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UNDERSTANDING THE DEEPLY ENGAGED MINDSET  
AMONG ACTIVE BUCKNELL STUDENTS

by

Max Byron Meng

A Thesis

Presented to the Faculty of  
Bucknell University  
In Partial Fulfillment of the Requirements for the Degree of  
Master of Science in Education in the Education Department

Approved:

  
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\_\_\_\_\_  
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UNDERSTANDING THE DEEPLY ENGAGED MINDSET  
AMONG ACTIVE BUCKNELL STUDENTS

by

Max Byron Meng

ABSTRACT

This thesis reports on a qualitative phenomenological investigation of the personal experiences of nine undergraduate students who attended Bucknell University, chosen on the basis of their shared experiences of deep immersion in social networking platforms; all had attained values of 40 or above on their Klout Scores, which measure social influence. Thematic analysis of interview transcripts and social analytic metrics, was used to identify the unique ways in which student engagement occurs online. Based on a review of the data, it appears that traditional principles of social influence are applicable to online interactions. The *social engagement cycle* and its *collaborative loop* are helpful in describing the phenomenon of social student engagement. Three categories of online student thought leaders emerged from this research: *collaborators*, *connectors*, and *contributors*. Interview data revealed that the participants valued connectedness, sought acceptance and gratification from online listeners, displayed skills in filtering through dense information, used social media as their primary source of news, and gravitated to others online who had interests similar to theirs. Also, findings suggest that social media use enhances student collaboration, which encompasses salient academic and non-academic aspects of the student experience.

## CHAPTER 1

### INTRODUCTION

Cynthia is a 20-year-old college student at Bucknell University. Throughout the day, even during her classes, she uses her iPhone to post messages to her friends' "walls." Following her classes, she usually heads to her residence hall room or the Bertrand Library to log on to Facebook to see what her friends have posted for her. She spends a few minutes reading their notes and visiting their pages to see recently posted photos. Sometimes she hears a new song on her friends' pages or finds out about their evening plans. Sometimes, she may even go on a "liking" frenzy to let her followers know she is listening. Usually, during her Wednesday evening lab, she discreetly sends text messages back and forth to her friends on her smartphone to find out which party on 7th Street everyone is hitting. After her lab, she meets up with her friends at a party for a good time and afterwards posts photos of them on Facebook. She adds a few tags to identify people she recognizes in her photos so that others can find them more easily. She also leaves comments teasing her friends and even sends a "poke" or two to them. Facebook is a central hub for her social group, and it provides an event calendar, a message center, and a photo album documenting their good times together. Facebook helps her track and organize her busy social life.

If I were to describe Cynthia's routine to someone of her generation, that person would not find her social behavior unusual or any deviation from the norm, because social interaction has undergone a transformative evolution since I attended my first college class 35 years ago. Let me explain. I decided to return to college in order to

pursue a second master's degree and work toward earning a doctoral degree. Anyone who returns to school as an adult knows that this experience, as with previous transitions, makes us reexamine our personal identities and how we socially relate to others in a new environment. We become observers of what was once just lived in our youth. Things once unnoticed—our reliance on relationships, for instance—take on new meaning. As an adult learner, I find myself constantly reflecting on my actions, choices, and relationships that I formed over the years and my experiences resulting from my social interactions with others.

Upon personal reflection, I have encountered many transitions during my lifetime, but none seems to me to have been as impactful as the friendships and social interactions that I developed within my college campus community years ago. The connections I forged during this time led to meaningful learning experiences and future opportunities. As I began to re-acclimate myself to the college scene, it soon became apparent to me that traditional face-to-face interactions, which had been so familiar to me, had been replaced by social networking sites. While attending class among “Millennials,” as members of the current generation of traditional-aged college students are widely known, I observed that a large majority of them were constantly on social media engaging with others through multiple social networks. Often pretending to be taking notes during the professor's lecture, they were engaging with their friends, scanning their Twitter feeds, or “creeping” on Facebook. Understanding how and why college students use social media began to intrigue me, and I wanted to explore this phenomenon. It was this curiosity that ultimately served as the inspiration for this investigation.

## Background

Social networks are online platforms where people create profiles of themselves and interact with other people. The rise of Internet technology and social networking sites has led to a new wave of student social engagement that differs from traditional forms of face-to-face interaction among members of the campus community. Students spend a significant amount of time with social media.

Social networking sites, such as Facebook, Twitter, and LinkedIn, have transitioned from fad to mainstream to global phenomenon over the last few years. In the first quarter of 2010, Facebook surpassed Google for the most page visits (Tsotsis, 2010), confirming a definite shift in how people are spending their time online. Citing this event as proof that the Internet has now become more a social milieu than a tool for research and information might be somewhat indefensible; however, this data point does suggest that social networks are satisfying some very basic human desires on a mass scale that search engines were perhaps never designed to fulfill. Social networks are changing the way we live our lives online and offline (Grossman, 2010), and they are enabling technology to bring out the best and sometimes the worst in us. Consequently, student affairs professionals need to be aware of how students use online social engagement and explore how this new phenomenon can be harnessed to foster student retention, involvement, identity development, and active and collaborative learning.

## Functions of Social Networking

One of the main reasons social networks, such as Facebook, are favored among college students is that everything they need is in one place. It is similar to a broadcast center, where they can communicate with their friends individually or as a group, while also reading what their contacts are doing. For example, aside from updating their statuses simultaneously across several outside platforms, they can manage their calendars to see what events are coming up and where their contacts will be going. They can also join groups indicated by a variety of topics and organizations that they support and follow, enabling them to communicate directly with other members without having to manage dozens of outside groups and links just to stay in touch. If they need anything to help them accomplish a task, they can search the Facebook application directory and find the right tool for the job. They can communicate with everyone in one place, using a variety of embedded tools that reach people in a manner that they prefer. Social networking is about getting away from the clutter, overflowing inboxes, contact spam, and unannounced phone calls. It is about building and maintaining personal relationships. It is also about a new take on self-presentation, enabling today's young people to reach individuals and targeted groups with specific information that is of value to them. It is about involvement. It is about self-identity.

Even if Facebook and Twitter were to lose their popularity and be replaced by a new platform that college students found more favorable, it would still be important for student affairs professionals to be aware of how social student engagement affects college students' learning and development, especially in their construction of racial, ethnic, and

gendered selves in early adulthood. Social networks are predicted to be among the top strategic technologies that will significantly impact higher education for the next few years, and campuses are encouraged to add social platforms to their conventional websites or applications, “sooner rather than later” (Violino, 2009, p. 29).

