Creating Community Online: The Effects of Online Social Networking Communities on College Students' Experiences. How Can Student Affairs Professionals Best Respond to this Emergent Phenomenon?

Scott Silverman

Student usage of online social networks (OSNs) has become prominent in the lives and experiences of today's college students. While not every student may be actively using OSNs, everybody knows about them and most are avid users. Despite the potential drawbacks focused on in the news media, students continue to use these online communities. The overarching research question for this study is: What are the effects of online social networking communities on the experiences of college students? In looking at this phenomenon from the students' perspective, it is apparent that students have a comprehensive understanding of drawbacks with regards to OSNs. Most students believe that limited interaction with and presence of their universities within OSNs would be acceptable or tolerable. In many cases, students welcomed the university presence as an opportunity for universities to be more aware of the student culture on campus and for universities to educate them about how to be safe and smart in their online activities. By understanding students' perceptions of the uses of OSNs, the benefits and drawbacks of OSNs, and the level of involvement that university staff and administrators should have within OSNs, student affairs practitioners can be more supportive of student participation in these networks, and through that, enhance student engagement with the university.

Statement and Background of the Problem

The purpose of this phenomenological study is to understand students' perceptions about the importance of online social networking (OSN) and their views on the role that colleges and universities can play in managing student usage of these phenomena. This study will examine the effect of students' use of online phenomena (e.g., Facebook and other online social networks) on their educational and developmental experiences. By gaining a better understanding of the effects that OSNs have on college students' experiences, student affairs professionals will learn how to work with students in this new type of community. This study helps student affairs professionals understand what OSNs are, how they function, the

Scott Silverman (scotts@ucr.edu) is an Associate Editor of *The Journal of College Orientation and Transition* and a Coordinator of Orientation Programs at the University of California, Riverside.

ALL 2009 • VOLUME 17, NUMBER 1

role they play in the student experience, and how to interact with students using online communities. In order to do their jobs effectively, student affairs practitioners must have a working knowledge of factors that might affect students' development, including OSNs (Willard, 2006).

When students graduate from high school, they typically have a social network that they have been building for 12 years, since first grade. Students are accustomed to seeing their friends and contacts on a daily or regular basis. Apart from students who change schools and/or move to new areas during the latter years of junior high or high school, and not counting the OSNs that high school students may already have established, high school seniors graduate with very large social networks that have great influence over their lives (Antonio, 2004). As students transition out of high school and into college, many of their friends are working or going to school in other parts of the state or country. Essentially, students have to rebuild their social network and will want to fill this void as quickly as possible (Schlossberg, 1984; Antonio, 2004) by entering online social networking communities such as MySpace and Facebook.

College students today are more "wired" or connected to information and to each other electronically than previous generations. Most students are digital "natives" meaning that they have either grown up with these technologies, or they have become so commonplace in their lives that using them is part of the norm. Students use a wide array of modern technological media, including e-mail, cellular phones, and the Internet, to communicate with each other with increasing regularity. The effects of the Internet on college students have yet to be adequately determined.

This growth in student use of OSN communities is a recent development. Facebook.com started at Harvard University in February 2004 and over time has expanded at colleges across the country. At the beginning of this research study, in March 2006, over 2,200 four-year colleges and universities were represented on Facebook, with over 8 million registered users, two-thirds of which logged in daily, with an average usage time of 18 minutes (Facebook.com, 2006). This makes Facebook the most popular among over 65 different OSNs that college students use regularly (Berkeley survey, Winter 2006). The number of OSNs and information on their rate of usage is not yet readily available, with Wikipedia having the largest amount of information, currently listing over 140 OSNs (Wikipedia.com, 2009) and, yet, still unreliable. There does not yet seem to be a single, exhaustive list of all OSNs, and the fluctuation in OSNs that exist or are actively used would limit the reliability of any list. Now that Facebook is open to everyone and not restricted to certain types of networks, usage of OSN, has increased dramatically. There are over 250 million active users (who have logged in within the last 30 days), half of whom log in at least daily, spending an average of 28.2 minutes online daily; one-third of the users are current college students, and anyone can use Facebook starting at age 13 (Facebook.com, 2009; Alexa.com, 2009).

This study helps the reader understand how social networking communities in general and online social networks in particular affect students, and what steps

might be needed to protect student and societal interests. Student affairs practitioners will best facilitate student success in their college and developmental experiences through more robust knowledge of students' activities and experiences (Evans, Forney, & Guido-DiBrito, 1998; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Pascarella & Terenzini, 2005). This study's aim is also to educate student affairs professionals about what students are doing in online communities and online social networks, and what student affairs practitioners can do to help integrate OSNs into a productive college student experience.

Student usage of Facebook is largely indicative, inclusive, and reflective of all types of communication and interaction that can take place through other online social networks. Therefore, the primary focus of this study is on Facebook, yet the findings of this study should be applicable to other OSNs. This study examines student development, sociological research on communities, online community research, and legal issues to extrapolate a frame of analysis for the effects of OSNs on college students. This study is necessary for student affairs administrators to understand another critical facet of the contemporary student experience.

Research Questions

There is little qualitative research on student users of online communities. This study used student perspectives to address the overarching research question for this research: what are the effects of online social networking communities on the experiences of college students? Various methods of data collection, including document analysis, an online survey, focus group, and participation in online communities to observe student interactions, contribute to answering the following three research questions:

- 1. How do students use online social networks, and in what ways do they engage with each other?
- 2. What do students feel are the benefits and drawbacks associated with their use of online communities and online social networks?
- 3. What are students' attitudes and perceptions about staff and administrator involvement in online social networks?

The knowledge of how students operate within OSNs may translate into programs and support services that professionals can use to engage students using online communities as a new venue for programming.

Literature Review

Student affairs professionals serve as "institutional agents" or individuals who have the ability and knowledge to connect students with institutional resources and support. Relationships with student affairs practitioners help students to access programs, resources, and opportunities that they would not otherwise know about or find (Nuss, 2003). Student development theory, as a field of study, guides student affairs professionals in helping students negotiate many of the challenges they are faced with during their college experiences and beyond. Chickering (2000)

argues that each institution's educational environment bears great influence on the developmental experiences of its students as they form their identity—a central task of the college years.

