacting their learning. This study is a direct response to that need for baseline or a foundational understanding of how students believe social media impacts their learning, and from this understanding, key recommendations can be developed for administrators at both levels of institutions to better connect technology with student learning.

Research Methods

A literature-based survey instrument was constructed by the research-team to describe how social media are used, particularly in an academic environment. Conceptually, the instrument was driven by Smith's (2008) survey of collegiate student aptitude and attitude toward social technology. The instrument included two sections, the first of which asked respondents four

questions about their social media use, and the second section included 25 questions about how social media is used and how it assists them.

The instrument was field tested with senior college students and modified accordingly, and then pilot tested with 30 secondary school students in a mid-western suburban 7-12 school. A Cronbach alpha for the pilot test indicated the instrument was reliable, with an alpha level of .7009.

Data were collected in a mid-western city of approximately 100,000, with surveys distributed to a convenience sample of junior and senior level students in a 9-12 high school. Students were those enrolled in upper level English classes, with a possible 124 students. Surveys were also distributed to seven first-year seminar classes at a land grant university, resulting in a possible convenience sample size of 133. All surveys were administered by classroom teachers, and in each setting, a set of pre-worded directions were read to the classes prior to their completing the surveys.

Findings

A total of 84 (68%) high school students and 113 (85%) college students completed the survey, with the actual survey respondents differing from the possible sample due to a number of variables, including students absent from class for illness, school activities, etc. As shown in Table 1, nearly all of the high school students (n=80; 95%) and college students (n=112; 99%) reported using *Facebook*, and approximately three-fourths of them also used *Flickr* as the second most popular social media (n=61; 73% and n=89; 79%, respectively). College students were more likely to use *LinkedIn* (n=86; 76%) than high school students (n=15; 18%) and *Virb* (n=68; 60% as compared to n=26; 31% of high school students). Of the ten social media web sites presented to respondents, only *MySpace* was used by a substantially larger percentage of high school students (n=44; 52%) as compared to college students (n=24; 21%).

A very high percentage of both sets of respondents reported using social media at least once per day including 81% of secondary school students (n=68) and 93% of college students (n=104). As might be expected, college students used social media to keep in touch with their family (37%) more than secondary students (7%), and both groups most commonly reported use of social media was to communicate with their friends (n=75; 89% of secondary students and n=57; 50% of college students).

Survey participants were also asked to indicate their perceived value of using social media, and as shown in Table 1, secondary students most popular perceived value was cultural or idea diversity (n=52; 63%) and for college students the most popular was exposure to new ideas (n=64; 57%). Aside from cultural/idea diversity, the largest differences of perceived value were for technical skill refinement (such as how to upload media) and language use or articulation, and for both uses, college students (29% and 31% as compared to 13% and 14%) were more likely to identify these as uses.

Table 1.
Self-Report of Social Media Use

Characteristic	Secondary Students n=84	Postsecondary Students n=113
Social Media Site Use		
Biznik	4 (5%)	17 (15%)
Blogger	23 (27)	36 (32)
Dig	1 (1)	1 (1)
Facebook	80 (95)	112 (99)
Flickr	61 (73)	89 (79)
Linkedin	15 (18)	86 (76)
MySpace	44 (52)	24 (21)
Pintrest	52 (62)	71 (63)
Twitter	58 (69)	69 (61)
Virb	26 (31)	68 (60)
Frequency of Use		
More than once per day	62 (74)	92 (81)
Once per day	6 (7)	12 (11)
4-5 times per week	11 (13)	6 (5)
Once per week	3 (3)	3 (2)
Every other week	1 (1)	0
Monthly	1 (1)	0
Less than once/month	0	0
Primary Category/Intention of Use		
Friendship	75 (89)	57 (50)
Family	6 (7)	42 (37)
Religion	2 (2)	0
School/education	1 (1)	8 (7)
Career development	0	6 (5)
Perceived academic value of use		
Exposure to new ideas	47 (56)	64 (57)
Team building	22 (26)	37 (33)
New information	39 (46)	44 (39)
Information verification	30 (36)	46 (41)
Cultural/idea diversity	53 (63)	39 (34)
Debate/defend ideas	19 (23)	58 (51)
Technical skill refinement	11 (13)	33 (29)
Language use (articulation)	12 (14)	35 (31)

Table 2.
Mean Score of Social Technology Use

Technology Use	Secondary Students n=84	Postsecondary Students n=113
<i>I use social media for school work to...</i>		
Study	2.89	3.14
help with coursework	2.94	3.02
stay connected with teachers	3.67	3.57
ask for help	3.45	3.61
do research for school	3.84	3.57
teach me what I didn't learn in class	3.90	3.75
learn more about an assignment	3.81	3.74
present class information in a different way	3.63	3.52
help with memorization	3.92	3.44
relieve stress	3.99	3.87
<i>I believe social media use helps me ...</i>		
Academically	4.29	3.99
prepare for college	4.16	--
be successful in college	--	3.94
prepare for life after graduation	4.30	3.88
keep friends	4.51	4.00
in my future career	4.62	4.01
study better	4.37	3.86
be more creative	4.00	3.72
understand myself better	3.98	3.40
be informed of the world around me	4.10	3.98
appreciate diversity	4.11	3.76
understand differences	4.00	3.62
manage my time	3.88	3.76
be accountable to others	4.24	3.90
engage in the community	4.50	3.77