Social network platforms serve a dual purpose to help users meet new people and then to stay in contact with them. Social networks are also called “virtual communities” or “profile sites,” and the relationship-building capacity of these sites results in more than simplistic social consequences, particularly when it comes to higher education (Wandel, 2008, pp. 35-36). College students today live in hybrid environments where their behavior in micro-societies is interwoven with their physical brick-and-mortar campuses (Martinez Aleman & Wartman, 2009).

College students use social networks to keep in touch with off-campus or high school friends. Students that have Facebook accounts use them “primarily to maintain existing off-line relationships or to solidify what would be ephemeral, temporary acquaintances” (Ellison et al., 2007, p. 1155). Also, students use social networks to keep in communication with others on campus and to establish new relationships. Some of the most popular uses of social networks by college students are “making plans, checking out people (to find out more about them), checking on their current boy/girlfriend [sic], entertainment, and procrastination” (Stern & Taylor, 2007, p. 13). Social networks are also used to “post/look at pictures, to make new friends, and to locate old friends” (Raacke & Bonds-Raacke, 2008, p. 171).



## Social Student Engagement

It is an obvious fact that college students spend most of their time outside the classroom. As student affairs professionals, our greatest hope is that students will fully engage in the many exciting programs and events our institutions have to offer, and that they will seek out opportunities to fully engage with people from diverse walks of life. In doing so, they grow as students, as young professionals, and as persons who can progressively contribute to society. The pathway each student chooses is based on the classes he or she takes on campus and his or her interactions with others during this developmental period.

The phenomenon of student engagement has enjoyed considerable attention in the literature of higher education and student affairs since the mid-1990s, and its beginning can substantively be seen in previous works by Alexander Astin on student involvement and Vincent Tinto on social integration. It is not difficult to understand why there has been a major focus on this topic, because a sound body of literature has established strong correlations between student involvement in a subset of “educationally purposive activities” (Coates, 2005, p. 26), and positive outcomes of student success and development, including satisfaction, persistence, academic achievement, and social engagement (Astin, 1984, 1993; Berger & Milem, 1999; Chickering & Gamson, 1987; Goodsell, Maher & Tinto, 1992; Kuh, 1995; Kuh, Kinzie, Schuh & Whitt, 2005a, 2005b; Kuh & Vesper, 1997; Pace 1995; Pascarella & Terenzini, 1991, 2005).

Also, more than ever before, institutions of higher education are feeling increased pressure to attract and retain students, satisfy and develop them, and ensure they graduate

to become successful, productive citizens. Kuh, Palmer, and Kish (2003) have demonstrated that what students bring to higher education, or where they study, matters less to their success and development than do their activities during their time as students.

Accessing mobile Internet technology through social networks and multiple devices has led to a new wave of student social engagement (HERI, 2007; Dahlstrom, de Boor, Grunwald & Vockley, 2011). Students spend a significant amount of time on social networking platforms, and higher education institutions have recognized the enormous potential of connecting with their students through various social media channels for admissions, community building, and leading edge retention efforts (Selwyn, 2009; Yu, Tian, Vogel & Kwok, 2010; Junco, Heiberger & Loken, 2011; Junco, Elavsky & Heiberger, 2012; Junco, 2014).

Numerous studies have found student-peer culture to be a key predictor in a range of educational outcomes including commitment to the institution, as well as persistence or departure (Nora, 1987; Spady, 1971; Terenzini & Pascarella, 1998; Tinto, 1993), leading Astin (1993) to boldly state that fellow students are “the single most potent source of influence” (p. 398) in the college student experience, a claim that is backed by substantial academic research. For example, the most notable work on student retention is Tinto’s (1975, 1987, 1993) *Student Integration Model*, which emphasizes the importance of integrating academic and social environments to influence student retention rates. Support for the role of social integration in student retention can be found in educational research (Astin, 1975; Endo & Harpel, 1982; Pascarella & Terenzini, 1980), as well as psychological, sociological, and economic theory (Bean & Eaton, 2002; Braxton &

Hirschy, 2005; Tinto, 2007). While methods and perspectives vary among the researchers, there is a broad consensus on one conclusion: “social engagement” is an essential component of academic persistence and student retention, especially during the first year.

At selective, residential liberal arts institutions, such as Bucknell, students are privileged. Their social and cultural capital has enabled them to enter environments where boundless opportunities exist all around them. Such students have access to some of the finest professors, researchers, and administrators, and their academic programs are second to none, yet academics are only part of the educational equation that adds up to a life well lived. In fact, in 2013, the Division of Student Affairs at Bucknell created a structured co-curriculum, in partnership with a vendor, CampusLabs, which requires the use of social media to help engage the whole student—mind, body, and soul—and ensure that he or she leaves Bucknell fully developed.

With recent advancements in the digital ecosystem, it would seem plausible that the concept of student engagement might transform itself to conform to today’s social-media-obsessed college students. This proposition is the impetus behind my research question: *Do students who are deeply involved in online social interaction manifest patterns of behavior that are consistent with traditional notions of student engagement, and if so, what unique forms does student engagement take within a digital context?*

### Purpose of the Study

The purpose of this qualitative study was to identify common patterns in the online behavior of college students whose presence in the cyber world was demonstrably influential, based on publicly available data. The focus of the research was on behaviors that paralleled those traditionally manifested by highly engaged student leaders on campus. The goal of the research was to clarify how the concept of student engagement has evolved to reflect the growing use of technology as a medium by which students interact with their campus communities.

This study consisted of an in-depth examination of the personal experiences of undergraduate students at Bucknell University, chosen on the basis of their shared experiences of deep immersion in online social networking. As such, it was not designed to test generalizable hypotheses empirically. However, with respect to the individual participants, all exhibited strong influence on the social web, as evidenced by their high engagement scores. Further, all reported substantial investments of both time and psychological energy in their online interaction with peers, consistent with traditional definitions of student engagement, but in ways that were uniquely reflective of the digital medium.

### Research Methodology and Orientation

My principal method of data collection consisted of interviews with nine undergraduate students at Bucknell, who had been identified as highly influential in their social media use, based on both the quantity and impact of their online postings. A

supplementary form of data used in my analysis consisted of social analytic metrics obtained through online sources.

During my interviews with the participants, I used open-ended questions to focus my attention and to identify common interpretations of their personal experiences. Within this essay, I have chosen to preserve the voices of my participants in my presentation. In this way, I hope to familiarize the reader with their personalities as I have come to know them over these past few months.

