Student Perspectives of Social Networking use in Higher Education

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Abstract: Social networks are currently at the forefront of tools that lend to Personal Learning Environments (PLEs). This study aimed to observe how students perceived PLEs, what they believed were the integral components of social presence when using Facebook as part of a PLE, and to describe student's preferences for types of interactions when using Facebook as part of their PLE. This study used mixed methods to analyze the perceptions of graduate and undergraduate students on the use of social networks, more specifically Facebook as a learning tool. Fifty surveys were returned representing a 65 % response rate. Survey questions included both closed and open-ended questions. Findings suggested that even though students rated themselves relatively well in having requisite technology skills, and 94 % of students used Facebook primarily for social use, they were hesitant to migrate these skills to academic use because of concerns of privacy, believing that other platforms could fulfil the same purpose, and by not seeing the validity to use Facebook in establishing social presence. What lies at odds with these beliefs is that when asked to identify strategies in Facebook that enabled social presence to occur in academic work, the majority of students identified strategies in five categories that lead to social presence establishment on Facebook during their coursework.

Keywords: Social, networks, higher, education, personal, learning, environments, Facebook

1 Background and Literature Review

Technologies are present in the in-class and out-of-class experiences of students more than they have ever been before (Public Broadcasting System, 2013). In the fall of 2008, the National Center for Educational Statistics (NCES), in the Institute of Education Sciences, conducted a survey. Questionnaires were mailed to 2.005 public schools in the 50 states and the District of Columbia; a response rate of 79 % was returned. "The survey weights were adjusted for questionnaire nonresponse and the data were then weighted to yield national estimates that represent all regular public elementary and secondary schools in the United States" (National Center for Educational Statistics, 2010, p. 2). At this point in time, the NCES found that the ratio of students to handheld devices in schools was one device (which included Palm OS, Windows CE, Pocket PC, BlackBerry) per 21 students nationally, whereas the number of mobile laptops (for distribution without a fixed location) were found to be one device per 14 students nationally (National Center for Educational Statistics, 2010). In the past five years schools have been looking at one-to-one computer initiatives, where schools loan equipment to students for a semester, year, or more or a "bring your own device" initiative where it is hoped that the majority of students will bring in their own purchased, leased, or loaned equipment whether it be a laptop, tablet, or handheld device. In 2013 the Public Broadcasting System's (PBS) LearningMedia division published national survey results of 503 teachers, finding that:

> A growing number of educators have access to and are adopting new technologies and platforms to support instruction. Ninety percent of teachers surveyed have access to at least one PC or laptop for their classrooms, and six in 10 teachers (59 %) have access to an interactive whiteboard. Tablets and e-readers saw the biggest increase among technology platforms available for classroom instruction. More than one-third (35 %) of teachers said they have access to a tablet or e-reader in their classroom, up from 20 % a year ago. Among teachers with access to tablets, 71 % cite the use of educational applications as the most beneficial for teaching, followed by educational websites (64 %) and educational e-books/textbooks (60 %). (Public Broadcasting System, 2013, para 5)

When asked about the use of handheld devices, including cell phones and smart phones, 36 % of teachers surveyed, responded that they were available in the classroom (Public Broadcasting System, 2013).

There have been two camps of thought on cell phone use in schools; turn it off or turn it in or use it for educational means when directed to do so (Prensky, 2008). The reality of what actually happens in schools on a daily basis may be a little more nebulous. Charles (2012) performed a qualitative study composed of classroom observations and interviews with high school youth and teachers on the use of technological devices in schools and concluded that "schools and teachers set rules and protocols that define appropriate behaviors with social digital tools and discourses. Nevertheless, students and teachers frequently negotiate the boundaries through relationships founded on trust and respect" (p. 15).

When it comes to the use of technology for social networking there are other substantial barriers that schools need to contend with. The press has been particularly adept at discussing the use of social networks in schools as synonymous with cyberbullying (Topping, Coyne, 2013), athletes losing National Collegiate Athletic Association (NCAA) eligibility (Federico, 2013), and teachers having inappropriate communications and interactions with students via social networks (Matthews, 2012). As such, districts, and at times states, have created policy and laws to persuade disuse of social networking in K-12 schools. For instance, Varlas (2011) observed that:

> Schools and districts are getting noticed for what they don't allow. Two common practices – blocking sites and restricting teacher-student social media contact – have made headlines lately. For example, Missouri's Senate Bill 54 (or the Amy Hestir Student Protection Act, named for a student who was repeatedly victimized by a teacher on social media) prohibits direct social media contact between teachers and students, unless it's deemed appropriate, education-related contact in a public setting. S.B. 54 takes the common "no 'friending'" policy a step further by applying it to both current and former students, indefinitely. (para 16)

It is expected that these safety and privacy related tensions will remain in K-12 education, with the only real possibility for remedy lying with centralized district monitoring and through closed or dedicated social networks.

