

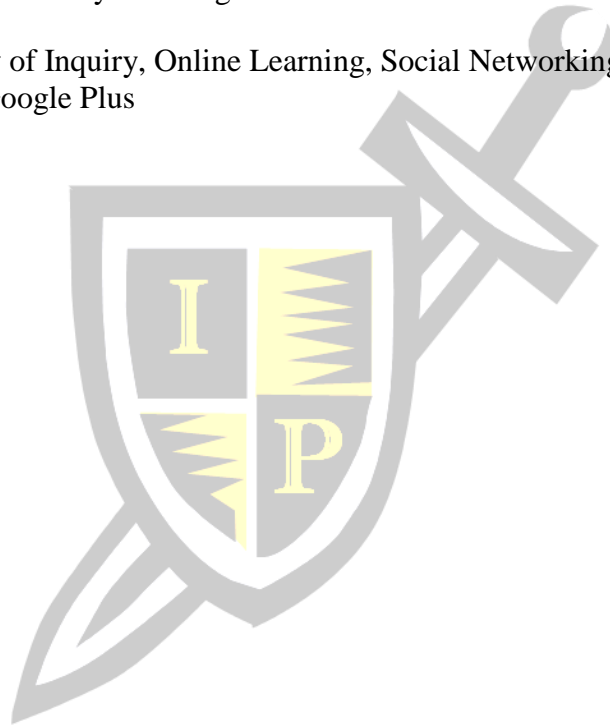
## **Supporting online management education with Facebook and Google Plus**

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### **ABSTRACT**

Social networking sites such as Facebook and Google Plus expands the opportunities for faculty-student interaction in online learning environments. The Community of Inquiry (CoI) framework consisting of three interrelated elements - social, cognitive, and teaching presence - provides a framework to visualize this interaction. Three online management courses using social networking sites are analyzed using the CoI for evidence of teaching presence.

Keywords: Community of Inquiry, Online Learning, Social Networking Sites, Management Education, Facebook, Google Plus



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## INTRODUCTION

The symbiotic relationship between mobile computing and wireless communication technologies allow for learning opportunities on multiple devices such as laptops, tablet PCs, and smartphones (Alexander, 2004a; Alexander, 2004b; Brink, 2011; Caudill, 2007; Park, 2011; Singh, 2010; Wagner, 2005). This connectivity allows for learning to “happen anywhere, whether in the formal classroom or the coffee shop: it should not be bound by time limits; and it must always yield measurable learning outcomes” (Gautsch & Griffy-Brown, 2010, p. 32). Web 2.0 technologies such as social networking sites (SNS) (e.g., Facebook and Google+) may serve as the connectivity to change the faculty-student interaction from merely posting faculty email addresses in a course syllabus to “developing a reciprocity and cooperation among students, and encouraging active learning” (Joosten, 2012, p. 3). While students may prefer social media over email communications, they are still skeptical of the value of SNS in an academic context (Crews & Smith, 2011; Joosten, 2012; Meishar-Tal, Kurtz, & Pieterse, 2012). Faculty must assess the educational value of using SNS within their course design.

Facebook (FB) provides several ways for encouraging communication. When an individual opens a FB account they create an individual profile, post content on their Wall (or Timeline), and share their Timeline content with their “Friends”. FB Pages, on the other hand, are profiles for organizations or businesses created by an individual FB member and visible to everyone on the Internet (Awl, 2009; Pineda, 2010, “How are Pages”, n.d.). FB Pages are advantageous because there is no approval of “Friends”, an individual FB account holder is automatically approved as a fan of the Page with a click of the “Like” button (Awl, 2009; Pineda, 2010; “How are Pages”, n.d.). Additionally, Pages are advantageous because they send updates to unlimited number of fans (Awl, 2009; Pineda, 2010; “How are Pages”, n.d.). An instructor could use FB Pages “to post course announcements, news, updates, and information” (Joosten, 2012, p. 40). Similarly, FB Groups are designed for small groups of individuals with common interests (Awl, 2009; Pineda, 2010; “How are Pages”, n.d.). FB Groups do not require group members to be “Friends” (Meishar-Tal et al., 2012). According to Awl (2009) FB Groups may consist of three types - open, closed or secret). Open groups are available to everyone on FB to see and join (Awl, 2009). Closed groups are visible to FB members, but are exclusive and require either an invitation or approval to join (Awl, 2009; Pineda, 2010). Secret groups are not visible to FB members and are by invitation only (Awl, 2009). The Group Timeline becomes the location for group members to receive and interact with Group content.