## CHAPTER 2

### LITERATURE REVIEW

Over the last few years, social networking has dramatically changed the ways in which humans interact with one another. This swift cultural transformation may account for why there is currently little research in the academic literature on social networking as it relates to student affairs in higher education. Because the body of research in student affairs is still developing, I have drawn on research from other disciplines to offer valuable insights on the subject. In this chapter, I will describe the characteristics of the Millennial generation, their use of technology, and the chaotic digital ecosystem in which they live. I will define the construct of social student engagement and highlight its links to academic and social integration. I will also discuss how social media use influences students' identity development. I will introduce aspects of social influence that have been recognized as significant within an online setting. I will describe three styles of social interaction that emerge from my review of the literature. Finally, I will describe what I call the *social engagement cycle* and its *collaborative loop*, also based on my readings, to provide the reader with a better understanding of what happens during an online exchange.

#### Characteristics of the Millennial Generation

Millennials are perhaps the most studied generation thus far. Howe and Strauss (2000, 2003) have synthesized data pertaining to this generation from numerous sources. Likewise, Levine and Dean (2012) have provided a comprehensive portrait of this

generation's unique aspirations, values, and needs, based on surveys of college students and student affairs professionals. However, before one can fully understand the mindset of current college students, I believe it is important to understand the chaotic digital ecosystem within which their generation operates.

Millennials are a hyper-connected generation, born between 1980 and 2000. At 86 million strong, they are the largest generational cohort in American history (Doherty, 2013). Earlier generations of college students were recognizable by the way they carried their notepads and books under one arm. In contrast, Millennials usually carry backpacks over their shoulders, to cushion their laptops, as they rush between classes with their heads down, gazing at their smartphones and using their thumbs to scroll for messages. Even when joined by their peers to walk along a campus pathway or sit as a group in the library, rarely a word passes between them, as they lean over their smartphones, fingers tapping and sweeping. Although aware of each other's presence, they seem to be comfortable with a lack of any face-to-face interaction.

### *Millennials Are Influential*

The opinions of Millennials matter a great deal in the digital ecosystem. Their influence is a result of their ability to scour massive amounts of information, to discern its quality and veracity, to make meaning of it, and to effectively disseminate it to their peers. According to Levine and Dean (2012), "social networking enables students to build a tribe and to keep it informed and involved" (p. 72). The authors have contrasted this generation with those who came before them, noting that young people have

traditionally passed through a series of friendship groups over the course of their lives, with ties that fade with each transition. Through social networking, communication can be maintained with peers over time, even in the absence of face-to-face contact.

Because of this generation's digital connectedness, their world view is dramatically different from that of their parents. Levine and Dean (2012) observed that "parents of today's college students grew up in an analog, national, industrial society and their children grew up in a global, digital, information economy" (p. xv), after the advent of Apple, Microsoft, personal computers, CD's, mobile phones, e-mail, instant messaging, and the Internet. Today's students are comfortable with complete transparency, coming of age using mobile online technology.

Whether this generation of undergraduates is aware of it or not, they influence others simply through organic conversations about their experiences. Students are prone to complain about their institutions and their academic conditions on social media, in particular on Facebook (Selwyn, 2009). For example, a first-year student at Southern Illinois University Edwardsville (SIUE) vented her disappointment publicly on Twitter, after not being accepted into SIEU's nursing program because of an error in course selection. Student affairs professionals on campus saw her tweets of frustration and decided to intervene on her behalf. They helped the student appeal the decision, which was successfully overturned, and she was admitted to the nursing program (Junco, 2014).



### *Millennials Make Extensive Use of Technology*

Among current college students, there is a culture of hyper-connectedness that has never been experienced before, because Millennials live in a multi-screen ecosystem with smartphones, tablet computers, and other mobile devices that were not available to previous generations of students. In fact, smartphone ownership has increased dramatically in just a few years. In 2013, 37% of teens in the United States owned a smartphone, compared to 23% in 2011. Additionally, 23% of teens reported owning a tablet. Interestingly, 74% of all teens 12-17 reported at least occasionally accessing the Internet on smartphones, tablets, or other mobile devices (Madden, Lenhart, Duggan, Cortesi & Gasser, 2013).

Regarding social networks, the Pew Internet and American Life Project found that between 67% and 75% of college-aged young adults used social networking platforms (Jones & Fox, 2009; Lenhart, 2009; Lenhart, Purcell, Smith & Zickuhr, 2010). Research shows that the most popular social networking platform among United States college students is Facebook, which is used by 79% to 99% of college students (Hargittai, 2008; Junco, 2012b, 2013b, 2014; Smith, Rainie & Zickuhr, 2011). Data collected by the EDUCAUSE Center for Applied Research (ECAR) found that 90% of college students used Facebook, with 58% of respondents reporting they used it several times a day (Dahlstrom, de Boor, Grunwald & Vockley, 2011). These “digital natives,” a term coined by Prensky (2001), seem to suffer from a short attention span because they consume dense doses of information, demand only content from their social networks that is

relevant to them, and prefer to socially interact with a host of cohorts online, rather than offline.

Insofar as social media use is popular among college students, and their rate of Internet use is higher than that of the general population, their hyper-connectedness would appear to be mostly due to the fact that they typically have unfettered access to multiple devices and mobile broadband connections (Jones, Johnson-Yale, Millermaier & Peres, 2009; Smith, Rainie & Zickuhr, 2011; Palfrey, 2010). A 2010 Pew Internet and American Life Project report revealed that 93% of young people ages 18-29 had smartphones and the same percentage regularly went online (Lenhart, Purcell, Smith & Zickuhr, 2010). According to a *TIME.com* article entitled "Millennials: Trust No One But Twitter," members of this social media-obsessed generation "learn what they think about Congress, how they think about God, and what they want from a shampoo not from the institutions trying to promote those ideas (or that shampoo), but from each other" (Drexler, 2014). However, technology experts see many within this particular generation becoming nimble analysts and decision-makers, because of their embrace of the networked world (Lenhart, Purcell, Smith & Zickuhr, 2010).

Social networks, such as Facebook, Twitter, LinkedIn, and Instagram, to name a few, have gained significant popularity over the last few years. This is, of course, in addition to texts, emails, and phone messages one receives throughout the day. This digitally literate generation uses social media to comment and converse with others. They use it as a source of inspiration, to consider new ideas relevant to their interests, to evaluate topics among their peers, and to seek validation of their opinions from audiences

of willing listeners. They use social media “to bring college communities together to celebrate and to grieve, to post events, to campaign for student government, [and] to announce protests, parties, and presentations” (Levine & Dean, 2012, p. 69). With unparalleled access to information and the ability to disseminate it immediately, it appears this generation of undergraduates can form opinions much more quickly than previous generations did at their age.

