# Using Social Media as a Tool for Learning: A Multi-Disciplinary Study

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In order to explore the rich dynamics of using social media as a tool for learning within higher education classrooms, researchers across three disciplines: education, human resource development (HRD), and marketing, joined forces seeking ways to focus on learning through a retrospective analysis. Three concepts—engagement, community building, and personal meaning formed the framework for this study and were utilized to analyze the themes that emerged from student reflections and opinion surveys. This study used an exploratory mixed-method multiple-case study approach involving seven social media platforms: Pinterest, Facebook, Twitter, YouTube, LinkedIn, Second Life, and Skype. The research is unique because it not only looks at how social media can energize traditional and online instruction, it also cuts across three disciplines of higher education offering insights on how social media can be used to promote student learning.

## USING SOCIAL MEDIA AS A TOOL FOR LEARNING

When the U.S. Department of Education (USDE) released its National Education Technology Plan, *Transforming American Education: Learning Powered by Technology* (ED, 2010), it charged institutions involved in preparing educators to provide technology-supported learning experiences that promote and enable the use of technology to improve learning, assessment, and instructional practices. The plan encouraged educators to "leverage the learning sciences and modern technology to create engaging, relevant, and personalized learning experiences for all learners that mirror students' daily lives and the reality of their futures" (p. 4). President Barack Obama called for educators to support innovative approaches to teaching and learning, to bring lasting change to our lowest-performing schools, and to investigate and evaluate what works and what can work better in America's schools.

To meet the extensiveness of these responsibilities in order to change the current landscape of our educational institutions is a daunting task for any educator. Schools must find ways to meet the needs of our students, in a globally, connected world. Perhaps, we must consider a new investment-- one that will improve teaching and learning in all content areas using innovative methods in technology. One such innovative technology, the use of social media, may be the golden ticket to provide students with meaningful, connected learning experiences. However, there is limited research on using social network sites which specifically impact students and address learning (Chen & Bryer, 2012; Kumar & Vigil, 2011; Roblyer, McDaniel, Webb, Herman & Witty, 2010). Greenhow (2008) ad-mits that the current literature consists of mainly "speculative, anecdotal, and opinion pieces or studies that focus on populations other than K-16 stu-dents and teachers" (p. 191).

## REVIEW OF THE LITERATURE

### Social Media Trends in Education

Social media are Web 2.0 technologies that facilitate social interaction and collaboration, and foster a sense of community (Bingham & Conner, 2010). Experian (2012) ranks the top six social network sites by total vis-its as: Facebook (7 billion), Twitter (182 million), Pinterest (104 million), LinkedIn (86 million), Tagged (72 million), and Google+ (61 million). These social networking websites have become a significant part of U.S. college students' lives (Junco, Heiberger, & Loken, 2010).

Yet, although many educators embrace social media on a personal level, concerns still exist when using it for classroom instruction. In a U.S. study completed in 2011, Pearson Learning Solutions and the Babson

Survey Research Group collected data from 1,920 faculty members, highlighting the fact that "virtually all higher education teaching faculty are aware of the major social media sites… over 90% of all faculty are using social media in courses they're teaching" (Moran, Seaman, & Tinti-Kane, p. 3). However, the use of social media seems to be limited in nature to primarily online videos (61%) as compared to other social media sites such as Facebook (4%) or Twitter (2%). More importantly, the instructors who reported using this social technology in the classroom restricted it to instructor posts rather than student-created content. Other prominent concerns seemed to dominate the results including the time it took to integrate the media into courses and concerns with issues regarding both privacy and integrity. When faculty members across the United States were surveyed on the use of social networks as a course strategy, the results revealed that although instructors were familiar with technology, most utilized discussions and blogs within a content management system (CMS) (Chen & Bryer, 2012; Dunlap & Lowenthal, 2009) instead of utilizing popular social media sites.

Kumar and Vigil (2011) reported that students look to faculty to use and model new technologies. However, the use of discussion forums were found to be the only tools that pre-service teachers used more for educational purposes (77%) than for informal purposes (53%). Faculty may not have the specific strategies on how to assess the use of social media believing that social networking should be used primarily for informal activities (Chen & Bryer, 2012) or that technology is more about the teacher than the student (Kumar & Vigil, 2011). In order for a teacher to find creative ways to use technology in the classroom, they must first find value in the technology it-self, moving from "what social media is" to strategies on "how to use it". "Traditionally, students come to school 'powered-up' and wired with the newest technologies available—but often they must leave them at the door, since faculty do not use them in classrooms and may even regard them with suspicion" (Roblyer, et al., 2010, p. 134).