A student's college experience can be broadly divided into in-class and out-of-class activities. Student affairs professionals predominantly work on issues relating to out-of-class experiences, of which online social networking is the newest and increasingly prominent component, and contribute to students' educational and developmental experiences in college. Applying Astin's Student Involvement Theory (1984), Schlossberg's Transition Theory (1984), and Maslow's Theory of Human Motivation (1943) to OSNs, social network analysis, community sociology, and legal issues provides a good foundation to understand the complexities of students' online interactions.

Astin's Student Involvement Theory

According to Astin (1984), learning and growth takes place when students are engaged in their environments and involved in campus life, and students who are involved in co-curricular activities are more successful in college and later in life (Astin, 1984). Astin defines involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297), and involvement requires "the investment of physical and psychological energy" (p. 298) into the activity, whether it is in or out of the classroom (Evans et. al, 1998). However, evaluating student involvement in a physical time and energy sense is still contingent on traditional definitions of student involvement—that is, spending time and energy on campus or at least in-person with other students. It is not yet clear how applicable this definition is to students' online involvement or engagement, though online interactions can both be related and distinct from class-related activities. As universities consider interventions or other programs to incorporate student online activity into their work, the quality and quantity of student involvement in online social networking should be taken into account.

Schlossberg's Transition Theory

Schlossberg (1984) defines a transition as "any event or nonevent that results in change in relationships, routines, assumptions, and/or roles within the settings of self, work, family, health, and/or economics" (p. 43) and stresses that during transition it is not the change itself, but the individual's perception of the change that matters. Regardless of what transitional stage a student is in, this theory explains the need for support for the transition and for eliminating barriers in the transition. As a student transitions into and through college, a key challenge for that student is finding a way to balance new activities and relationships with other parts of life. For many incoming college students, abandoning the social network they spent perhaps 12 years building up through high school and starting a

new social network can be unsettling. Today's college students are even more susceptible to this phenomenon (Beavers, 2004; Coomes, 2005; Esposito & Lang, 2006). Pressure to fit in and feel like full members of their new community leads students to seek out as many new friends as possible (Schlossberg, Lynch, & Chickering, 1989) through any available means. Students may want to address transition in terms of leaving the breadth and depth of their pre-college social networks, then attempting to fill that void by participating in OSNs in order to fulfill their need for belonging as described by Maslow.

Maslow's Theory of Human Motivation

Human behavior is motivated by the desire to fulfill certain needs. Maslow's Hierarchy of Needs (1954) essentially says that there are five levels of basic needs that every human has, but that the needs are generally felt only as the need before it is met (Maslow, 1943, 1970). The needs, in order from most essential to higher level, are: 1) Physiological: water, air, food; 2) Safety: shelter, protection, health, routine/rhythm; 3) Love: affection, belonging, comfort; 4) Esteem: value, self-worth, respect; and 5) Self-Actualization: a person's desire to reach her or his full potential. The need most relevant to the setting of social networks is that of love; that is, a student's need to feel comfort and a sense of belonging within the community. Students want to belong to groups and interact with others who share similar interests. That is why students will create or join subgroups within Facebook, groups that mirror officially registered student organizations on campus or are based on hobbies, favorite TV shows/movies, politics, or other special interests (Business Week Online, 2004).

Social Network Analysis

A number of researchers have studied the methods, frequency, and extent of connections between individuals through analyzing blogs and online social networks and examining how those connections might define and shape a community (Stutzman, 2006a, 2006b, 2006c; Hampton 2001; Granovetter, 1973; Wellman & Hampton, 1999). Social network analysis classifies people as *nodes* and the connections between them as *ties* (Granovetter, 1973). This analysis reflects the notion that social cohesion is based on strength and function of the ties between people.

A strong tie is characterized by a number of factors: 1) mutual confiding in one another, 2) emotional intensity of the relationship, 3) amount of time spent interacting, and 4) reciprocation of the connection (Granovetter, 1973; Hampton, 1990). Thus, students can maintain strong connections to other individuals through online communities despite the interaction not necessarily occurring face-to-face. People benefit both from strong and weak ties (Wellman, 1998; Granovetter, 1973). The premise is that although one's relationships with family and close friends (the strong ties) are necessary and important in supporting

that individual, maintaining a number of weaker ties with a diverse group of acquaintances and other friends will provide a wider base of support and knowledge (Granovetter, 1973, 1978). In the context of this study, student affairs professionals function as nodes, tying students to campus resources, each other, and to their educational growth and personal development.

Importance of Developing Communities

Universities support a variety of student constituencies or communities, including cultural program offices (serving Chicano, African, Asian-Pacific, Native American students) and resource centers (serving Lesbian, Gay, Bisexual, and Transgender individuals; women and men; students with disabilities). Other communities of students supported by universities include student athletes and students interested in physical fitness/recreation and students involved in campus activities, events, and organizations. Each student organization and campus community within the institution offers a sense of belonging and comfort to students, as well as a place to network and befriend their peers and communicate outside of class (Astin, 1984; Schlossberg, 1984; Maslow, 1943).

While online communities and OSNs are similar to other in-person communities, they are also different in terms of nature, content, and frequency of interactions between members (Levin-Epstein & PaperClip Communications, 2006; Stutzman, 2006a, 2006b, 2006c, 2006d). Some students use social networks to seek out relationship opportunities; but in general, students use OSNs to connect to others with similar interests. Students want to make new friends, reconnect, or stay connected with old friends (Fosbenner, 2005; Georgetown Voice Editorial Board, 2004).

During this research study, Facebook was the most popular online social networking community among college students, and is the sixth most trafficked site on the World Wide Web (Facebook.com, 2007). Now, Facebook is the most trafficked OSN overall with almost 1.2 billion monthly visits (McCarthy, 2009), the third most trafficked Web site in the United States, which is home to 30% of its membership (Alexa.com, 2009). Recognized student organizations regularly use Facebook for event planning, invitations, and communication. Unregistered student groups and informal social networks also use Facebook to communicate, particularly for party and event invitations (Arrington, 2005).

Legal Issues

Since the online social networking phenomenon is relatively new, a large number of potential legal implications have yet to be resolved, mostly dealing with liability, negligence, free speech, and maintaining a harassment-free environment conducive to a positive learning experience. It is unclear what liability can be assessed to universities for the online content posted by students in OSNs. Universities might very well face liability even without an official statement of

monitoring student-posted online content.