Also, Millennials rely on social media for research to make decisions. Again turning to consumer research for insight into this generation’s behavior, a recent consumer study by the market research firm, Chadwick Martin Bailey and iModerate Research Technologies found that 60% of Facebook fans and 79% of Twitter followers were more likely to recommend brands that they had seen others endorse online. The study also found that 51% of Facebook fans and 67% of Twitter followers were more likely to buy products or brands of companies that they themselves had chosen to follow or endorse (Cruz & Mendelsohn, 2010).

The Chadwick Martin Bailey study also uncovered several interesting perceptions among Millennials. First, e-mail was considered junk mail if it was from someone they did not know. Also, organizations that did not engage in social media use were found by Millennials to be out of touch. When asked the question, "What does it say about a brand if they are not involved with sites like Facebook or Twitter?," female respondents, ages 18 to 24, responded, "It shows they are not really with it or in tune with the new way to communicate with customers" (Cruz & Mendelsohn, 2010, p. 22).

It is so important to this generation to have a strong online presence that they doubt one's relevance without it. An organization's having a social presence in 2014 was analogous to its having a web site in 2004. In the view of the Millennial generation, social media use represents the technology of the future.

### *Millennials Have Short Attention Spans*

The online behavior of this generation is rarely ever routine. As they walk to their next class or sometimes even during a lecture, they casually review their social networks. On the spur-of-the-moment, they Google search something they feel they need to know or tweet the world an observation. Each minute of the day is unpredictable. Even among themselves, it appears very difficult for them to anticipate what content they will review next. What I mean by content is information such as tweets, status updates, photos, comments, and so on.

Hyper-connectedness among young people can be a problem. In a survey of technology and sociology experts conducted by the Pew Internet and American Life Project and Elon University, respondents were "fairly evenly split as to whether the younger generation's always-on connection to people and information will turn out to be a net positive or a net negative by 2020" (Anderson & Rainie, 2012, p. 1). Some experts expressed concern that young adults are shallow consumers of information who do not retain knowledge, because they spend most of their energy sharing short social messages or seeking entertainment (Anderson & Rainie, 2012). Some believe young people are often too distracted to engage deeply with others.

For this reason, keeping the attention of this hyper-connected generation can be challenging. They use multi-screen devices for simultaneously surfing several social media channels and scouring massive amounts of online information, which consumes their attention every moment of the day. In some respects, Millennials suffer from a short attention span because they can only focus on one thing at a given moment. However, for the most part, Millennials are effective multi-taskers, who can absorb prodigious amounts of content through multiple devices in unpredictable ways. Young people today are more adept at finding answers to deep questions, in part because they can search efficiently and access collective intelligence via the social web. Levine and Dean (2012) explain, “of course, they can go deeper if they [wish, but] they matriculate into analog universities, populated by academics who are hunters, whose interest and work generally emphasizes depth over breath” (p. 22). The researchers further explain that there is a mismatch between how professors teach and how digital natives learn. They suggest that the “Internet needs to replace the blackboard” (p. 185).

Perhaps the following analogy can better explain what I mean when I say that Millennials have short attention spans. Imagine a scenario in which each successive generation is invited to sit at a large table in a dining hall where they are served an exquisitely prepared entree of the most delectable foods in season. On their turn, the members of each generation enjoy their meal until they are satisfied. However, by the time the Millennial generation arrives at the dining hall, the table has been expanded and transformed into a smorgasbord with a vast variety of choices. Regardless of its season, every food imaginable from around the world is available. As members of this cohort

move quickly along the edge of the table, they sample a multiplicity of entrees, motivated by their desire to taste as much as possible and as soon as possible. Thus, they focus only briefly on any single choice, because they are synthesizing tastes and moving to their next choice.

Inevitably, demands on Millennials' attention are only going to increase as they mature. The sea of information they are exposed to during their entry into adulthood will only expand. It should be noted, however, that experts interviewed in the Pew study were evenly divided as to whether they viewed the short attention span of the current generation of college students as a negative trait or this generation's greatest strength (Anderson & Rainie, 2012). Recognizing that digital technologies permit multitasking, as well as individualized and interactive learning, some experts say that it is only natural for this younger generation to filter out noise, choose only media that interest them, or consume only information that is relevant to them at any given moment (Anderson & Rainie, 2012). The Pew researchers suggest that Millennials are learning desirable life skills, such as "synthesizing (being able to bring together details from many sources); being strategically future-minded; the ability to concentrate; and the ability to distinguish between the 'noise' and the message in the ever-growing sea of information" (Anderson & Rainie, 2012, p. 1).

### *Millennials Live In A Multi-screen World*

So who are these Millennials? Thus far, we can surmise they are members of a media saturated generation, who are digitally dependent for their sense of self. Let us

now turn to consumer behavior studies to better understand how this generation uses new technology.

According to a recent study (Google, 2012), nine out of ten people move between multiple devices and interact with more than one medium in consuming content online. The report defines "content" as information, such as tweets, status updates, and posted photos, and it defines "media" as a device, social network, or application used to distribute content (Google, 2012 p. 8).

The Google study revealed that although much attention has been focused on smartphone usage, rates of media consumption through smartphones have been lower than rates of such use through other devices. For example, users typically spend 17 minutes per interaction on smartphones, compared to 30 minutes on tablets, 39 minutes on PCs/Laptops and 43 minutes on televisions (Google, 2012). Although smartphones have the shortest usage times, they are often used as a starting point for Millennials, when they begin specific tasks. The Google report described this behavior as "sequential screening." According to the report, "simultaneous screening" occurs when people use multiple devices at the same time. The researchers found that the devices that people chose were often motivated by "where [they were], what [they wanted] to accomplish and the amount of time needed" to complete the task (Google, 2012, p. 2). More precisely, the Google study found that nine out of ten people used multiple screens sequentially—that is, they used one device to start a task, such as searching for a textbook, booking a flight home, or paying college tuition, but used a different device to complete the task. In fact,

98% of those surveyed moved between multiple devices to finish a task that was started earlier in the day.

Interestingly, this consumer behavior study further revealed that television was no longer the dominant medium commanding people's full attention, but had instead "become one of the most common devices that [was] used simultaneously with other screens" (Google, 2012, p. 25). Of the 77% of participants that used other devices while watching television at the same time, 49% used smartphones and 34% used PCs/laptops. This same study also found that 78% of people multitasked by simultaneously using the following combinations of devices: PC and smartphone (92%); television and PC (92%); television and smartphone (90%); and television and tablet (89%).