Obviously a disconnect exists between teaching and learning—a gap in technology understanding that "prevents technology from being used in ways that would improve instructional practices and learning outcomes" (ED, 2010, p. 10).

### Engaging, Connecting, and Meaningful Learning with Social Media

A shift is occurring in education whereby the learning environment is becoming decentralized moving from instructor and institution to one where students direct their own learning, find their own information, and create knowledge by engaging in networks away from the formal setting (Kop & Hill, 2011) that is ripe for social media learning. When examining the literature, however, few relevant examples of how social networks are being

integrated into academia are found; however, the following studies suggest that today's social technologies hold the potential for transforming teaching and learning.

Twitter (www.twitter.com) has been used as a pedagogical tool in both undergraduate and graduate courses.  Junco, et al. (2010) utilized the National Survey of Student Engagement (NSSE) to study the effect that Twitter had on student engagement and grades.  Twitter was found to not only increase college students' engagement and improved grades but it also increased interaction with peers and instructors for deeper interpersonal connections.  Similarly, Dunlap, et al. (2009) found that using Twitter in classroom environments allowed student interactions to be natural and immediate, enabled social presence, continued conversations after the semester, and allowed for the construction of meaning through communication.

Rinaldo, Tapp, and Laverie (2011) described using Twitter in a consumer behavior course to "follow" the professor.  Students were surveyed to assess their opinions regarding its role in career preparation, traditional education goals, and the use of classroom time.  In this study, both the professor and the students were relatively inexperienced with Twitter, so their perceptions increased positively throughout the semester.  Students reported that Twitter helped them understand and learn course material and achieve competency in the subject matter, and the students believed that knowledge of Twitter would assist in finding future employment.

Researchers at Harvard University created an online forum using the platform Ning (http://www.ning.com/) with their pre-service teachers in an attempt to create a "community of praxis", for increasing both student engagement and learning.  Ning is a social network similar to Facebook where users create or join particular networks with others who share similar interests.  The researchers recognized that both pre-service and professional educators struggle to find time to read, plan, or reflect on good teaching practices due in part to isolation in the teaching area, confinement to a single school or mentor, and the demands of the profession.  By creating a Ning network, the hopes were to build a community of learners.  Although the results indicated that the pre-service students felt that instructors underemphasized the relevance of the activity, students were engaged in meaningful conversations which reinforced learning (Reich, Levinson, & Johnston, 2011).

"Students' use of blogs, wikis, and social bookmarking has been of particular interest to educators who perceive these technologies as beneficial in higher education" (Kumar & Vigil, 2011, p. 145).  For example, Wells (2007) introduced pre-service teachers to wikis, blogs, and podcasts.  The students were required to read about the new technologies, engage with these new technologies as part of an assignment, and demonstrate their

knowledge and understanding of the content unit by presenting it in a wiki, a blog, or podcast that they created. The research revealed that many of the students not only combined these new technologies but also included other Web 2.0 tools that had not been introduced in class. According to Wells, "Once they [students] became interested many really flew with the idea. Even those who felt less than confident commented later that they had learnt so much from the experience that they felt much more confident to try them out during future teaching placements" (p. 5).

Other studies have shown that social media not only increased interest and engagement but also creativity. Grounded in social constructivistism, Perry, Dalton, and Edwards (2009) considered whether the use of thought-provoking images in conjunction with course reflections would generate engagement, social connections, and enhance the learning environment for students taking online courses. The researchers integrated the Web 2.0 technology PhotoVoice (PhotoVoice.org) into their course. PhotoVoice is an online social media for participatory photography, digital storytelling, and self-advocacy projects. The findings revealed that by integrating photography and digital storytelling methods with in-depth course reflections, instructors increased interest, engagement, personal meaning, and creativeness with their students. Using this new technology, relationships were fostered, ideas were shared, and social connectedness was formed between classmates as well as with instructors. While the findings supported innovative teaching strategies, the study encouraged instructors to develop and implement effective teaching strategies that created communities and maximize learning within the community context (Perry, et al., 2009).

One of the advantages of social media in the classroom from a marketing perspective is its potential for viral marketing, meaning the voluntary sharing of information among users. For example, YouTube (http://www.youtube.com) provides an opportunity for student-generated media and viral advertising. One study of MBA marketing students required the creation of an Internet "spoof" video posted on YouTube with the objective of maximizing the number of video views (Payne, et al., 2011). Most students expressed enjoyment in creating the advertisement based upon entertainment, creativity, teamwork, and challenge.

From tweets to visual stories, the type of social media used in the above studies share a ubiquitous thread—(1) a sense of community building, (2) engaging students in the learning process, and (3) students forming a personal meaning for the material learned. These three concepts formed the conceptual framework for this study and were utilized to inform research questions and analyze the themes that emerged from the data collected in the study (Maxwell, 2012).