Higher education, on the other hand, allows for more freedoms in terms of teacher-student interactions, including communications via social networks, since most of the students are legally adults (over 18 years of age in the USA).

What is perhaps more interesting is that the demographic of social network user is getting older, so the use of social networks by students across the age spectrum is more congruent than previously thought. Breener and Smith (2013) reported on their study sponsored by the Pew Research Center's Internet & American Life Project that online adult's social networking use has grown substantially since 2005. It was reported that currently 72 % of adults use social networking sites. Further, they noted that:

> Although younger adults continue to be the most likely social media users, one of the more striking stories about the social networking population has been the growth among older internet users in recent years. Those ages 65 and older have roughly tripled their presence on social networking sites in the last four years – from 13 % in the spring of 2009 to 43 % now. (para 1)

But then how are these users using social networks in higher education? The concept of social presence in online learning may hold the first clue.

Social presence by any means is not a new idea. In fact, we as human beings have been referred to as social animals. Aristotle's (350 B.C.E.) Politics observed that, "A social instinct is implanted in all men by nature" (para 14). It would not be too far of a stretch to think that since we seek out social interaction in everyday life that we want to do the same thing while learning. Social learning theory has a long and entrenched place in education. In the 1970s theories from social psychology and developmental theory came forth with the idea is that students can learn from each other while developing. Bandura (1977) noted that children could learn from observation and modelling behaviours from others. Further, Vygotsky (1978) coined the term Zone of Proximal Development, which explained that a child would be able to accomplish a task independently in the future if he/she receives assistance performing it in the present. If we take this base premise as valid, which has been illustrated through research since that time and bring it to the current discussion we are left with the question of how then do students learn from each other, and how does that mix with online social presence?

In online interactions, social presence is defined as "'a sense of being with another' in the virtual environment" (Biocca et al., 2003, p. 460). Thus, social presence "acts to 'humanise' the experience of online learning" (Kehrwald, 2010, p. 48). Tu and McIsaac (2002) theorized that there were three dimensions of social presence; social context, online communication, and interactivity. They proposed that these three components were integral to create a sense of

community among online learners. They further observed that, "an increase in the level of online interaction occurs with an improved level of social presence" (p. 131). Jeremić, Milikić, Jovanović, Brković and Radulović (2012) took the notion further by discussing the interaction social presence has with the adaptability of Personal Learning Environments (PLEs):

> The notion of PLE assumes personal selection and aggregation of different, often web-based tools and services into a learning environment customized to the needs and preferences of an individual learner. In a PLE, learning activities are not confined within the "walls" of one system/tool, thus enabling learners to make use of a wide diversity of digital resources (content, tools, and services) available on the Web (p. 28).

Abreu-Ellis et al. (2013) observed similar findings when using Computer Mediated Communication (CMC) for language acquisition in that "participants noted that they tended to migrate to communication technologies they believed that their peers would frequently use or check; for instance using Facebook for urgent communications when they needed to reach their teletandem partner rather than e-mail (for fear their partner would not check for messages in a timely manner)" (p. 366).

Jeremić, Milikić, Jovanović, Brković and Radulović (2012) further clarified the relationship between PLE's and online or social presence in that:

In a PLE, the notion of global online presence, i.e., student's online presence expressed on different tools integrated into his/her PLE, could be especially important. By giving students insights into their class-mates' activities, availability for chat, information about work overload, emotional state, likes and dislikes, and all of that regardless of the particular tool they are using in the given moment, students' global online presence can provide those missing nonverbal cues typical for face-to-face interaction. This further increases students' awareness of each other and positively affects their willingness to collaborate (p. 28).

This study sought to observe how students perceived PLEs, what they believed were the integral components of social presence when using Facebook as part of a PLE, and to describe student's preferences for types of interactions when using Facebook as part of their PLE.