Yet, the biggest concern seems to be that if universities agree to officially monitor the online content posted by their students, then they may face liability for negligence. In essence, negligence is the failure to protect society against unnecessary or unreasonable risks; any person or institution that neglects to protect society, particularly specific individuals, can be held liable for the ensuing damages (Encyclopedia Brittanica, 2006). There is a chance that someone can sue a university for negligence for *not* warning a student about the pitfalls of participating in online communities. In fact, it is highly likely that universities need to take reasonable steps to educate students about potential pitfalls and risks in order to minimize the university's liability.

Methodology

This phenomenological, qualitative study analyzed student perspectives to examine the effects of OSNs (e.g., Facebook.com and MySpace.com) on students' educational and developmental experiences, campus communities, and the practice of student affairs. Student perspectives were gathered through focus groups and an online survey and help to inform student affairs professionals and administrators about the online social networking experience. By studying a few hundred students through the online survey, a small number of subjects through focus groups, and conducting participant-observation of student interactions within OSNs, patterns of relationships and meaning became clear (Creswell, 2003).

Sample Population

This study was conducted at the University of Southern California (USC), a large, private institution located in Los Angeles. USC is one of the largest U.S. universities with a total enrollment of about 33,500 students (USC, 2009). Thus, it is not surprising that USC reportedly has the highest percentage of its enrolled undergraduate students registered for and actively using Facebook on a regular basis (Facebook staff, 2006). As of July 2006, USC had over 1,000 active Facebook groups. Since Facebook removed network information pages from its system, information on specific usage of people affiliated with USC is not readily available (Facebook, 2009). Given that the broad array of literature reviewed for this study included a large assortment of college newspaper articles from around the country, expressing common themes and perspectives that were also reflected in comments posted on Facebook groups, the data collected should be fairly representative of all students across the country.

Observations

For this study, the researcher was an active participant in Facebook and other

OSNs. The researcher interacted with numerous students in a variety of capacities on Facebook, mimicking actual student-to-student interactions which provided first-hand experience with how OSNs work, their function, and purpose.

Document Analysis

The researcher read any published article or research that could be reasonably attained over the course of this study. This study is based largely on document analysis of current research related to online interactions; theories related to social networking, communities, and student development; pre-existing research data, findings, reports, and presentations; and the researcher's own experience within Facebook and other OSNs. This level of analysis reveals additional resources for interventions that universities may implement in order to alleviate concerns about online communities.

Surveys

An online survey conducted through SurveyMonkey, an online survey tool for the collection and initial analysis of data, enabled the researcher to collect the opinions and perspectives of individual students on 30 questions. These survey questions were tested for clarity with a few individuals prior to launching the survey through Facebook. Students enrolled at colleges around the country were encouraged to participate. Respondents were solicited using widespread advertising through e-mails and Facebook, including posting messages on the walls of the largest Facebook groups (totaling over 1.5 million potential survey respondents). The survey was active from December 2006 through early February 2007. In total, 367 students participated in the online survey, and 270 of those students successfully completed all sections of the survey.

The survey data were analyzed using the analytical tools provided on www.surveymonkey.com. The researcher categorized all responses to open-ended survey questions thematically. Though the intent of the researcher was for each survey question to ascertain different information about the student experience within online social networks, many participants felt that some questions were not very different. The researcher then clustered like questions together, and in some cases, grouped the responses accordingly. The university-related questions revealed information not only about the size and type of universities, but also showed which institutions were actively engaging in OSNs and/or talking to students about their online activities.

Focus Groups

Participants for focus groups of students enrolled at USC were solicited through targeted e-mail messages to specific, identifiable pockets of students which represented a variety of constituencies and levels of involvement within the

university. Focus groups were conducted with student officers from the Undergraduate Student Government, members of the fraternity/sorority community, officers and some members of another student organization, and some student employees and their friends. Specific incidents and problems that occurred within online communities were incorporated into the student focus group discussions. The focus groups also indicated any interventions these institutions might already have implemented, for example, educating students on how to be safe online, or instances where the university has sanctioned students for their online behaviors.

Six focus groups, lasting 40-60 minutes, of three to ten students each were conducted at the University of Southern California. Some, but not all, of these students completed the online survey. Each focus group was audio-taped and transcribed by the researcher who also took notes during the discussions. The researcher reviewed the audiotapes and handwritten notes of each focus group repeatedly during the transcription phase of data collection and analysis. After each focus group was transcribed, focus group responses for each question were coded into themes identified by the researcher. Initial themes and classifications of responses were collapsed into broader categories as necessary for ease of comprehension and data analysis.

Survey/Focus Group Questions

The online student surveys and focus groups included the following questions:

- What do you use online social networks for, and how do you expect your usage to change?
- What role do OSNs play in your life and college experiences?
- What is the difference between in-person communities (i.e., your school, your neighborhood, your city, and other communities you identify with) and online communities?
- How do you think participating in OSNs affects your college experience?
- What drawbacks do you see in this form of communication?
- What questionable content have you run across on Facebook, MySpace, or other online social networks?
- What are the positive and negative effects of OSNs on college students' experiences?
- What is your opinion on the benefits and drawbacks of students using OSNs?
- What is the appropriate response to content students post, and who should be responding to that content?
- What liability does a university face for content that students post?
- What level of involvement (advertising, participation, recruitment) is appropriate for the university?
- Is your university checking online social networks for potential policy violations?

- What should universities know about student participation in online social networks?
- What do you think the university could do to help educate students, and what material and methods should be included in any such educational program?

These questions, and more, were asked in various forms in order to address the three research questions.

Results

Research Question One: How do students utilize (OSNs), and in what ways do the students engage with each other?

To answer this first research question, the researcher studied students' perceptions of the ways in which they utilize OSNs and their interactions within these online communities. One of the key findings is that students believed that their use of OSNs was highly flexible. Users could engage in them as frequently or infrequently as they choose from the comfort of their own homes. Students also appreciated that OSNs served as a maintenance-free online directory. As a participant from Focus Group I said, "I do not have to write down e-mails or numbers anymore. All I need to do is remember someone's name,...go to Facebook, and find the easiest way to contact anyone." Students also valued OSNs because they allowed students to interact with each other more frequently and regularly than they could without the online communities. Some students commented that OSNs are "integral to the student experience" since making friends on campus from day one is a top priority.

Research Question Two: What do students feel are the benefits and drawbacks associated with their usage of online communities and online social networks?