**Importance of the Study**

There is limited research focused on social media for pedagogical use in the higher education classroom. Thus, this study explores how social media promotes learning in the college classroom by facilitating student engagement, community building, and personal meaning.  To this end, college student reflections were collected across three disciplines that utilized social media for learning.  These reflective data may serve useful for future studies and suggest important avenues necessitating further research.


## METHODOLOGY


**Context**

In order to explore the rich dynamics of using social media as a tool for learning within higher education classrooms, researchers across three disciplines: education, human resource development (HRD), and marketing, joined forces seeking ways to focus on learning through a reflection of practice.  This research project sought to answer the following research questions:

1) How did social media create a sense of engagement?

2) How did social media facilitate a sense of community?

3) What personal meaning was facilitated through social media technology?


**Research Design and Data Collection**

This exploratory mixed-methods research used a multiple-case study approach (Bryman & Bell, 2007) to examine seven social media platforms: Pinterest, Facebook, Twitter, YouTube, LinkedIn, Second Life, and Skype for the purpose of classroom learning. Two of the three cases involved data collected from retrospective student reflections on the use of social media in the classroom following learning activities (Education and HRD). The third case (Marketing) utilized qualitative and quantitative data collected from voluntary opinion surveys and reflective comments to examine student perceptions regarding the social media project. Although data was originally collected for academic purposes during the 2011-2012 school year, Institutional Review Board (IRB) approval to use students' reflections as retrospective data was subsequently obtained. Each social media learning activity is briefly defined below to give a context for how the tool was utilized to facilitate student learning.

## Case One:  Education

Imagine learning to teach when you have never been in a classroom. Imagine being asked to design lesson plans based upon ideas that you have never experienced or to create a classroom management plan for students you have not seen.  For many pre-service education students, this is their reality.  For that reason, Pinterest (Pinterest.com) was selected as the social media platform for pre-service students to explore new ideas in teaching and classroom management and gather these ideas collectively through the use of images.

Created in 2009 and launched in March of 2010, Pinterest is a new class of social tools (Experian, 2012) where users can visually share, curate, and discover new interests by pinning images to an online pinboard.  With over a hundred million visitors per month (Go-Gulf, 2012), current trends show Pinterest to be one of the top three network sites in the United States (Experian, 2012).  According to the site, the goal of the social media platform is "to connect everyone in the world through the 'things' they find interesting" (Pinterest, 2012a).
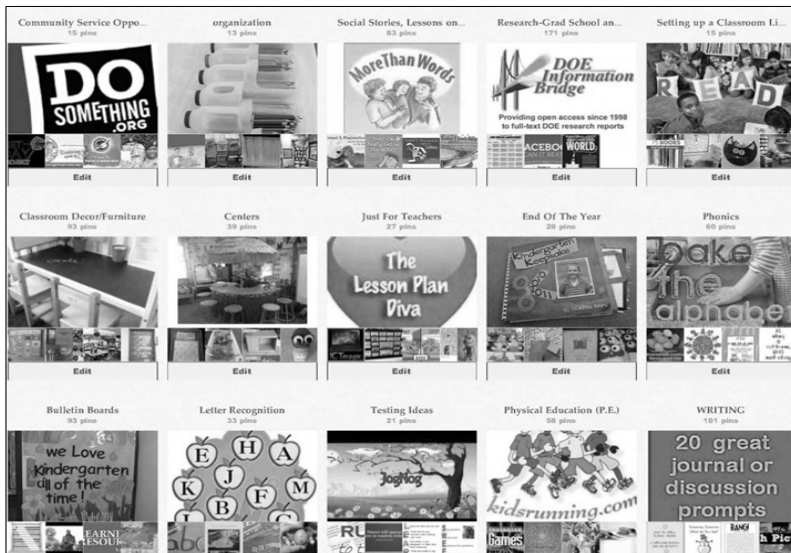


**Figure 1.**  Student pinboard on Pinterest. Source: Teach for Kids, Pinterest (2012b). Retrieved from http://pinterest.com/teachforkids/.

Pinterest was integrated into both a classroom management course and a PK-6th grade teaching skills course as a novel type of instruction and student reflections were collected through an online forum within the content management system Blackboard.  For this project, a Pinterest group was created for the course.  Once the account was set up, the group profile was edited, creating a display name, profile picture, and description of the purpose of the site (see Figure 1).  Students enrolled in the courses were given the user name and password specific to the course.  In order to create a meaningful assignment and build a community of praxis, students were required to choose a minimum of ten resources from the web that they planned to reconstruct or utilize in their own classrooms after graduation. These ten items could either be pinned onto one of the existing boards or the students could construct new categories leaving feedback on each posting for others to read as to why they believed the pin would be valuable to them as a teacher.