So what does this all mean? Millennials interact online through multiple devices, whether by texting, tweeting, watching videos, posting photos and infographics, or visiting websites. They are not limited by space, place, or time. They move simultaneously between screening and operating systems. This pattern of use is a shift from how technology was used even just a few years ago. Levine and Dean (2012) observed, "digital technologies have made current college students a 24/7 generation, operating around the clock, any time, any place" (p. 21).

### Social Student Engagement

*Student engagement* has been defined by Kuh (2009) as the time and effort students devote to educational activities or academic collaborations that are empirically linked to student success. According to Kuh, (2009) engagement encompasses



involvement in co-curricular activities and interactions with peers and faculty. This phenomenon emphasizes two major aspects—in-class academic activities and educationally related co-curricular activities—both of which are important to student success. Kuh (2009) notes that “student engagement and its historical antecedents . . . are supported by decades of research showing positive associations with a range of desired outcomes of college” (p. 698). Pascarella and Terenzini (2005) also highlight the relationship between student engagement, student development, and student success.

Although most closely associated with Kuh (2009), the term engagement has been used elsewhere in the educational literature by a number of other authors as well. Finn (1989) and Finn and Rock (1997) envisioned the concept as including three progressive levels: (1) acquiescence to school, (2) initiative taking, and (3) social involvement. Tison, Bateman, and Culver (2011) defined engagement as a composite of academic challenge, active and collaborative learning, and skill development. Skinner, Kindermann, and Furrer (2008) defined it as “the quality of a student’s connection or involvement with the endeavor of schooling” (p. 2). Fredricks and McColskey (2011) described 21 criteria used to measure student engagement through different methods, ranging from classroom observations to student self-reports.

Related to student engagement is the concept of *student involvement*, a theoretical construct that has been widely attributed to Alexander Astin. According to Astin (1984), involvement is “the amount of physical and psychological energy that the student devotes to the academic experience” (p. 518). His theory of student involvement includes five tenets: (1) involvement encompasses investment of physical and psychological energy;

(2) involvement occurs along a continuum, insofar as some students are more involved than others and individual students become more involved in some activities than in others; (3) involvement has both quantitative and qualitative features; (4) the amount of student learning and development associated with an educational program is directly related to the quality and quantity of student involvement in the program; and (5) the effectiveness of any educational practice is directly related to the ability of that practice to increase student involvement (Astin, 1984).

Also related to student engagement is the concept of *social integration*, which has been shown to be linked specifically to student persistence (Tinto, 1993). Unlike previous theories addressing the reasons why some college students continue on to complete their degrees, while others drop out, Vincent Tinto (1993) developed a model to explain student departure that takes into account pre-entry student attributes, such as family background, skills and ability, and prior schooling, as well as student intentions, commitments, institutional experiences, and integration into the institution. According to Tinto (1993), student social integration is one variable that can be influenced by the institution. He postulates that both academic and social integration become important motivators in a student's decision to persist or to leave college. Therefore, a supportive campus environment, where academic performance and faculty interaction are complemented by extracurricular activities and peer group interactions, is more likely to result in students' successful degree completion. Tinto (1993) explains that a student's level of social integration refers to the extent to which he or she connects with and accepts the values and goals of peers and faculty within the college community. A higher

level of integration leads to a stronger commitment toward achieving personal goals and to the academic institution.

Extensive research has shown that students who are more interactive with faculty, staff, and peers at their institutions are more likely to persist to graduation (Pascarella & Terenzini, 2005). Further, students are more likely to persist if they believe that the norms of their student peers and faculty support persistence at their institutions (Bank & Slavings, 1990). Research has shown that students who have strong social bonds outside of their peer groups are more socially integrated and more likely to persist. Additionally, relationships that are reciprocated appear to have a positive and direct impact on social integration and persistence (Thomas, 2000). Eckles and Stradely (2012) recently analyzed the impact of a cohort of first-year full-time students at a small, private institution on retention of individual members. They found “attrition and retention behaviors among students’ friends had a significant impact on whether students returned for sophomore year” (p. 13).

Currently, there is little research within the student affairs literature on how deeply engaged students use social media, as noted by Junco (2014). Such research would be of potential interest to student affairs professionals, because it relates to major issues of student engagement, academic and social integration, and success (Junco, 2014). In calling for assessment of engagement outcomes related to social media use, Junco (2014) advised academic researchers to focus on what students do on Facebook, rather than whether or not they use the site. His assertion is that “it’s not using Facebook

that is related to engagement; it's how students use the site that more strongly predicts benefits or drawbacks" (p. 60).

Although the relationship of student engagement and social media use does not appear to have been specifically studied thus far, researchers have focused their attention on Facebook use as it relates to a number of other topics, such as life satisfaction, social trust, civic engagement, political participation (Kim & Khang, 2014; Valenzuela, Park & Kee, 2009; Vitak *et al.*, 2011), identity development, peer relationships (Pempek, Yermolayeva & Calvert, 2009), perceptions of social support (DeAndrea *et al.*, 2011; Manago, Taylor & Greenfield, 2012), self-esteem (Gonzales & Hancock, 2011; Mehdizadeh, 2010; Tazghini & Siedlecki, 2013), personality traits (Bachrach *et al.*, 2012; Gosling *et al.*, 2011; Moore & McElroy, 2012; Ong *et al.*, 2011; Orr *et al.*, 2009; Ross *et al.*, 2009; Seidman, 2012), ) and relationship building and maintenance (Ellison, Steinfield & Lampe, 2007, 2011; Ellison, Vitak, Gray & Lampe, 2014; Manago, Taylor & Greenfield, 2012; Valenzuela, Park & Kee, 2009; Yang & Brown, 2013).

Several studies have revealed significant relationships between time spent on Facebook and face-to-face interactions among college students. Heiberger and Harper (2008) and the Higher Education Research Institute (2007) found that heavy users of social networking platforms more frequently participated in and spent more time in campus organizations than did low users. Additionally, heavy users were more likely to report that they engaged in daily offline interaction with close friends (HERI, 2007) and that they felt stronger connections to their friends (Heiberger & Harper, 2008).

Educational researchers have shown that social networking technology can improve social and academic integration, resulting in enhanced student engagement (Junco, 2012b, 2014; Junco, Elavsky & Heiberger, 2012; Junco, Heiberger & Loken, 2011). Junco's (2012b) findings suggest that use of Twitter and Facebook improves students' interaction with peers and faculty, which in turn increases social and academic integration, leading to improved persistence. He found that time spent on Facebook was positively related to time spent in offline interactions, though involvement in campus activities was not predicted by time spent on either of the two social networking platforms. Another study found that students who used social networking platforms to learn about on-campus activities persisted in college at higher rates and participated in more face-to-face campus community activities than did those who relied on other sources of campus information (Ward, 2010).