By examining what students defined as the benefits and drawbacks of online social networking, educators will have a better understanding of the role this phenomenon plays in the lives and experiences of today's college students. It helps them determine to what extent and for what purpose students use OSNs. OSNs provide an easy way to keep in touch with friends and family due to their widespread use and ongoing, anytime access from anywhere in the world. The widespread use of OSNs by students indicates that connecting to other students is one of the foremost concerns of today's college students (Focus Group III). Students said that OSNs increase socialization, provide opportunities for entertainment, and help them become more involved in campus activities. According to most survey respondents, the primary benefits of OSNs are that they provide a "sense of community and commonality" and "definitely make the school feel smaller and [helps students feel] more connected," indicating that OSNs help students connect better with each other overall, even offline.

Among the key drawbacks students identified were their concerns about safety while online, identity theft, cyber-bullying, cyber-hate, and stalking. Student responses indicated that appropriateness of content is largely determined by who

views it and in what context. Respondents were also concerned about the repercussions of content posted online in terms of the appropriateness of the content, who posted it, and the extent of the repercussions. Some students also relayed that use of OSNs can detract from engaging in other productive activities or contribute to procrastination in studies. Most indicated that they would continue to engage in online social networking or spend that time on other activities, such as TV, movies, or other social activities. While students may not seem as outwardly concerned about these drawbacks as their parents or university staff, students' responses indicate that they are aware of these concerns.

Research Question Three: What Are Students' Attitudes And Perceptions About Staff And Administrator Involvement In Online Social Networks?

According to the data collected, students largely do not feel that universities can be held liable for content posted by students online. This may change if the universities implicitly or explicitly imply that they would monitor the online content of their students, which imposes a duty of care. Even without stated or implied monitoring, liability is yet untested in the courts; overall, students felt monitoring is justifiable, and in some cases necessary, for universities to educate their students about the potential pitfalls of online social networking. Respondents thought this would mitigate potential liability.

Although students widely believed that the primary function of OSNs is for students to communicate with each other, participants expected and appreciated staff participation within OSNs, as long as the university was not seeking out problematic content online. Participants were against corporate advertising or employers evaluating current or potential employees through OSNs. Students expressed that they were comfortable with universities responding to issues or misdeeds through online interaction in the same way that they would treat misdeeds face-to-face or in print.

Study participants indicated that as a result of staff participation in OSNs, they adjusted their privacy settings and edited content within their profiles. Most participants in this study felt that colleges and universities have a responsibility and a compelling opportunity to educate students about the risks and benefits associated with OSNs. The format and timing for the educational interventions could vary (see below for what students' institutions were doing at the time of the study). Respondents also suggested elements to include in initiatives. The concept of using students to deliver the message ran across the media for conveying that message. "Education on issues of concern could be addressed in a workshop during freshman orientation," said one respondent, so that all incoming students would receive a uniform message.

TABLE 1

Students' thoughts on educational interventions.

What interventions has your university implemented to educate students about the benefits and drawbacks of OSN?

| Orientation | Seminar | Newsletter, flyers, | Nothing that I |
|-------------|-------------|---------------------|----------------|
| program | or workshop | e-mails | know of |
| 13 (4.9%) | 16 (6%) | 33 (12.4%) | 205 (76.8%) |

What are some possible approaches the university might take to educate students about the issues of concern? What are additional steps the university might take to educate students about the benefits and drawbacks of OSN?

| Workshop, | Pamphlets, flyers | E-mails, | |
|------------|-------------------|--------------|-------------------|
| class | flyers | news | Other |
| 42 (15.7%) | 23 (8.6%) | 26 (9.7%) | 151 (53.9%) |
| (| class | class flyers | class flyers news |

Content for Educational Seminars, Workshops and Orientation programs

Focus group participants routinely felt that any educational measures should include information on the following crucial elements:

- privacy settings, safety, identity theft, and dangers of posting too much personal information online (students do not need to fill out every field of data that OSNs ask for);
- the effects of online social networking content on current or future employment;
- critical issues in the terms of use and user agreements;
- possible short- and long-term repercussions of their actions;
- personal accounts or "horror stories" from students who got into trouble as a result of the content they posted;
- appropriateness or inappropriateness of content, not as defined by the university, but rather to guide students into thinking about how they want to be perceived; and
- positive ways to use OSNs for in-class and out-of-class experiences, including the role of OSNs as community builders and venues for emotional support.

Students thought that if an educational intervention were to take place during orientation, every incoming student would be more informed about how to maximize the benefits of OSNs while minimizing the drawbacks. An online module similar to Alcohol.edu or online driver's education, ongoing workshops,

seminars, or an informational letter to students and parents about how students can use OSNs in a positive way would also be useful. Intermittent reminders through a variety of means would likely be more comprehensive and effective.

Positive Effects of OSNs as they relate to Orientation, Transition, and Retention

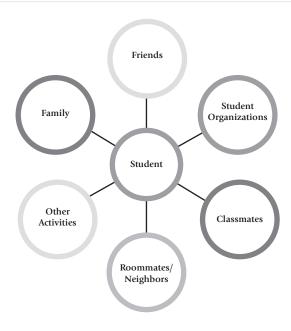
Orientation and Transition. OSNs help ease the transition for students from high school to college. Some universities have encouraged summer orientation leaders or resident advisors to search their students on Facebook before meeting them in person in order to get them involved and engaged sooner. Students also use Facebook shortly after they get their university e-mail account, searching profiles of their assigned roommate and checking their "compatibility." This can have both negative and positive implications. A negative result is that Housing/Residence Life offices have had to deal with an increase in roommate change requests before move-in day (Schweitzer, 2005). On the other hand, the increased presence of multiple, diverse populations online stimulates greater interactions between students with different backgrounds, leading to better understanding of each other and their experiences. This enhances the depth and breadth of connections students have with other students, eases their transition into the university setting, and contributes to their persistence and retention.

Retention. Students who are involved in campus life and activities such as student organizations, internships, and other out-of-class activities are less likely to drop out of the university as they have multiple social networks that support them during their time at the university. Social networks may include other members of their organizations, their roommates, hallmates, study groups, and friends; all of these networks serve to support students during college (Astin, 1984; Ellis, 2004). Research shows that OSNs serve a similar supporting function; they offer support, comfort, camaraderie, and even a distraction or pastime (Paperclip, 2006; Stutzman, 2005a, 2005b, 2005c). The structure provided by in-person social networks (Granovetter, 1973), and, by extrapolation, OSNs, imparts emotional support and a sense of belonging, which are crucial foundations for student success in college (Kuh et al., 2005; Maslow, 1943).