In addition, students were asked to 1) reflect upon the pins they chose to post, 2) explain what they learned from using the social platform, and 3) discuss whether they would use the site in the future.  Students were encouraged to create their own Pinterest site to pin ideas from their colleagues and to save their own pins so that after the course was completed they would have a site created from their own personal interests and needs.

### Case Two:  HRD

Human Resource Development (HRD) is a discipline with the primary purpose of strategically improving an organization to make it more effective (Gilley & Gilley, 2003).  This effectiveness is achieved through various initiatives such as employee training and development, career development, organization development, and numerous learning-based programs (Chalofsky, 2011).  As in other fields, technology is having an enormous impact on the field of HRD (McWhorter, 2010) and a new area of inquiry, *Virtual HRD*, has now emerged that embraces sophisticated technologies in the workplace for increasing learning capacity and performance (McWhorter & Lindhjem, 2012).

Social media data utilized in the HRD classroom collected for the current study included 151 participants. Data was collected from:  a) 53 student reflections on the use of Skype and Second Life in an online master's level class on leadership and ethics, b) 44 student reflections on the use of Second Life for a training activity in an online master's level class on workforce development; and, c) 54 student reflections on the use of LinkedIn for professional networking in a hybrid undergraduate capstone experience class.

Skype (http://www.skype.com) is a video conferencing program that facilitates real-time interaction over the Internet.  This platform allows for text

chat, voice chat, video chat, and sharing of screens for presentations or Internet tours. In the current study, student reflections of synchronous real-time group meetings (RTGMs) held every three weeks in an online master's class were collected and examined. Each group of approximately five students was required to hold four RTGMs during the semester that discussed the topic of the week and formulation of a group ethics project.

Second Life (http://secondlife.com) is a 3D virtual world where a number of universities hold online classes and professional meetings through the use of an *avatar*, or graphic representation of the user (Mancuso, Chlup, & McWhorter, 2010). This environment has been found to be useful for students to interact synchronously (in real-time) due to its use of text and voice chat capabilities which establish *virtual presence* (Burgess, Slate, Rojas-LeBouel, & LaPrarie, 2009). In the current study, student reflections were gathered following RTGMs and a one-hour training session.

LinkedIn (http://www.linkedin.com) is the largest professional network on the Internet with over 160 million members in 200 countries (LinkedIn.com, 2012). Its users collaborate through private messaging or group discussions and by public status reports similar to Facebook. Also, users can post their online resume, work history, education, and listing of skills and abilities as well as integrating with Twitter, Slideshare.net, and many other social media sites. In the current study, 54 undergraduate students (seniors) in two capstone experience hybrid classes utilized LinkedIn for creating their professional network to showcase their skills, and connect to classmates, university professionals, and area and regional contacts. Additionally, students joined professional groups and generated a web link to their online profile for their resume and cover letter constructed in the course.

### Case Three: Marketing

Contemporary businesses struggle with how to use social media tools effectively. Because of this, college recruitment increasingly focuses on marketing students who have expertise managing and administering social networks, not merely from a personal usage experience, but those who understand the complexities of social media marketing from a business perspective. One study noted: "Managers have struggled to deal with the challenges that consumer-generated advertising and viral marketing pose" (Payne, et al., 2012, p. 204). To ensure that marketing students possessed these critical skills, Facebook, Twitter, and YouTube were utilized for an analysis project in an undergraduate marketing course.

According to Experian (2012), more than 50% of online adults used Facebook regularly; the network is positioned to be a unique source of value to marketers (p. 87). Facebook's mission is "to give people the power to share and make the world more open and connected" (Facebook, 2012).

Twitter is a real-time information network that connects individuals to the latest stories, ideas, opinions, and news through 140 character tweets (Twitter, n.p.).  YouTube is the world's top video sharing site with over 800 million unique users each month (YouTube, 2012).

The objective of the classroom project was to identify social media strategies utilized by top retail companies by answering the question: "How are retailers using social media to interact with customers?"  Fifty retail companies were selected from the top fifty companies listed on *Stores* 2011 Top 100 Retailers (NRF Stores, 2012) and then grouped by store format (grocery, discount, restaurants, department, etc.).  Students self-selected into 13 groups and determined which group of stores to analyze.  The integrated assignment required students to conduct a content analysis including developing tables with the following information:  social media location (Facebook, Twitter, YouTube), content of most recent 50 posts (information, questions, suggestions, complaints, etc.), time period of most recent 50 posts (number of days/weeks/months/years), positive or negative nature of posts, and the source of the post (company or consumer).