2 Methodology

This study used mixed methods to analyse the perceptions of graduate and undergraduate students on the use of social media, more specifically Facebook, as a learning tool. Participants selected to participate in this study were students who had been required to join a closed Facebook group managed by the researchers in their respective classes. This does not however, screen out the fact that participants may have reflected on their use of social networks or Facebook used outside of those classes under the direction of other professors. An online survey was developed and an introduction letter with the survey link was sent by e-mail to 77 undergraduate and graduate students who were enrolled, at a four-year private university located in central Ohio. Researchers used the university Learning Management System (LMS) to contact current and previous students and to request their participation in the study. Fifty surveys were returned representing a 65 % response rate. Survey questions included both closed and open-ended questions.

Survey data was analyzed in terms of frequencies and correlations. Additionally, a content analysis of narrative responses was performed in order to identify recurring themes. Patton (2002) noted, "content analysis is used to refer to any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings" (p. 453).

3 Results

For the undergraduate participants who returned the survey, six (12 %) were sophomores, fifteen (30 %) juniors, and eleven (22 %) seniors. A total of nine (18 %) M.Ed. students answered the survey and nine (18 %) were M.Ed. students who had already graduated by the time of the survey. In terms of gender, forty-two (84 %) participants were female and eight (16 %) were male.

Participants were asked to rate their technology skills on a Likert-type scale from poor to expert. Three (6 %) participants considered themselves as slightly better than poor, 13 (26 %) as average, 30 (60 %) as less than expert, and four (8 %) as expert in technology use. When asked how often they used Facebook, participants rated themselves on frequency of use on a Likert-type scale from never to several times a day. Two (4 %) participants identified that they never used Facebook. Four (8 %) identified using it rarely, 11 (22 %) identified using Facebook sometimes, 13 (26 %) identified using Facebook often, and 20 (40 %) identified using Facebook several times a day. Forty-seven (94 %)

noted that they used Facebook most often for social use while three (6 %) used it primarily for academic use.

Participants were asked to indicate on a Likert-type scale how often they used social networks as a learning tool during their undergraduate and graduate programs. Two participants indicated that they never used social networks as a learning tool. Seven-teen (34 %) participants indicated that they rarely used social networks. Sixteen (32 %) participants indicated sometimes using social networks. Twelve (24 %) participants indicated using social networks often as a learning tool and three (6 %) indicated using social networks very frequently in this capacity.

Participants were asked to indicate how often they were required to create video postings for class on Facebook on a Likert-type scale (from never to very frequently). Six (12 %) participants indicated they had never been required to do so. Twenty-five (50 %) indicated that they had rarely been required to create a video posting on Facebook for class. Twelve (24 %) students indicated that they had been required to do video postings on Facebook sometimes. Seven (14 %) noted that they had been often required to create video postings while no participates noted that they were required to post video postings frequently on Facebook for classes.

When asked how they found the experience of creating video postings on Facebook for class, they indicated their responses on a Likert-type scale (from very difficult to very easy). Two (4 %) of the participants indicated that the process was very difficult. Four (8 %) indicated that the process was difficult. Thirteen (26 %) of the participants were neutral about the process, finding it neither difficult nor easy. Fourteen (28 %) of the participants found the process of creating video postings easy and 16 (32 %) of the participants found the task very easy.

When asked about how they felt about their privacy when using Facebook as an educational tool, participants indicated their responses using a Likert-type scale (from felt that privacy was compromised to felt that privacy was protected). Three (6 %) of participants felt that their privacy was compromised. Eight (16 %) of the participants noted that they felt that their privacy had been somewhat compromised. Sixteen (32 %) of participants noted a neutral response in which they felt their privacy neither compromised nor protected. Fourteen (28 %) of the participants felt that their privacy was somewhat protected, while ten (20 %) of the participants felt that their privacy was protected.

When asked what was the most important aspect educationally to using Facebook, participants were provided with the following choices; text-based communications, video-based sharing activities, and prefer to not use Facebook

educationally. Fourteen (28 %) of the participants indicated that they believed that text-based communication were the most important quality. Twenty-five (50 %) of the participants indicated that video based sharing activities were the most important quality of using Facebook educationally. Eleven (22 %) of the participants indicated that they preferred not to use Facebook educationally.