Figure 1 shows that when looking at a college student's in-person experiences separately from that student's online social networking activities, a great deal can be gleaned from the student's social interactions. For each student, spheres of social interaction may be loosely connected or not connected at all. There may be some individuals from one social sphere that exist also within other spheres, but that crossover is disconnected.

FIGURE 1

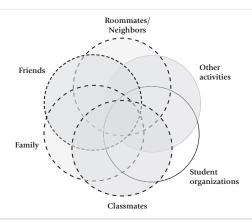
A conceptual model of a student's in-person interactions.



However, when looking at the effects of online social interaction, a very different level, type and frequency of interaction is evident, as illustrated by the overlapping spheres of social interaction in Figure 2.

FIGURE 2

A conceptual model of a student's online interactions.



Conceptually, the theories of Astin (1984), Schlossberg (1984, 1989), and Maslow (1943, 1970), woven together with Social Network Analysis as explained by Granovetter (1973, 1978), Hampton (2001), Stutzman (2005, 2006), and Wellman, and data collected to answer this research question, provide a foundation for understanding online communities and their impact on college students. Through online social networking, a student can interact with many formerly distinct constituencies simultaneously. Additionally, that person's friends and contacts are more likely to connect to each other independent of the primary individual than if the interaction is only in person.

Discussion

As technology grows in variety and scope, people are becoming concerned that there may be more breadth and less depth in social connections. Online communities in general and online social networks specifically provide a forum for multiple, simultaneous, overlapping spheres of social interaction that many users feel is important to their lives and experiences. This is certainly the case with college students who, in many ways, are already infusing technology in every aspect of their lives. Students order food and do other shopping through the Internet. They also use the Internet to turn in their assignments, collaborate with classmates, and conduct research for their assignments.

The Internet, through online communities and OSNs, is revolutionizing communication and socialization today as the telephone did for social interaction over 50 years ago. Students then chose to make calls rather than walk to their friend's house; now they choose to send e-mail, text, and instant messages instead of making phone calls. Transitioning to electronic communication (primarily e-mail) as students become more familiar with that technology saves universities time and money. Colleges and universities can communicate with more students more efficiently online then they ever could through paper. Rupert Murdoch, who purchased MySpace for \$580 million in 2005, made the following comment regarding online social networking:

To find something comparable, you have to go back 500 years to the printing press, the birth of mass media—which, incidentally, is what really destroyed the old world of kings and aristocracies. Technology is shifting power away from the editors, the publishers, the establishment, the media elite. Now it's the people who are taking control. (*Wired Magazine*, 2006)

It is likely that in the long run, OSNs will prove to be even more relevant in our daily lives. This study will be applicable and transferable to the impacts of any emergent technology on students' educational and developmental experiences. What this could mean for educators is an opportunity to help students navigate the challenges of preserving the depth and breadth of their communication with friends, family, and others without sacrificing their many other pursuits.

As discussed previously, society and higher education institutions have already identified a number of concerns with respect to online social networking. Generally, these concerns center on an interest in protecting the students from

harm resulting from their own behavior and protecting the university from legal action. As a result of those concerns, some institutions have considered taking action to control what students can or cannot view, post, or access. Other universities have opted to take a more educational route, addressing issues brought to the university's attention by talking to the student about the concerns resulting from his or her posted content. The responses to in-person concerns should be the same as responses to inappropriate online behaviors, actions, messages, and other content.

Some institutions recognize that the wisest and most prudent course of action is educating their students about the benefits and drawbacks of engaging in OSNs. Communicating through online social networks is so popular among college students and so prevalent in their lives that students will likely continue to utilize OSNs despite any intervention that universities might consider implementing. This is apparent since students already recognize many of the issues and concerns related to OSNs. While the specific Web sites, networks, or mechanisms may change over time, students will continue to engage each other and interact online. At the same time, colleges and universities want to meet students where they are academically, emotionally, cognitively (in terms of their developmental stages), and physically. Given these factors, if students are not at a location where we could offer them our services, programs, counsel, and advising, then we need to find new ways to reach them. This does not mean that the university should abandon its existing in-person programs and services; instead, the university should supplement in-person services and interactions with online interaction.

Since students will continue to participate in OSNs and other online communities because they believe that the benefits of doing so outweigh the drawbacks, higher education institutions need to educate students on being safer in their online activities. More importantly, student affairs practitioners, educators, and administrators have the unique opportunity to support students in their online social networking and utilize this medium for enhanced integration, engagement, involvement, and retention within the university.

Facebook, MySpace, and other OSNs, despite some of their disconcerting attributes and features, play a key role in the campus socialization process for undergraduate students. This is particularly important for new first-year students as they transition from the social network they had been building through high school to college where everything and everyone is different. However, ongoing participation in online communities and OSNs plays at least an equally prominent role in the lives and experiences of continuing students as do their in-person activities and interactions.

In the words of Cathy Small, author of *My Freshman Year* under the pen name Rebekah Nathan, today's campus communities are "small, individualized networks formed early, by choice, mediated by technology, and not really connected to academics" (Nathan, 2006). As opposed to the traditional sense of community—a sense of identity or affiliation based on shared experiences, geography, beliefs, needs, and preferences—college campuses are personalized communities of choices and individuals. In college, community is typically elusive

and not automatic. OSNs break down those barriers to interaction so that in addition to the often close-knit, in-person communities or social networks, there are numerous open, loosely woven and overlapping spheres of online social interaction existing simultaneously and continuously.

As a result, students are interacting online more than anyone would have thought possible several years ago, prompting universities to be concerned that students would be less involved and engaged on campus, and prompting society to be concerned that OSN users would be disconnected from real life. Despite the potential for negative applications that online communities and OSNs have, they still engage students, often in more ways than any campus activities office could think to attempt. The depth of that engagement and its impact remains largely undefined, but our understanding of it is enhanced by this research. This study shows that students are not less connected in person as a result of interacting online with increasing regularity. However, evaluating student involvement has traditionally required looking at the commitment of physical time and energy; Astin's definition of student involvement may need to be expanded to include online involvement or engagement.