The marketing project also included comparison of the retailers' social media strategies including an analysis of the effectiveness of those strategies.  Findings were presented in a formal business report and oral presentation.  A voluntary opinion survey regarding the social media project was completed by students at the conclusion of the project.  Forty-eight students were enrolled and participated in the social media analysis project and 25 students completed the survey which included nine Likert questions and one open-ended question.

## ANALYSIS OF THE DATA

The first step in the analysis process involved exploring the data and then organizing it into a usable format.  Transcripts were created from written student reflections, then arranged, numbered, and coded for content. The data was organized, as Bogdan and Biklen (1992) proposed, by breaking the information down into "manageable units, synthesizing, searching for patterns, discovering what is important, what is to be learned, and deciding what to tell others" (p. 157).  The researchers looked for themes emerging from the data and then created conceptual categories in which to form the framework for the analysis.  Merriam (1998) pointed out the categories should "reflect the purposes of the research and in effect are the answers to the research questions" (p.183).  Prior to coding, the researchers reviewed their conceptual framework constructed at the onset of their study.

After collecting and transcribing all of the qualitative data individually, the research team then triangulated the study's validity and reliability by utilizing multiple sources of data (three separate disciplines) and sorted the data using the conceptual framework which served as a heuristic for organizing and reporting the data most relevant to the study. Furthermore, the team compared their interpretations across disciplines looking for distinct pat-terns. Because of the vast number of reflections collected in this study, only a few excerpts were documented in this paper.

## RESULTS

Analysis results are discussed below according to the three research questions in the study. Based upon the students' reflections, a matrix was developed to aid in conceptualizing the social dimensions of *engagement, community,* and *personal meaning* in terms of instruction and learning. Table 1 provides a visual depiction of the relationship between the conceptual themes and student reflections of using social media.

## ENGAGEMENT

The following question was considered and reflections were analyzed in order to determine, "*How did social media create a sense of engagement*" [for the students in this study]?

As revealed in Table 1, excerpts from the students confirmed that the use of social media in the classroom was engaging and fun. For example, students who initially thought the Pinterest assignment was too consuming of their time changed their minds: "At first I thought ten items was too many items to find and pin, but once I started checking out the different categories and fun activities, I realized ten things to pin was not enough" (P005, 2012, p. 3). Another student echoed the sentiment: "When I first got on Pinterest, I had one education board and now I have more than 20" (P040, 2012, p.10).

Students demonstrated that using social networks increased both motivation and enthusiasm for learning declaring: "I love using this Website; it opens up a whole world of creativity to be explored" (P044, 2012, p.10). In fact, another student exclaimed: "This was the best homework assignment I ever got!" (P001, 2012, p.1). Interestingly, none of the students reported boredom with the Pinterest assignment and marketing students thought the workload was reasonable (84%).

Likewise, HRD students were very interested in the social media LinkedIn. One student remarked: "I learned firsthand the value of using various tools like LinkedIn to increase my visibility to employers" (P228, 2011, p. 4). Another said: "Creating a LinkedIn account helped me realize that businesses can see me as a professional, rather than just a profile on a social media website" (P230, 2011, p. 4).

**Table 1**

**Examples of Student Reflections Based Upon Conceptual Themes**

| Social Media | Common Themes | | |
|---|---|---|---|
| | Engagement | Community | Personal Meaning |
| Pinterest | "I have become addicted... I love this website" (P005, 2012, p.1). | "I learned from this lesson that there are many ideas out there, and it is great that people share their ideas with other educators" (P002, 2012, p.1). | "This was a great way to build my classroom ahead of time" (P066, 2012, p.14). |
| | "I am so fortunate to have you (Pinterest) in my life. We are going to swap ideas for many years to come!" (P045, 2012, p.11). | "With you searching what you can, your friend doing what they can, and people who share your interests searching--everyone can conquer more" (P016, 2012, p.5). | "I used a lot of the pins to help with my lesson plans for student teaching, so it was a blessing!" (P014, 2012, p.4). |
| | "I find it all so useful and fun!" (P011, 2012, p.4). | "I can find teaching ideas that have been used across the world" (P012, 2012, p.4). | |
| Facebook, Twitter, and YouTube | "If you are not actively listening and engaging your customers, in about a day then you will lose their attention" (P137, 2012, p. 1). | "Having a group to work with helped me learn more and bounce ideas off each other" (P125, 2012, p.1). | "I think it was a good project" (P120, 2012, p. 1). |
| | "Social media is going to become a company's greatest communication to its custom-ers" (P126, 2012, p. 4). | "I disagree it should be an individual assignment because you can't compare" (P114, 2012, p.1). | "Useful project" (P122, 2012, p.1).<br><br>"It was much more relevant than some projects I've done so far. It was refreshing" (P118, 2012, p. 1). |
| Skype, LinkedIn, and Second Life | "Skype is a great classroom for online learners" (P203, 2012, p. 2). | "I enjoyed the group interaction with my peers on Skype. It was very helpful to be able to see and communicate with others" (P205, 2012, p. 2). | "In a virtual world [Second Life] you can get an almost-hands-on type of experience without the safety risk that real world instruction [in laboratories] might include" (P211, 2011, p. 3). |
| | "I was more active in paying attention and participating in questions being asked. I believe Second Life is useful because it is more like real life" (P212, 2011, p. 3). | "I created a profile on LinkedIn…I invited friends, made new contacts…joined several professional groups" (P259, 2011, p. 7) | "Students are able to get 'hands on' experience without ever being in real danger. They are able to learn safety measures first in a safe environment" (P216, 2011, p. 3). |
| | "Second Life was a fun and great way to meet in a group setting without being in person. The option to chat and speak kept the meeting going at a steady pace" (P204, p. 2). | "I love Second Life… it is a wonderful learning tool and think it should be used more often in online classes. The down fall of many online classes is the lack of connection" (P207, 2012, p. 1). | "Good way of training" (P220, 2011, p. 3). |