Regarding Facebook use, Ellison *et al.* (2007, 2011) have examined how the site influences the scope of students' social circles. Ellison *et al.* (2011) found that students usually do not initiate contact with strangers on Facebook, but instead use it for connecting with close friends and staying abreast of their happenings. According to Junco (2014), "this affordance of Facebook leads to stronger bonds on campus and increased social integration" (p. 61). The typical behavior of new students is to maintain a connection with high school friends on Facebook as they transition to college (Ellison, Steinfield & Lampe, 2007, 2011; Stuzman, 2011).

A study by Selwyn (2009) found that students use Facebook to develop their identities as college students—a dependency that emphasizes the significant role that

Facebook plays in facilitating academic integration. Students use Facebook to make connections among peers within their campus communities, to seek information, to strengthen new relationships, and to maintain a “safety net” of high school friendships and family connections as they transition to college. As a result of their online social interactions, students become more academically integrated, because they learn the cultural mores and norms of academia, effectively navigate through the college environment, and seek information and support from their peers. Selwyn (2009) provides data on how students are using Facebook to improve their social and academic integration. By studying the wall posts of social sciences students, he found that four percent of the posts made during the course of the study were related to participants’ academic experiences within five main thematic categories: (1) accounts of and reflections on the college experience; (2) exchanges of practical information with peers, including sharing of information received from faculty and university staff; (3) exchanges of academic information with peers; (4) displays of supplication and fits of temporary disengagement with students; and (5) playful bantering with peers. A similar study by Yu, Tian, Vogel and Kwok (2010) found that students’ Facebook use was directly related to their increased adoption of the university culture and increased social acceptance by peers, which together led to achievement of various learning outcomes.

Thus, findings from fellow researchers have generally supported Tinto’s (1993) model. These findings suggest that peer influences are strong predictors of student retention and that social networking platforms help students develop relationships that lead to successful social and academic integration. It appears that Facebook use

strengthens students' social bonds, helps them develop a greater sense of commitment to their institutions, and reinforces feelings of positive motivation to perform better academically. Junco (2014) observed that students' use of Facebook for seeking social information leads to stronger social bonds and better integration into their peer groups, which in turn helps both them and their peers to engage in learning the culture and norms of the university environment. According to Junco (2014), "these behaviors on Facebook lead students to have stronger connections with and feel more accepted by peers at their institution (social integration) and to feel more comfortable with their cognitive skills (academic integration)" (p. 64). Junco (2014) further observed that the research thus far has focused on how students, without any guidance from educators, naturally use Facebook. He speculated that active and collaborative learning experiences would be further enhanced if social networking were part of the educational process.

### Social Media and Student Identity Development

Social networking platforms enable college students to explore different identities, which are exhibited through online "profiles." According to Martinez Aleman and Wartman (2009), students create profiles that are playful, paradoxical, or honest. Profiles may or may not present their true identities. Students nevertheless interpret Facebook as an expression of fluid identity, which is a blending of real-world and cyberspace contexts. Such actions support Erik Erikson's (1968) construct of *identity*, which he describes as a "conscious sense of individual uniqueness" and an "unconscious striving for a continuity of experience" (p. 108). Erikson's (1968) theory of psychosocial

development includes eight stages through which healthy individuals pass during their lives. He postulates that an individual faces a psychosocial crisis at each stage in life, which he or she seeks to resolve before advancing to the next phase of development. The crisis faced during the fifth stage of this model is characterized by a conflict of *identity versus role confusion*. Youth navigate through this stage typically between the ages of 13 and 19, and Erikson viewed the process of identity formation as a crucial integration of insights gained from previous stages and preparation for future ones. The psychosocial development of adolescents during this stage perhaps explains in part why social networking is so popular among first-year college students. Students control and execute self-presentation through online profiles; a practice termed “impression management” (boyd & Ellison, 2007, p. 219). These profiles, then, are “user portrayals” of students’ self-understanding and “how it is that they want to be seen by others” (Martinez Aleman & Wartman, 2009, p. 39). Youth actually use social media to engage in and support a critical maturation task, identity development, as proposed by Erikson (1968) and Chickering and Reisser (1993). According to Lenhart and Madden (2007), psychologists have long recognized the teenage years as a tumultuous period of identity and role development, where individuals intensely focus on social life. Their earnest desire to engage with their peers during this period explains why teens are eager and early adopters of social technology. Social networking appeals to teens, because it provides a “centralized control center to access real-time and asynchronous communication features, blogging tools, photo, music and video sharing features, and the ability to post original creative work—all linked to a unique profile that can be customized and updated on a



regular basis” (p. 1). When socializing and making new friends online, teens often publicly “disclose information about themselves that would normally be part of a gradual ‘getting-to-know-you’ process *offline* (name, school, personal interests, etc.)” (p. 2).

While some social science researchers speculate that use of social media makes youth more narcissistic and insecure, requiring constant validation from peers (Patel, 2011), others argue that online self-validation among college students is a useful adaptive exercise, because social media use helps students solve problems, formulate shared values, and apply critical thinking to important choices and actions they make while away from home (Junco, 2014). In addition, college students engage through social media to help in their transition from high school. This connectivity among students helps them feel welcome on campus, at ease and comfortable in their home away from home. It helps them confront uncertain feelings of transition and facilitates social and academic integration. Researchers have found that successful relationships are based on investment, commitment, trust, and comfort with rational dialectics. Social networking enables peer acceptance and feedback: two distinct features important to youth (Wandel, 2008).

Social networks affect college students’ perceptions of their peers, because students make judgments on the social attractiveness of others based on how they use Facebook (Tong *et al.*, 2008). For many students who share their true identities online, it appears that the maxim, “your first impression is a lasting impression,” applies to online introductions as it does to face-to-face interactions. Martinez Aleman and Wartman (2009) studied the effects of social media use and suggested that online social behavior can change real-life behavior, insofar as “positive social changes and deeds established

online can be transferred to our daily lives” (p. 5). Consistent with the notion that overall patterns of self-presentation online carry elements of authenticity, a number of studies have shown that students who are more extroverted offline also appear to be more extroverted on Facebook (Bachrach, Kosinski, Graepel, Kohli & Stillwell, 2012; Ong *et al.*, 2011; Ross *et al.*, 2009; Seidman, 2012).