If participants noted that they preferred not to use Facebook educationally, they were asked to provide narrative data regarding that choice. Overarching themes were formed from the narrative data provided by the participants in this study. Several participants noted that they felt that there were better alternatives to using Facebook such as the university's Learning Management System (LMS) or other providers that are limited more directly for academic use. This also overlaps with the notion of having to manage multiple education portals rather than a one-stop-shop for all course requirements. A participant noted that, "I prefer not to use Facebook educationally because many of the assignments such a video posts or discussions that are being done through Facebook can be done through Angel [LMS] where it is more private and less chaotic." This theme was further observed in a participant noting:

> I think that the abilities that Facebook gives academically can be outdone by other academic sites. To my knowledge, there isn't anything that Facebook has above other academic sites other than its popularity as a social media site. There are other learning portals that allow blogs, threads, and posts and I prefer to keep my social life separate from my academic life. While using Facebook was easy to do it was also another site that I had to remember to check. Since we use Angel for class as well I think it would be easier to keep track of if it was all on one site. I am not on Facebook all of the time, if I were then it would be easier. I think the way we used it was effective and beneficial it was just another source to keep track of.

This also alluded to participants wanting to compartmentalize their academic lives from their non-academic lives; "I try and keep my personal life VERY separate from my educational and professional life."

Participants also noted concern about privacy risks, equating a larger social presence on Facebook being synonymous with less security and posing a privacy risk:

Facebook is about the sharing of personal information and can be pub-
licly searched. Having a large social presence is a potential security
risk. While social interaction is a part of the classroom experience, it is
not the main goal. The people I interact with on Facebook are already
my friends, I do not use it to make new ones.

Furthermore, some participants felt that using social media educationally was
incongruent with current school policy and practices (since participants were
in teacher-education programs in this study):

We are not permitted to use Facebook educationally in my district, and
although I made a request to use Twitter as a tool for parent communi-
cation, it was denied. I believe that this is due to misuse [by students
and staff during personal time], and an inappropriate situation between
a teacher and students last year. We have been told that we should not
use social media, and to be aware that our personal accounts are mo-
nitored.

When asked about using Facebook for education and establishing social pres-
ence online, participants indicated their responses on a Likert-type scale (from
very poor to very good). Four (8 %) participants noted that a very poor social
presence was established by using Facebook. Four (8 %) participants noted
that a poor social presence was established by using Facebook. Twenty-four
(48 %) participants noted that a social presence was neither poor nor good
when using Facebook. Eleven (22 %) participants noted that a good social pres-
ence was established by using Facebook. Seven (14 %) participants noted that
a very good social presence was established by using Facebook.

Participants were provided with a list of strategies and were asked to check
all that applied which they identified as helping to establish social presence
when using Facebook as a learning tool. Strategies included; *"liking" other
students' posts; commenting on other students' posts; "liking" professors'
posts; commenting on professors' posts; posting your work for people to see;
professors "liking" your work; professors commenting on your work; reading
comments on other students' work; watching video posts from classmates; and
watching video posts from professors.* Participants were provided with the
opportunity of adding additional strategies; however, no additional strategies
were listed.

Twenty-eight (56 %) of the participants noted that social presence was
established by *"Liking" other students' posts*. Nineteen (38 %) of the partici-

pants noted that social presence was established by *"Liking" professors' posts*. Twenty (40 %) of the participants noted that social presence was established by *commenting on professors' posts*. Twenty-seven (54 %) of the participants noted that social presence was established by *posting your work for people to see*. Twenty-three (46 %) of the participants noted that social presence was established by *professors "liking" your work*. Twenty-seven (54 %) of the participants noted that social presence was established by *professors commenting on your work*. Twenty-three (46 %) of the participants noted that social presence was established by *reading comments on other students' work*. Thirty-four (68 %) of the participants noted that social presence was established by *watching video posts from classmates*. Twenty-nine (58 %) of the participants noted that social presence was established by *watching video posts from professors*.

4   Discussion

The majority of students described themselves as having average to less-than expert technology skills and most students disclosed that they used Facebook often, to several times a day. This is not a surprising outcome as the landscape of education has change greatly. Prensky (2010) observed that children come to K-12 schooling as digital natives and to meet these students on common ground "technology is becoming an important part in students' education. But just how to use it in school is not yet, completely clear, and most educators are at some stage of figuring out … how to use technology meaningfully for teaching" (p. 3).

To define how students use Facebook, participants were asked to describe whether they most often used the social network for social versus academic use. Overwhelmingly, Facebook was described as used for social interaction, with 94 % of participants using the social network in this manner. This could be influenced by the fact that social networks are still underutilized for academic purposes in higher education. Sánchez, Cortijo, and Javed (2014) noted "Facebook is the most popular Social Network Site (SNS) among college students. Despite the popularity and extensive use of Facebook by students, its use has not made significant inroads into classroom usage" (p. 138). In this study only 6 % of the participants identified using social networks very frequently for academic purposes.