### Community Building

Researchers reviewed student perceptions in regards to the following question: "*How did social media facilitate a sense of community*?  In this study, the students were able to learn from one another using social media. For example, one student wrote: "What I learned from doing Pinterest with my fellow education majors (and even field teachers) is that it is a great tool to share ideas and information with one another" (P001, 2012, p. 1).  "I loved using Pinterest because I think it helped to bring some of us together by facilitating discussions about what we pinned" (P031, 2012, p.7).

The social media platforms provided a collaborative learning environment in which students were able to share information with each other but also connect with others globally.  "I can find teaching ideas that have been used across the world" indicated one learner (P012, 2012, p. 4). Utilizing groups for the marketing project facilitated communication and contributed to a better comparison of companies' specific social media strategies as evi-denced by one marketing student's comment: "Having a group to work with helped me learn more" (P125, 2012, p. 1).

Referring to their first experience with LinkedIn profiles, one student illustrated the collaborative nature of this social media platform:

> *I never realized that this network existed.  Once I was logged in and started looking up people to be linked to, I found several people that I knew from my current company, family, and even friends from my military experience.  This is really a fantastic find, especially since my field of work, is very small. (P274, 2011, p. 10)*

### Personal Meaning

In accordance with the basic tenet of constructivism that people learn by experiencing rather than observing and that students need to make their own meaning, researchers examined the final question: "*What personal meaning was facilitated through social media technology*?"

Students demonstrated through the reflections that the course activities using the social media added meaning and were valuable to them personally.  "There are so many things I have already done that I would have never thought of prior to Pinterest" (P012, 2012, p. 4).  "I actually found it to be a time-saver, and incredibly useful, ESPECIALLY for teaching" (P024, 2012, p. 6).  "It helped me greatly with ideas for my Classroom Management Plan and got me using Pinterest personally as a way to plan for my future classroom" (P030, 2012, p. 7).  Also, ninety-six percent of marketing students stated that the social media project increased their knowledge of social media and 100% agreed that the project increased their knowledge of using social media by businesses.

One HRD student remarked about their experience with Skype during a "mock" panel interview activity with an iPad: "I was able to interview someone and be interviewed using Skype.  As this technology becomes more accepted, …[Skype] may become more prevalent…companies can save time and money by performing hiring interviews without the cost associated with conventional methods" (P269, 2011, p. 9).  This reveals the student's connection with the interviewing process as well as the potential of Skype interviewing for future Virtual HRD activities.

## CONCLUSION

Across three disciplines, associations between student engagement, community building, and personal meaning were revealed.  Students' use of social media was viewed as a beneficial tool to classroom learning.  Findings in this study also coincide with earlier research which asserts that educators must continue to find ways to relate to students because a "disconnect" currently exists between the teaching and learning taking place within classrooms.  Although Moran, et al. (2011) pointed out that over 90% of instructors are utilizing social media in their courses, when marketing students were asked: "Not counting this course, in how many other courses have you used social media for a project?", the mean response was .44, suggesting that social media integration into course projects by business professors may be less.