The benefit students receive from being loosely connected to multiple individuals is as important a component of students' college experiences as having strong and close connections to fewer individuals. This speaks to Granovetter's concept of the strength of weak ties (1973). Furthermore, this study shows that OSNs help fulfill three of Maslow's hierarchy of needs for student experiences—the need for love and sense of belonging, the need for esteem and self-worth, and the need for self-actualization or reaching their full potential. Students interact within OSNs to find others that share similar interests. These commonalities then lead to students valuing and depending on each other for support and respect.

Recommendations

This study proposes that online communities warrant attention and support similar to that provided to other communities within the institution. By utilizing the findings of this research study, student affairs practitioners should be better able to determine the appropriate level and type of attention and service to direct towards online communities and OSNs. At a minimum, practitioners should acknowledge that students are engaging with each other online and that OSNs are an effective way to engage students with campus events, programs, and resources. As this online phenomenon is similar in function to other campus communities and has been increasing in popularity, student affairs professionals should consider targeting programming for this community. This can be in the form of educating students on how to protect themselves while online as well as how to use OSNs productively and meaningfully. As students increasingly engage in online communities and OSNs, they and their universities increasingly advertise and promote community events and campus programs. In some instances, traditional programs, such as an in-person student organization fair, may be drawing significantly fewer attendees. Institutions may be able to supplement in-person

activities and programs with online content to increase participation. An essential piece of advice for universities based on the findings in this study is that promoting the campus events through OSNs is generally anticipated and appreciated by students.

This researcher believes that there are no new behaviors occurring as a result of the existence of OSNs; rather, the same behaviors are being depicted and conducted through different media with more permanent evidence. Therefore, higher education institutions should think of OSNs as a new medium for the same behaviors. If a residence hall administrator is expected to follow up on a complaint from a student who says someone in her hall is writing threatening messages on her message board, then that administrator should do the same if another student is receiving threatening posts on his Facebook "wall." The same actions, regardless of the medium, warrant the same responses. Depending on the circumstance and free speech implications, a student affairs professional responding to inappropriate online content may not be able to force the offender to take down the content, but a professional staff member could talk to the offender about how that content will affect how he or she is perceived by others. It is best to treat these communities as any other venue for information distribution.

Existing campus policies should be sufficient to address any issues that arise. Some institutions are inclined to develop new policies and procedures for dealing with complaints they receive related to students' behaviors on Facebook or MySpace. In this researcher's opinion, this is both unnecessary and unwise. The liabilities that such new policies would incur upon institutions of higher education would be huge. Creating new policies would imply that for every new medium of communication and behavior, new rules and procedures would need to be developed. Also, students will be more likely to find loopholes through haphazardly developed policies. Certainly, the perception of liability will be questioned at some point in court. Participation in the sites may warrant a duty of care for the university to notice problematic behavior before it harms persons or property. This would be exacerbated by any official policies of monitoring.

Colleges and universities should have a holistic policy that can address any medium for behavior. If university administrators feel that their current policies are insufficient to address concerns about student participation within OSNs, then the same policies likely do not address other communicative media such as Instant Messenger, cellular phones, or other emerging technology. It might also make sense, depending on university preference, to have a guiding document outlining how the institution will both educate students on making the best use of OSNs and how the institution itself will utilize OSNs to engage students more effectively. By examining the impact of OSNs on student experiences, student affairs professionals can reach out and conduct programming for online communities as they would for a traditional Greek community, cultural student program, and other constituent groups.

Facebook, MySpace, and other OSNs have become prominent fixtures in the lives of our college students. In fact, in many ways they have pervaded multiple fac-

ets of society. Certainly OSNs, Instant Messengers, e-mail, and cellular phones have become preferred means of communicating and maintaining contact with a larger number of casual friends. It is clear that in terms of the student experience, OSNs are strong contributors. Even if the college or university would want to prohibit their use, students will either find a way around it or develop new methods of engaging in the same "sharing" behaviors. With these and other concerns, it is clear that we will have more questions in the future, not fewer. As technology evolves, it is incumbent upon staff to understand the uses of the technology, its implications, and the role that the institution should take, if any.

The effects of this study on the practice of student affairs can be summarized in three points:

- 1) Educate: Universities must educate students on how to use these tools safely and wisely to minimize liability concerns while helping students make the best use of OSNs.
- 2) Participate: Students want some sort of university presence within their online world. They expect staff to market campus activities and to be able to communicate with faculty and staff online. Students also want to connect to staff (i.e., to see if they have shared hobbies, interests, or background).
- 3) Translate: An institution's staff can channel students' online engagement into more robust on-campus engagement and in-person interaction. This includes connecting online activities to in-person equivalents and vice-versa and supporting them accordingly.

In short, universities should embrace, not oppose, student usage of OSNs.

Recommendations by Functional Area of Campus

Considering the widespread use of online social networking among students, institutions must educate new students on how to take advantage of the benefits of OSNs while mitigating the negative effects. It is equally important to provide educational measures on OSNs to students in leadership roles. As student leaders, and often student employees, these students represent the university. The behaviors they emulate and actions they take will be replicated by others. The images that these student leaders reflect may be seen as sensible, acceptable behavior by new and current students. Some of the same issues that apply to students also apply to staff and faculty who must remember that what they say and do online will be viewed as an example of acceptable behaviors and emulated by students and others. Staff and faculty should be educated accordingly and prepared to engage students productively within online social networks. Table 2 shows recommendations by functional area of a campus.

Recommendations by Functional Area of Campus

| Functional Area | Recommendations for Practice: How can OSNs be used to engage students in campus life? |
|--|---|
| Residence Life | Residence hall advisors can form an online group for residents on their hall/floor/building for convenient event promotion or announcement or to invite suggestions for what programs students might be interested in participating. Resident Advisors can check out student profiles to determine their interests and plan group outings accordingly. |
| Student Life and Campus Activities | A virtual student organization fair can be conducted online with campus student organizations and online Facebook groups. Campus events and resources can be promoted online. Commuter students, already less likely to be involved/engaged in campus life, can be "plugged in" to the campus through OSNs, where they can connect to resources and individuals through online communication. Other student populations, including transfer, returning, and international students who may not have been as involved with campus life, can be engaged in a similar manner. Specific Facebook pages may be set up for each type of student constituency. |
| New Student Orientation | Orientation staff may educate students about the benefits and drawbacks of using OSNs. Orientation leaders may form online groups for the students they interacted with over summer. This would be useful in following up with students to see how they are doing throughout the year. |
| Academic Life | Faculty advisors can communicate with students rapidly through OSNs. This would be helpful for schedule-building or offering help in coursework. Teaching assistants can have virtual office hours to be available for initial contact with students. Faculty-to-student mentoring can also occur online. |
| Alumni | Members can track what interests and activities students participated in while on Association campus, which will help when soliciting donations later. More support might be acquired by looking up friends of alumni that are active in the Alumni Association and already giving to the institution. |

Student Peer Mentors

 Peer mentors can connect with their mentees more readily through OSNs. This can be useful for setting up the initial meeting and for the mentor to learn about the mentee's interests and classes.