While tech-savvy Millennials can create authentic online profiles that contain biographical information, pictures, “likes,” “dislikes,” current “statuses,” and any other information that they may choose to post, social networks also allow college students to present themselves in anonymity or pseudonymity (i.e., using a fictitious name or a “handle”), either independently or as members of various online communities and groups (Junco, 2014; Donath, 1999). “Egocentric” (boyd & Ellison, 2007, p. 219) and communal, trust-based sites, such as Facebook, all rely on complete transparency, such as full disclosure of group identification and purposes, temporal structures, system infrastructures, and user characteristics (Jones, 1998), to enable the exchange of culturally important and user-specific information (Facebook, 2013a, 2013b). With full transparency comes a risk of providing too much personal information. Regarding criticisms of youths’ “oversharing” of information online, Junco (2014) cautions educators not to propagate a cynical *adult normative perspective* on students’ social media use, by which elders define what is appropriate based on their own expectations and norms. It is Junco’s contention that “while the pitfalls of sharing personal information online *should* be discussed, they need to be placed within a broader context of supporting student learning and development” (p. 96).

### Factors Affecting Online Social Influence

Social networking platforms offer an important source for bonding among peers living on campus. Burger *et al.* (2004) found that college students like others who are similar to themselves. Social psychology researcher Robert Cialdini (2009) says this is a common motivation among most people "whether the similarity is in the area of opinions, personality traits, background or lifestyle" (p. 148). Consequently, he notes that others can gain influence over us by creating the appearance that they share much in common with us. The social networks that are created on Facebook and Twitter appear to accelerate everything in the student-peer culture—developing identity, locating friends with similar interests, and managing relationships. The relationships that students create, using these tools, can lead to friendships of trust. Schaefer (2012) explains that the "implication [of these online relationships] is that many people are more easily influenced by trustworthy friends because it is a useful shortcut in the daily decision-making process" (p. 22). Thus, building strong connections on social media helps students develop supportive networks of peers (Ellison, Steinfield & Lampe, 2007, 2011; Ellison, Vitak, Gray & Lampe, 2014).

Supportive online exchanges with others are established through traditional aspects of social influence. Cialdini (2009) describes the intricacies of social interactions in terms of six fundamental psychological principles: (1) *reciprocation*, (2) *commitment and consistency*, (3) *social proof*, (4) *liking*, (5) *authority*, and (6) *scarcity*. He maintains that, regardless of whether the relevant conditions are real or simply perceived, they influence our social interactions with others. According to Schaefer (2012), all of these

traditional aspects of social influence are present in online interactions. For example, the principle of *reciprocity* requires that “one person try to repay, in kind, what another person has provided” (Cialdini, 2009, p. 49). Reciprocity in the online world can create both long-term influence and short-term leverage. According to Schaefer (2012), “being authentically helpful and giving of your time and talent without an expectation of reward can have a multiplier effect as your goodwill is observed and noted by others” (p.61). When combined with great content and an engaged network, reciprocity in the cyber world is probably the single most powerful initiator of social interaction and influence (Schaefer, 2012).

Regarding *commitment and consistency*, “psychologists have long recognized a desire in most people to be and look consistent with their words, beliefs, attitudes, and deeds” (Cialdini, 2009, p. 95). This sociological phenomenon is termed homophily (Jussim & Osgood, 1989; Huckfedlt & Sprague, 1995; Mouw, 2006). The principle of commitment and consistency manifests itself in the online world in ways that closely parallel its expression in the offline world, with two caveats: (1) positions taken publicly on the web are searchable and undoubtedly permanent, which makes this particular principle powerful; and (2) the sheer volume of web based information makes positions in the form of mere status updates or tweets ephemeral. Positions enunciated in this form usually “evaporate soon after they are issued” (Schaefer, 2012, p. 39).

According to the principle of commitment and consistency, those similar to us or our friends, whom we trust, have a substantial influence upon us even more than we may want to admit. Gladwell (2002) says "word of mouth is—even in this age of mass

communications and multimillion-dollar advertising campaigns—still the most important form of human communication . . . the only kind of persuasion that most of us respond to anymore" (p. 32).

According to Cialdini (2009), the principle of *social proof* states that we tend to align our judgments and actions in social situations with those of others. For instance, “likes” on Facebook are a strong proxy for social status (Madden, Lenhart, Cortesi, Gasser, Duggan, Smith, *et al.*, 2013; Kerpen, 2011). Social proof is important in assessing social engagement in a context where one rarely meets face-to-face with virtual friends, followers, and connections. The online world has many markers or “public numerical badges” (Schaefer, 2012, p. 53) to help users determine what is socially acceptable, such as the number of one’s Facebook friends or Twitter followers. Also, social influence indicators, such as Klout Scores, often “serve as shortcuts to more time-consuming assessments of actual experience” (Schaefer, 2012, p. 53).

According to Cialdini (2009), the principle of *likability* holds that “people prefer to say yes to individuals they know and like” (p. 172). Likability is as legitimate a source of influence online as it is in the real world, according to Schaefer (2012), but with two significant differences. First, social media enable users to provide plenteously personal information and create opportunities for social interaction. As a result, honesty and authenticity are valued in such connections. Second, “likability can’t be faked” online and likability probably amplifies one’s online presence (p. 44).

The fifth principle is *authority*. Cialdini (2009) maintains that there is strong social pressure to comply with the demands of those in positions of power. Many people

assume the online world is a level-playing field, leaderless, and rudderless. However, this is not the case. According to Schaefer (2012), “many of the real and perceived trappings of authority exist in the online world” (p. 37). Many people defer to real or perceived indicators of authority online as “decision-making shortcuts,” because they are overwhelmed by massive information and the complexities of modern life (p. 37).

The final principle is *scarcity*. Establishing *scarcity* can be difficult online except in the rare cases in which “true (and scarce) authority or high celebrity value” is attached to one’s digital content (p. 48).

### Three Styles of Online Engagement

Within of the scholarly literature, multiple authors have made generalizations about different behaviors that consistently manifest themselves in individuals’ online engagement. Here, I will describe three distinct styles of online engagement that emerge from the literature.

#### *Collaborating Style*

A *collaborating* style emerges as the dominant view of online influence, because it exemplifies a class of social media users that together have a sizable audience with a sizable reach. Regarding collaboration among college students, Coates (2007) observed that “students reporting a collaborative style of engagement tend to favor the social aspects of university life and work, as opposed to the more purely cognitive or individualistic forms of interaction” (p. 134). Further emphasizing the importance of collaboration, he added that “high levels of general collaborative engagement reflect

students feeling validated within their university communities, particularly by participating in broad beyond-class talent development activities and interacting with staff and other students” (p.134). Although Coates is referring to face-to-face collaboration, the same observation holds true for students collaborating in social media, but is further magnified by the sheer volume of potential participants.