We know that the benefits of a student being engaged are vital to learning and although the majority of students demonstrated interest, enthusiasm, and participation with the assignments, about 5% of the education students commented that they were either disinterested or that they were distracted using the social media.  For example, one student noted that although engaged personally with the social media, she was sidetracked when having to focus on a class assignment.  "I know the feeling about staying on task... It is next to impossible…without being distracted by all the other glamor-ous things on Pinterest" (P013, 2012, p. 1).  Marketing students' opinions re-garding the workload required in the course varied from "very heavy work load" (P102, 2012, p. 1) to the "Most simple project I've ever had!" (P107, 2012, p. 1).

Despite several noticeable concerns, students across disciplines showed a heightened sense of engagement in the collaborative projects which involved practical applications to their future employment.  From planning future classrooms to considering how best to market a future business, students moved from being passive observers to active participants in the learning process. Students in the education course began the semester with a limited level of knowledge as to how to write effective lesson plans or

manage a classroom.  However, as the semester progressed, social networking allowed students to exit the course with a toolbox of ideas.  The findings support the initiatives set forth by the USDE in that classrooms need to be engaging, relevant, and make meaningful connections to students' lives.

Furthermore, as students reflected through the discussions, they realized they had a shared sense of interest with one another.  For example, marketing students wanted to work together in groups and the education students demonstrated that there was value in sharing and collaborating ideas with one another: "It is great that people share their ideas with other educators" (P002, 2012, p.1).

## Limitations

Some limitations associated with the findings of the study should be considered.  First, data was collected before the study was conceptualized and research questions were formulated, which may place some limits on this study as retrospective data was utilized.  Also, a wide array of social media and instructional techniques were used in connection with the social media activities which may not result in similar findings with different instructors or courses. Finally, only those student reflections that were consistent with the conceptual framework were reported in the findings of this study.

## Implications and Recommendations

It is imperative that university students learn social technology competencies to be relevant in today's organizations.  Bozarth (2010) urged instructors to utilize social media in the classroom because "technologies dissolve many of the barriers between the learners and the instructor, creating a more informal, collegial, and interactive learning environment" (p. 13).  Also, she advocated for social media tools in business training initiatives because trainees become more cognizant of their own learning and take ownership of it; thus, providing "additional support for sustaining new learning and transferring formal training back into the workplace" (p. 13).

Future recommendations for educators working with any of the social networking platforms would be to provide students with "hands-on" training in advance of any assignments. Although we assume our students enter our classroom "wired" for technology, certain students still found the use of social media difficult to navigate.  "I found it [Pinterest] tedious and at times frustrating … Could just be my lack of knowledge on how to navigate this site" (P079, 2012, p. 15).  "At first I did not really like using Pinterest… I think the reason I didn't like it at first was because I didn't really know how to use it" (P057, 2012, p.13).  By allowing students class time to navigate through the social media, set up personal pages, and ask questions as a class, instructors may reduce many of the difficulties reported by students.

Since marketing students reported low usage of social media for class projects, marketing professors may want to consider more integration of social media into their assignments.  To ensure that workload is equitable among groups for the marketing project, future group size will be determined by allocating one company per group member.  The project has also been adapted to expand the emphasis on application, comparison, and additional reflection.  The student opinion survey has also been expanded to include questions regarding the usefulness of the specific social media platforms, rather than the project as a whole.

This interdisciplinary research discussed the utilization of seven different social media platforms applied to education, human resource development, and marketing courses.  In addition, the research promoted a scholarship among disciplines and provided new insights into how social media influ-ences learning.  Three educators, implementing social media as independent projects, found that student engagement, a sense of community, and person-al meaning resonated across academic disciplines.

Recommendations for future research may include a more in-depth analysis of student reflections to determine if specific social media technologies are more useful for achieving certain learning objectives. Furthermore, consideration of the appropriateness and effectiveness of specific social media technologies within particular academic disciplines could be explored.

## References

Bingham, T., & Conner, M. (2010). *The new social learning: A guide to transforming organizations through social media*. San Francisco, CA: Berrett-Koehler Publishers.

Bogdan, R. C., & Biklen, S. (1992). *Qualitative Research in Education. An Introduction to Theory and Methods. Second Edition.*

Bozarth, J. (2010). *Social media for trainers: Techniques for enhancing and extending learning.* San Francisco, CA: John Wiley & Sons, Inc.

Bryman, A., & Bell, E. (2011). *Business research methods, 3rd edition.* New York: Oxford University Press.

Burgess, M. L., Slate, J. R., Rojas-LeBouel, A., & LaPrairie, K. (2009). Teaching and learning in Second Life: Using the community of inquiry (CoI) model to support online instruction with graduate students in instructional technology. *Internet and Higher Education, 13*(1-2), 84-88.

Chalofsky, N. (2010). Meaningful workplaces: *Reframing how and where we work*. San Francisco, CA: John Wiley & Sons, Inc.