It does not appear that lack of requisite technology skills in using social networks for academic use seems to be an issue for students themselves. This came to light when asked several questions on the survey. When asked how

often they were required to produce and post videos on Facebook for academic work, 50 % of participants noted rarely being required to perform such a task, but since this group was purposely sampled and had all been required to perform such a task at least once previous to taking the survey they were asked to rate the difficulty in producing and posting video on Facebook. Sixty percent of the participants found the task of creating and posting video to Facebook easy to very easy. This evidence supports the claim of student-expertise in technology skills, what seems to be lacking is the skill to be required of them in higher education settings and their comfort or motivation in using social networks as a platform for learning.

There was a spectrum of beliefs about the privacy of using social networks toward learning outcomes. Only 48 % of the participants believed that their privacy was protected in some manner by using Facebook. It is important to note that for the purpose of this study, closed Facebook groups were used in which only members of the group could see each other's posts and the professors moderated who were accepted into the groups. 32 % of participants felt their privacy was neither compromised nor protected by using Facebook. To clarify the issue of privacy, narrative data was collected. When asked if they had responded that they would prefer not to use Facebook educationally, participants noted that:

- Social presence on social networks poses a potential security risk because personal information can be publicly searched
- Since school policy and practices afford little space for social media and social networks, teacher education programs in higher education should mirror these practices
- Direction is given by K-12 school administration not to use social media and teachers are informed that accounts are monitored accordingly.

These summative points reflect the thematic beliefs of 44 % of the participants regarding privacy and security issues in utilizing social networks for educational purposes.

To focus on social presence and interaction modality, participants were asked their preference in using text-based or video-based sharing activities. 28 % preferred text-based interaction whereas 50 % preferred video-based sharing activities. This alludes to the need of flexibility when planning for PLEs in general as there seems to be distinct preferences regarding modalities of interaction.

Perhaps the most interesting finding of this study was in asking participants to rate Facebook in the establishment of social presence online. 36 % of participants rated Facebook as good to very good in establishing social presence online. 48 % of participants indicated that they felt that Facebook neither established good nor poor social presence; in essence they could not identify social presence while using Facebook educationally, having been given a definition of social presence online. What is interesting is that when asked what lead to social presence on Facebook, given a list of action items, the majority of participants identified strategies in five categories that lead to social presence establishment on Facebook during their coursework; social presence was established by *"liking" other students' posts*; social presence was established by *posting your work for others to see*; social presence was established by *professors commenting on your work*; social presence was established by *watching video posts from classmates*; and social presence was established by *watching video posts from professors*. Notably, there is a mix of the validity of modalities from simple action as "liking" to text commentary and video postings. What is of interest is that even though students were not able to identify social presence in using Facebook educationally in general, having been given a definition of social presence online, participants still validated several actions as contributing to the establishment of social presence on Facebook when using it educationally.

The question then returns to how students view Personal Learning Environments in regards to using social networks. Although using Facebook as a PLE was a forced issue for students in the fact that they did not have a choice in utilizing the social network or choosing another viable means to showing their work, they were not given direction on how to interact with their peers once they had posted their work. This did provide a framework for the "aggregation of different, often web-based tools and services into a learning environment customized to the needs and preferences of an individual learner" (Jeremić, Milikić, Jovanović, Brković, Radulović, 2012, p.28) in the fact that they chose how to provide feedback to one another in terms of simply "liking," posting commentary, or follow up videos. This allowed students to engage socially by providing space:

Regardless of the particular tool they are using in the given moment, students' global online presence can provide those missing nonverbal cues typical for face-to-face interaction. This further increases students' awareness of each other and positively affects their willingness to collaborate (p. 28).

The tension seemed to arise around taking, what students interpret as a tool for recreational or personal uses and repackage it toward teaching and learning

and their beliefs about the privacy of using Facebook groups, even if they are closed groups.

5 Conclusion

What is built here is a characterization of the profile of college student use and beliefs about using social networks as a learning and teaching tool in higher education. Even though students rated themselves relatively well in having requisite technology skills and 94 % of students used Facebook primarily for social use, they were hesitant to migrate these skills to academic use because of concerns of privacy, believing that other platforms could fulfil the same purpose, and by not seeing the validity to use Facebook in establishing social presence. What lies at odds with these beliefs is that when asked to identify strategies in Facebook that enabled social presence to occur in academic work, the majority of students identified strategies in five categories that lead to social presence establishment on Facebook during their coursework.

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Biographies

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