Gender and Cultural Student Program Offices

- As one of the benefits of higher education is exposure to people of diverse backgrounds (in terms of demographic characteristics, identity, and upbringing), it is recommended that services offered by these offices be available both online and in person. At the University of California, Riverside, the LGBT Resource Center institutes weekly online chats with student volunteers for anyone who wants to talk about their sexual/gender orientation or related topics.
- Facebook groups may be created both for the office as a whole as well as student sub-groups affiliated with the office to reach out to a larger population of students.

While these recommendations were classified by the functional area of campus, a number of them apply to multiple functional areas, all of which will help student affairs practitioners and other staff members successfully integrate OSNs into a productive college experience. These recommendations are simply a launching point. Each college or university should think about what particular challenges face its campus and how best to program for their student body and campus culture. By implementing any of the previous recommendations, an institution can embrace OSNs as important components of the campus community, just like intramural sports or intercollegiate athletics are common avenues for university support of its campus culture.

Principles for Institutional Policies and Sample Policy

Any institution that is considering policy revisions or new policies regarding how the university and its employees should or would interact with students within online social networks should consider the following principles in developing such policies or initiatives. These principles will guide institutions in developing or revising policies that are comprehensive, inclusive, and broad. They will also help colleges and universities avoid assuming additional and unnecessary liability. These principles will adapt and evolve as more case-law around this area is developed.

- Higher education institutions should not explicitly state, nor imply, that
 the school will be monitoring online social networks for problematic
 content or student conduct violations.
- Institutions may consider stating that any complaint or concern filed about a student's conduct or actions could include online content as material on which to establish said claim. This is no different than a student filing a concern about a peer based on a behavior they witnessed in person.

- Institutions should not explicitly state that participation within OSNs is part of the job description for any professional or student staff. The college or university would have difficulty regulating what that staff member did within the OSNs outside of the scope of employment.
- Institutions could refer to utilizing OSNs as a venue for event promotion, publicity, and marketing to their student populations.
- Institutional policy should certainly commit to educating students about the benefits and drawbacks of online social networking, just as university policy generally would indicate that the institution exists to provide education to its students to prepare them for further studies, the work force, and to be productive members of society. Training should be tailored to new students, student leaders, staff, faculty, and administrators separately, as each constituency may utilize OSNs differently.
- Institutional policy ought to include provisions for campus resources to support student engagement through online communities, OSNs, or any other emergent technological phenomena for communication.
- Colleges and universities can look to OSNs as one of the best ways in which to reach out and engage students.

Using these principles, universities can develop policies regarding OSNs. For example, at the Office of Residence Life at Shell Rock University (SRU), a hypothetical university, this is what that policy, guiding document, or handout in the student's move-in packet may look like:

At Shell Rock University, the Office of Residence Life is committed to supporting the ongoing and varying needs of our residents to promote a vibrant and actively engaged student experience. SRU acknowledges that students are interacting online, within such online communities or online social networks as Facebook and MySpace, as well as through other technological media.

Working with the Office of New Student Orientation, the Office of Residence Life will educate all incoming students on the benefits and drawbacks of online social networking in the hopes that students will maximize the utility of these online communities while mitigating negative consequences. All students will receive this message and training during orientation, whether they will be living on campus or not, as we anticipate residential and off-campus students to be interacting significantly online. Residence Life will also work with the Campus Activities Office throughout the year to promote ongoing education and tips for students to continue to use these forms of technology positively.

Any student groups forming online that are interested can apply for programming funds to support an in-person social gathering or activity pertaining to their stated interests. The Residence Hall Association in concert with Residence Life staff will review such requests and make allocations accordingly. In collaboration with the Office of Campus Activities, all student

groups on Facebook, MySpace, or other online social networks will be able to register for campus recognition for room reservations, as well as to provide a list to residents of all online groups so that students may intentionally seek them out.

The Office of Residence Life, and Shell Rock University as a whole, is not in the business of seeking out student conduct violations on Facebook or other online social networks. As with student conduct violations that occur in person and are reported to the university, the university is obliged to follow up on any reports, whether the behavior that has allegedly occurred is depicted within online social networks or not. The role, purpose, and function of university professional staff participating within online social networks are not mandated by the university whatsoever. Some staff, as well as student leaders or student employees, may use online social networks for publicity, marketing, and event promotion, much akin to some aspects of how students as a whole utilize online social networks.

The Office of Residence Life encourages our staff to engage with our students in ways that are meaningful, productive, and effective from the student's point-of-view. Resident advisors, resident directors, and other staff members will want to stay informed about the venues for interaction preferred by students and will participate accordingly. Should you have any questions or concerns about this, please do not hesitate to contact your Resident Advisor or Director to offer feedback.

Other individual departments and the university in general will want to adapt the principles mentioned here and insights from the university's own experiences, structure, and culture, to develop policies appropriate in scope and content to its own involvement within online social networks. This is only a sample of what that guiding document might look like.

Implications for Future Research

As this study is one of the first major research studies into online social networking, there are a number of interesting areas for future research:

- Assessing how court rulings impact user behaviors online, particularly student-staff interactions;
- Observing how student usage of OSNs change from one institution to another;
- Noting how differences in institutions (public versus private, demographic, location, commuter versus residential) affect usage;
- Noting the differences in usage between and among OSNs;
- Comparisons over time (using this study as a baseline for comparison);
- Focus groups and surveys of staff (entry- to senior-level) as relates to this study;
- Rorschach-like test of respondents' first reaction to a prompt of each function of Facebook (for example, "What is your initial reaction when

- you think of the Facebook 'poke' feature?");
- Exploring OSNs as vehicles for mourning, empathy, and other emotional support;
- Examining the impact of OSNs for multiculturalism and diversity education;
- Examining the impact of student engagement and involvement within OSNs;
- Physically sitting with students as they engage each other in OSNs and both observe and interview simultaneously;
- Discovering the impact of OSNs as college students are increasingly exposed to the phenomenon and technology at earlier ages; and
- Securing OSN developers, managers, and owners as partners for any research endeavor to influence the topic of study, gauge the results, or to be the focus of study.