Chen, B., & Bryer, T. (2012). Investigating instructional strategies for using social media in formal and informal learning. *International Review of Research in Open & Distance Learning, 13*(1), 87-104.

Department of Education (ED), O. (2010). Transforming American Education: Learning Powered by Technology. National Education Technology Plan, 2010. *US Department Of Education.* Retrieved June 3, 2012 from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED512681

Dunlap, J. C. & Lowenthal, P. R. (2009). Tweeting the night away: Using Twitter to enhance social presence. *Journal of Information Systems Education, 20*(2), 129-136.

Experian Marketing Services (2012). *The 2012 Digital Marketer: Benchmark and Trend Report.* Retrieved June 20, 2012 from http://www.experian.com/marketing-services/register-2011-digital-marketer.html

Facebook (2012). Mission. (n.d). In Facebook [About page]. Retrieved June 16, 2012 from https://www.facebook.com/facebook?sk=info

Gilley, J. W., & Gilley, A. M. (2003). *Strategically integrated HRD, 2nd edition.* Cambridge, MA: Perseus Publishing.

Go-Gulf (2012). *User Activity Comparison of Popular Social Networking Sites [Infographic].* Retrieved June 20, 2012 from http://www.go-gulf.com/blog/social-networking-user#

Greenhow, C. (2008). Commentary: Connecting formal and informal learning in the age of participatory media: A response to Bull et. al. *Contemporary Issues in Technology and Teacher Education, 8*(3). Retrieved June 10, 2012 from http://www.citejournal.org/vol8/iss3/editorial/article1.cfm

Junco, R. R., Heiberger, G. G., & Loken, E. E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning, 27*(2), 119-132.

Kop, R., & Hill, A. (2008). Connectivism: Learning theory of the future or vestige of the past? *International Review of Research In Open And Distance Learning, 9*(3), 1-13.

Kumar, S., & Vigil, K. (2011). The net generation as preservice teachers: Transferring familiarity with new technologies to educational environments. Journal of Digital Learning in Teacher Education, 27(4), 144-153.

Mancuso, D. S., Chlup, D. T., & McWhorter, R. R. (2010). A study of adult learning in a virtual environment. *Advances in Developing Human Resource Development, 12*(6), 691-699.

Maxwell, J. A. (2012). *Qualitative research design, 3rd edition.* Thousand Oaks, CA: Sage Publications, Inc.

McWhorter, R. R. (2010). Exploring the emergence of virtual human resource development. *Advances in Developing Human Resources, 12*(6), 623-631. doi:10.1177/1523422310395367

McWhorter, R. R., & Lindhjem, K. A. (2012). *Exploring a virtual learning environment for nanotechnology safety training.* Refereed proceedings of the 2012 Academy of Human Resource Development Conference, February 28-March 3, 2012 in Denver, Colorado, (pp. 2992-3001). Bowling Green, OH: AHRD

Merriam, S.B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey -Bass Publishers.

Moran, M., Seaman, J., &, Tinti-Kane, H. (2011). *Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media.* Pearson Learning Solutions and Babson Survey Research Group.

NRF Stores (2012). *2012 Top 100 Retailers.* Retrieved February 8, 2012 from: http://www.stores.org/2012/Top-100-Retailers/

Payne, N. J., Campbell, C., Bal, A. S., & Piercy, N. (2011). Placing a hand in the fire: Assessing the impact of a YouTube experiential learning project on viral marketing knowledge acquisition. *Journal of Marketing Education, 33*(2), 204-216. doi:10.177/0273475311410853

Perry, B., Dalton, J., & Edwards, M. (2009). Photographic images as an interactive online teaching technology: Creating online communities. *International Journal Of Teaching And Learning In Higher Education, 20*(2), 106-115.

Pinterest (2012a). *Getting started: What is Pinterest?* (n.d.). In Pinterest [About Page]. Retrieved June 16, 2012 from http://pinterest.com/about/

Pinterest (2012b). *Teach for kids.* In Pinterest [Boards]. Retrieved June 10, 2012 from: http://pinterest.com/teachforkids/

Rinaldo, S. B., Tapp, S., & Laverie, D. A. (2011). Learning by Tweeting: Using Twitter as a pedagogical tool. *Journal of Marketing Education, 33*(2), 193-203. doi:10.1177/0273475311410852

Wells, M. (2007). *Wikis, blogs and podcasts - using Web2 technologies in teacher education.* Retrieved June 3, 2012 from http://www.aare.edu.au/07pap/wel07108.pdf

YouTube (2012). *Traffic.* In YouTube [Statistics]. Retrieved June 23, 2012 from http://www.youtube.com/t/press_statistics