Google’s response to FB’s social media is a product called Google Plus (+). Individuals with a Google account have access to the Google+ social networking application (Anderson & Sill, 2011; Brogan, 2012; Lytle, 2013b; “UW Google Apps”, n.d.). Individuals post their individual profiles, post content on their Stream (i.e., News feed), and share their Stream with others through Circles or Communities (Anderson & Sill, 2011; “UW Google Apps”, n.d.). Circles are a way to organize friends and colleagues into groups for sharing information relevant for that specific group of individuals (Anderson & Sill, 2011; Brogan, 2012; “Find people”, n. d.; Heatley & Lattimer, 2013). Google + Communities, on the other hand, allows groups a place to “communicate, post, and share files within a group” (Haebig & Lawrence, 2013-14, 26). These communities may be public or private (“Create”, n.d.; Lytle, 2013a). Unlike FB, Google+ offers a video conferencing tool called Hangouts which allows “users to simultaneously collaborate on Google Docs, view YouTube video, and use screen share and other apps” (Haebig & Lawrence, 2013-104, p. 27). While Hangouts are limited to 10 individuals simultaneously per session, the

feature does allow for the video to be archived on YouTube (“About Hangout”, n.d.; Haebig & Lawrence, 2012-2014).

Incorporating SNS into an online course design creates challenges for college faculty. Specifically, faculty need a pedagogical model that focuses on the spatial and temporal challenges of online learning and the skills necessary for creating a collaborative learning environment (Garrison, 2011; Paloff & Pratt, 2007). This paper describes the application of Facebook and Google+ in management education at a Northeastern regional comprehensive university using the community of inquiry (CoI) model. Specifically this paper describes the use of FB Pages in an undergraduate management course, FB Groups in a graduate management course, and Google+ Communities in an undergraduate management course.

## COMMUNITY OF INQUIRY

The CoI model incorporates social presence, cognitive presence, and teaching presence to describe the educational experience (Garrison, 2011; Garrison, Anderson, & Archer, 2000). Garrison et al.’s (2000) original study was based on a text-based environment of computer-mediated communications and computer conferencing. Garrison’s (2011) current iteration of the CoI model characterizes social presence as open, interpersonal, and cohesive communications (p. 25). Cognitive presence focuses on “intent, process, and learning outcomes” (Garrison, 2011, p. 24). Finally, teaching presence is the combination of instructional design, facilitation, and direct instruction of the social and cognitive processes to achieve learning outcomes (Garrison, 2011).

Much of the early research on the CoI framework focused on archival postings of threaded discussion boards. This led many researchers to adopt a qualitative methodology (Ajayi, 2010, Lightfoot, 2005, Garrison et al., 2000; Weisskirch & Milburn, 2003). This qualitative methodology had limited sample sizes and single institutions which inhibited the ability to generalize and to explore the interrelationship presence with other variables (i.e., satisfaction, learning outcomes) (Arbaugh, 2008; Arbaugh et al., 2008). A quantitative methodology using a valid survey instrument was needed to overcome these barriers.

Garrison, Cleveland-Innes, and Fung (2004) provided an early quantitative approach to examine the CoI elements with other variables such as role adjustment of online students compared to face-to-face (F2F) learning environments. They believed that online learners have the additional learning roles of possessing the skills to use technology, managing communications from peers and instructors, developing a self directed learning perspective, and developing an anytime, anywhere learning mindset. Using factor analysis, their 28 question instrument validated the CoI structure.

Arbaugh et al. (2008) developed a valid CoI instrument using a multi-institutional sample. Their 34 question CoI survey was administered to nearly 300 graduate students at 4 institutions across the United States and Canada. Factor analysis supported the CoI instrument for all three elements of the CoI model. Akyol, Garrison, and Ozden (2009) used this validated instrument combined with student interviews and an analysis of 1000 discussion board postings from 60 students in online and blended courses. Akyol et al. (2009) found the course design allowed for the successful development of each CoI element.

Shea, Hayes, and Vickers (2010) focused their research on the teaching presence component of the CoI model. They surmised that the teaching presence research was narrowly focused on discussion boards and not the entire course design. Their study examined the content

of the two upper-level online management courses including class discussion board,s small-group discussion boards, individual student/faculty communications, and assignment instructions. They concluded that teaching presence occurred throughout the entire course not just threaded discussions.