The survey contained two additional sections, including the prompt “I use social media for school work to...” and “I believe social media use helps me...” Of the ten items listed on the survey about how social media is used for academic or school work, as shown in Table 2,

secondary school students rated seven items higher than the college students, although a one-way ANOVA revealed that none of these mean ratings were significant at the .05 level ($f=1.68$). The high school students had the highest mean rating, on a 1-to-5 progressive Likert-type scale (1=rarely use progressing to 5=always use), with using social media to relieve stress (mean 3.99), followed by helping with memorization (mean 3.92), and teaching what was not learned in class (mean 3.90). College students had a similar pattern of mean ratings, with the highest mean reported for relieving stress (mean 3.87), teaching what was not learned in class (mean 3.75), and learning more about assignments (3.74).

For how social media helps students with their academic work, every item that was rated on a 1-to-5 scale (1=*Very Little* progressing to 5=*Very Much*) by both high school and college students was rated higher by high school students. Of the 15 items, one related just to high school students, "I believe social media use helps prepare me for college" (students had a mean of 4.16 on this item), and one related just to college students "I believe social media use help me be successful in college" (mean 3.94). An ANOVA between the items (at the .05 level, $f=1.72$) indicated that 9 of the 12 were significantly different (higher) for the high school students.

High school students saw the greatest academic value of social media as generally with their future careers (mean 4.62), keeping friends (mean 4.51), and engaging in the community (mean 4.50). Two of these academic values of social media were the same for college students (future career 4.01 and keeping friends 4.00), and the third highest mean value was for the general statement that "I believe social media helps me academically" (mean 3.99).

Discussion and Conclusions

Study findings revealed a trend of secondary students appreciating and believing that social media is important to helping them learn, but that by early in the college experience, this belief or perception becomes much more tempered and that social media is less helpful to them. Perhaps the belief that social media is less helpful academically stems from the limited use of social media for classroom interaction. Also, the types of social media being used on college campus may not coincide with the types or preference of social media favored by new, incoming students. And, new college students might simply just need to develop a greater sense of appreciation of how and why social media can enhance the learning environment versus primarily broadening a social foundation.

Based on the study findings, there are several recommendations that can be made for educational leaders. First and foremost, leaders need to get into social media, try it, experiment with it, and develop a personal understanding of what social media does, can do, and is doing to students. By creating accounts and working through what it means to create an online presence, administrators can at the very least begin to understand how social media can be addictive and can frame a basic vocabulary around social media sites. Second, administrators need to get their teachers and faculty members to experiment with social media. This conversation must include recognition of personal and professional boundaries, but can also include alternative and creative ways to keep students informed of class projects, assignments, and due dates. Administrators must, however, educate and coach their teachers and faculty about how boundaries are important and how to separate personal space and information from the professional roles of teaching and communicating with students. A

specific expansion of this concept would be mandated policy and procedure on the ethical use of social media. Obviously, social media has the ability to be a powerful tool, but that persuasion can be positive and/or negative in its effect. Thus, an entry level social media course or seminar could help to address this recommendation of using social media in a responsible, ethical, and positive manner.

Administrators may also need to offer social media workshops for faculty and students alike. Faculty may be reluctant to use social media as a viable learning tool because they feel non-proficient in technology use. Students may also suffer the same feelings of inadequacy because they are not familiar with a specific type of social media. Both parties would benefit from fundamental instruction in how and why to use various types of social media.

Third, in addition to looking for ways to integrate social media into the classroom, both college advisors and high school teachers need to explore ways to teach about how social media impacts an individual and how it can and should be used. Business education classes and career centers can focus the application of social media as resume building and looking for jobs, and some social media sites can be used to help understand individual differences and students finding their personal interests. Teachers can also find a way to help students with time management, focusing on the frequency of use, for example, as a priority setting. And fourth, while social media has been highlighted as a venue for cyber bullying, there is the possibility that an aggressive, highly visible integration of school into social media could help to build a stronger sense of community. Social media are not going to disappear, as the frequency and breadth of use suggest that these media are highly integrated into students' lives, and institutions, driven by their leaders, must find a way to make them relevant and encouraging of learning and student development.

Social media is here to stay. As such, it needs to be embraced by educational administrators. This acceptance should then parlay itself into marketing the inherent educational values of social media to teachers, instructors, staff, and students. The technology has the potential to be a valuable learning asset and powerful learning tool, but users must understand the proper ways (the hows and whys) via which to use social media in a positive ethical fashion.

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