References

- Alexa.com. (2009). Facebook Statistics. Retrieved September 5, 2009 from http://www.alexa.com
- Antonio, A. L. (2004). The influence of friendship groups on intellectual self-confidence and educational aspirations in college. *Journal of Higher Education*, 75, 446–471.
- Arrington, M. (2005, September 7). 85% of college students use Facebook. Retrieved from http://www.techcrunch.com
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297–308.
- Beavers, C. (2004, November 30). Online black book binds college students nationwide. *The Independent Florida Alligator*. Retrieved from http://www.alligator.org
- Berkeley Survey. (2006). Preliminary findings of a survey of students' online interactions. University of California, Berkeley. Presented at NASPA Drive-In, Spring 2006.
- Business Week Online. (2004, July 21). *A hot new twist on the old college try*. Retrieved from http://www.businessweek.com
- Chickering, A. W. (2000). Creating community within individual courses. *New Directions for Higher Education*, 109, 23–32.
- Coomes, M. (2005, December 2). A quick guide to facebook.com. *The Courier-Journal*. Retrieved from http://www.courier-journal.com
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Ellis, S. (2004). [Review of the book *Enhancing student engagement on campus*, by A. Sandeen]. *Journal of College Student Development*, 45, 261–262.

- Encyclopedia Brittanica. (2006). *Freedom of Speech*. Retrieved from http://brittanica.com
- Esposito, T., & Lang, J. (2006). Presentation to the Association of Student Judicial Affairs at the 18th Annual Conference. *Overexposure? Discovering and responding to conduct code violations from online sources*.
- Evans, N. J., Forney, D. E., & Guido-DiBrito, F. (1998). Student development in college: Theory, research and practice. San Francisco: Jossey-Bass.
- Facebook.com. (2006). *Facebook Web site*. Retrieved June 14, 2006, from http://www.facebook.com
- Facebook.com. (2006). Web site terms of use policy. Retrieved June 15, 2006, from http://www.facebook.com
- Facebook.com. (2007). Web site statistics. Retrieved June 2, 2007, from http://www.facebook.com
- Facebook.com. (2009). Web site statistics and Facebook Factsheet. Retrieved September 1, 2009, from http://www.facebook.com
- Fosbenner, A. (2005, February 8). Facebook me. *The Appalachian*. Retrieved from http://www.theapp.appstate.edu
- Georgetown Voice Editorial Board. (2004, April 22). Facing the book. *The Georgetown Voice*. Retrieved from http://www.georgetownvoice.com
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Granovetter, M. (1978). Threshold models of collective behavior. *American Journal of Sociology*, 83(6): 1420–1443.
- Hampton, K. (2001). *Living the wired life in the wired suburb: Netville, globalization and civil society.* (Doctoral dissertation). Department of Sociology, University of Toronto.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). Student success in college: Creating conditions that matter. San Francisco: Jossey-Bass.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4): 370–96.
- Maslow, A. H. (1954). Motivation and personality. New York: Harper & Row.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.
- McCarthy, C. (2009, February 10). Whee! New numbers on social network usage. Retrieved from http://news.CNet.com
- Nathan, R. (2006). My freshman year: What a professor learned by becoming a student. New York: Penguin Books.
- Nuss, E. M. (2003). The development of student affairs. In S. R. Komives & D. B. Woodard (Eds.), *Student Services: A handbook for the profession* (4th ed.) (pp. 65–88). San Francisco: Jossey-Bass.
- PaperClip Communications. (2006). *Cyber communities and online social networks:* What campus administrators need to know. Little Falls, NJ: PaperClip Communications.

- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Schlossberg, N. K. (1984). Counseling adults in transition: Linking practice with theory. New York: Springer.
- Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults*. San Francisco: Jossey-Bass.
- Schweitzer, S. (2005, September 26). When students open up -- a little too much. Colleges cite risk of frank online talk. *Boston Globe*. Retrieved from http://www.boston.com
- Stutzman, F. (2005). An evaluation of identity-sharing behavior in social network communities. Paper presented at the meeting of the School of Information and Library Science. UNC, Chapel Hill.
- Stutzman, F. (2005). Social network analytic approaches to the World Wide Web. Term Paper. UNC Chapel Hill.
- Stutzman, F. (2005). *Weblogs: An introduction*. Paper presented at the meeting of the UNC Information Technology Services Conference. UNC Chapel Hill.
- Stutzman, F. (2006a). *Our lives, our Facebooks*. Paper presented at the meeting of the International Sunbelt Social Network Conference. Vancouver, BC.
- Stutzman, F. (2006b, January 8). Re: Student life on the Facebook [Web log message]. Retrieved from http://chimprawk.blogspot.com
- Stutzman, F. (2006c, January 23). Re: How university administrators should approach the Facebook: Ten rules [Web log message]. Retrieved from http://chimprawk.blogspot.com
- Stutzman, F. (2006d, April 25). Re: Transience in social networks, or how to bear MySpace and Facebook [Web log message]. Retrieved from http://chimprawk.blogspot.com
- Stutzman, F. (2006e, May 6). Re: Google tech talk [Web log message]. Retrieved from http://chimprawk.blogspot.com
- USC. (2009). *USC At a Glance*. Retrieved August 30, 2009, from http://www.usc.edu
- Wellman, B. (1998). *Networks in the Global Village: Life in Contemporary Communities*. Boulder, CO: Westview Press.
- Wellman, B., & Hampton, K. (1999). Living networked on and off line. *Contemporary Sociology*, 28(6), 648–654.
- Wikipedia.com. (2009). *Online social networks*. Retrieved September 1, 2009, from http://www.facebook.com
- Willard, N. (2006, April 26). Expert sees need for school staff to access social-networking sites. Retrieved from http://www.edweek.org
- Wired Magazine. (2006). *His space*. Retrieved from http://www.wired.com/wired/archive/14.07/murdoch.html