## **SOCIAL NETWORKING SITES**

Mendez, Le, and De La Cruz's (2014) case study outlined potential problems with using Facebook in the classroom. The specific case described problems associated with using an optional FB Groups page for course discussions. Students not joining the course FB Group were given alternative assignments. One student appealed their "D" grade on the basis that "the Facebook group webpage may have provided others with pedagogical insight that could have helped her throughout the course" (p. 6). The other student participated in the FB Group discussions but "made some outrage comments on the class Facebook webpage" (p. 6) and similar comments on personal Facebook page (p. 6). Another student complained to the professor about the comments, but the professor took no action concerning the outrageous comments. The student making the outrageous comments received a 'C' in the course and appealed the grade on the basis that the professor "discriminated against him in class, given his comments on a non-university sanctioned webpage" (p. 6). As the authors conclude the use of SNS may complicate the grade appeal process of an institution but it also raises questions about academic freedom of faculty.

Meishar-Tal, Kurtz, and Pieterse (2012) studied the use of FB Groups as an alternative learning management system (LMS). Their case study focused on a 13-week face-to-face (F2F) graduate education course with 50 students. Students were required to join the FB Group which consisted of course presentations, performance tasks, and communications between student and instructor through postings on the Group wall (Meishar-Tal, et al., 2012). Students were asked to post their reflections of the course by using Google Docs Form which were analyzed by the researchers. While some students viewed FB as a place to socialize and not for education, the researchers reported 86% of the students would recommend FB for other courses. Specifically, students felt encouraged to participate in the FB activities even if the participation was to "Like" a particular posting.

## **APPLICATION**

The current study examines the use of SNS in online management education using Garrison's (2011) framework. Specifically, this study focuses on this author's use of Facebook and Google+ in undergraduate and graduate management courses at a Northeastern regional comprehensive university. All course content was delivered through the university's Desire2Learn (D2L) course management system with the SNS for each course as an optional communication channel.

### **FB Page**

The author created a FB Page for a 5-week online undergraduate elective course in the university's Bachelor of Science in Business Administration (BSBA) degree. The FB Page was announced as an optional communication channel in the course syllabus and the course D2L

News (Figure 1). Fourteen of the 27 students enrolled in the class “Liked” the course FB Page. The author posted 70 entries to the course FB Page with each entry containing a “Like” and “Comment” area. Five of the 70 entries were direct instruction using embedded instructor videos, an article on how to improve presentations, and an article about a course topic, the Patient Protection and Affordable Care Act. The remaining postings focused on the course design and organization. For example, three of these 65 postings embedded Google Documents containing information about course calendar and grading criteria revisions. An additional 10 postings discussed information about the Group Project. The remaining postings were general course announcements covering a range of topics such as quiz and exam date reminders. No student during the semester, liked or commented on a course entry.

### **FB Group**

The author created a closed FB Group for an online 12-week graduate elective course in university’s Master of Business Administration (MBA) degree. Similar to the FB Page application, the FB Group was announced as an optional communication channel and in the course syllabus and the D2L News feature. Nine of the 16 students enrolled in the course joined the FB Group. During the semester 67 total entries were posted on the FB Group primarily by the instructor (n=62). Nearly a third of all faculty postings involved direct instruction using embedded video clips, an article on presentation skills, and articles of numerous course topics (i.e., telcommuting, minimum wage, social media policy). The remaining postings focused on the course design with embedded documents covering weekly notes, course announcements, project announcements, and assessment due date reminders.

### **Google+ Communities**

Finally, a Google+ Community was created to support an online 5-week online BSBA elective course. Similar to the FB Pages and FB Groups, this optional social media site supplemented the primary D2L course and was announced in the course syllabus and D2L News feature. Students wishing to join the community were directed to send the instructor an email with the student’s Google account email address they would use to access the Google+ community. The instructor then sent an invitation to each student with a Google account email to join the community. Nine out of 25 students joined this community. The instructor posted 25 items to the community involving both direct instruction and course design. For example, the direct instruction postings included instructor created YouTube and Showme videos. The course design postings included embedded documents for course announcements, assessment due date reminders, and links to course related articles.

### **CONCLUSION**

Higher education faces many challenges caused by the confluence of mobile commuting and wireless communication technologies. SNS (e.g., Facebook and Google+) may provide faculty with new opportunities to engage their students. The instructional design for the online courses in this study focused on using the SNS as a supplemental communications to the primary course management system. This design was a major limitation in using the full potential of the social networking sites for educational purposes, given that about half of the 68 total students



opted for using the SNS. Additionally, the analysis for this study was done from the archival record of each course SNS. This approach eliminated any possible inquiry into why students did not choose to use the SNS? Or, if they chose to participate what were their perceptions of the SNS on their learning? Both legitimate questions for future research that incorporates the research methodology into the instructional design. Integrating technology into a course will always be a pedagogical challenge. Today, it's using SNS, what will tomorrow bring?

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