Research shows that social media use in college courses can encourage student cooperation and collaboration (Hollyhead, Edwards & Holt, 2012; Junco, Elavsky & Heiberger, 2012; Schroder & Greenbowe, 2009; Kear, 2011). This reaction may arise because active users of social media feel empowered by its convenience, emboldened by its neutrality or “level-playing field,” and energized by its appealing culture of trenchancy. In short, the culture of social media seems to foster a spirit of online assertiveness.

A *collaborating* style exemplifies altruistic behavior, because social media use is a sociological phenomenon, not just a technological one. It is about people and their experiences. What is interesting to me is that those who collaborate appear to have "virtual" influence merely through authentic helpfulness and providing meaningful content. As mentioned previously, reciprocity in the online world can create both long-term influence and short-term leverage. When combined with great content and an engaged network, reciprocity in the cyber world is probably the single most powerful initiator of social interaction and influence (Schaefer, 2012).

Those with a *collaborating* style are helpful to their followers and are always willing to go the extra mile to answer questions. If we were to compare the goodwill from

an exchange on the social web to the generosity that materializes when one person gets coffee for another, the difference is that all online exchanges of generosity are recorded for public view. According to Brogan and Smith (2010), those who engage in generous acts online leave “evidence of participation and good deeds to be seen by others who pass, like markers on a trail through the forest” (p. 89).

It should be noted that those who view these online interactions as a way to “use people” to leverage relationships do not have a correct understanding of authentic helpfulness. According to Brogan and Smith (2010), people can sense when one is tallying the score. They know when those who come calling are looking for a return on previous favors. Mutuality of benefit is maximized when both parties simply engage in efforts to generate good will. In contrast, calculated efforts to leverage indebtedness to one’s own advantage are often met with resentment instead.

Those with a *collaborating* style invite action because of the level of authentic helpfulness they have established in their respective networks of interdependence. They are trusted by their audiences because of their authenticity. As mentioned previously, people tend to trust others like themselves over those in positions of authority, as confirmed by the 2015 Edelman Trust Barometer (Edelman, 2015), an annual survey that tracks trust in the global institutions of business, government, media, and non-governmental organizations (NGOs). Those who exemplify a *collaborating* style open their minds and hearts and expressions to new possibilities, new alternatives, and new options. Covey (1989) describes this phenomenon as synergistic communication, a pattern of interaction in which one proceeds with uncertainty as to precise outcomes, but



with confidence that benefits will accrue and a desire to ensure that they do. Further describing this collaborative experience, Covey (1989) noted that experiences of synergy generate a desire for further “mind expanding adventures” moving forward. Encapsulating the aim of those with a *collaborating* style of social engagement, he observed that “we seek not to imitate past creative synergistic experiences, rather we seek new ones around new and different and sometimes higher purposes” (p. 269).

Students who exemplify a *collaborating* style are those with whom student affairs professionals may want to develop relationships that will harness their enthusiasm as online ambassadors for their universities. Every institution makes claims about the benefits of its programs and services, but these claims become more meaningful when current students are the ones delivering the message. According to Brito (2012), there is a difference between an influencer and an advocate, in that “advocates love the brand, and tell others about it” (p. 187). It would seem that relationships between student affairs professionals and students identified as collaborators could potentially transform such students’ online influence into advocacy on behalf of their institutions.

### *Connecting Style*

Those with a *connecting* style tend to focus on sharing their observations and passing on information they believe is relevant to their followers. Although this pattern of online behavior seemingly has yet to be documented among college students, there is evidence of its existence among adult populations. For instance, Veletsianos (2012) examined the Twitter practices of higher education scholars with more than 2,000

followers and found that they tweeted about research and other topics related to their professional activities, such as content shared at academic conferences. As scholars networked with their professional peers, they also served as connectors between individuals; connecting their students with others in the field. They used Twitter to manage their online personas and to maintain their networks of professional peers. In so doing, they acted intentionally to improve their own knowledge and practice. They also found that the scholars with whom they interacted responded to their generosity by in turn offering assistance to others. Among scholars, “networked participation is a complex and multifaceted human activity where personal and professional identities blend, and where participatory digital practices meet individual reflections, fragmented updates, and social interaction” (Veletsianos, 2012, p. 345).

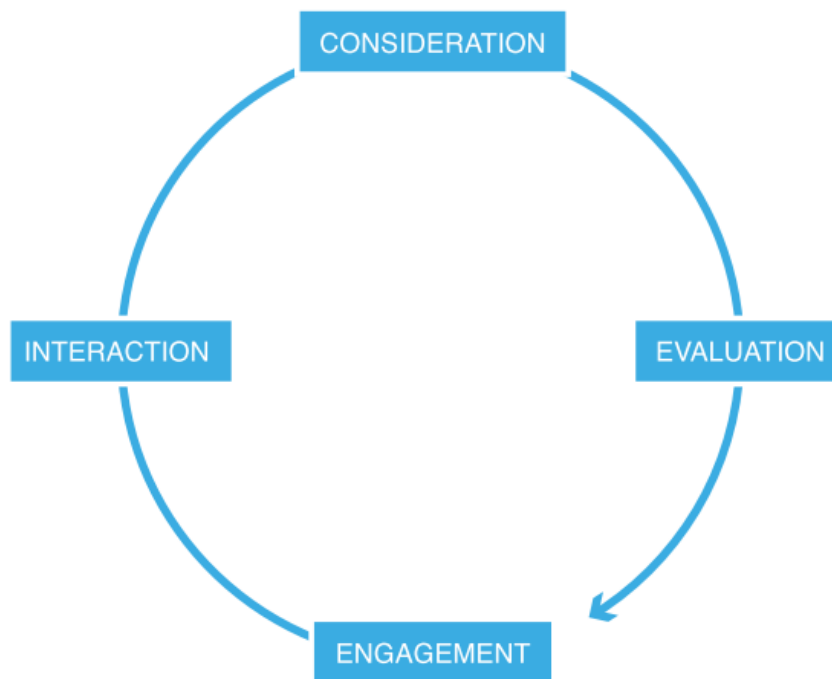
### *Lurking Style*

Those who exhibit a *lurking* style of online activity are slow to engage meaningfully online or are just getting started. In some respects, they are still trying to figure out how to interact with social media by testing just a few social media channels. They are also cautious about the risks, uncertain about the benefits, and therefore engage only lightly in the social networking sites where they are present. The social media activities among this group tend to consist of listening, rather than active participation in a conversation. Lurkers prefer to observe the discussion and wait for an ideal entry point in which they can make a contribution to the discussion (Dennen, 2008). Junco (2014) defines *lurking* as “implicit learning.” He described this style of online engagement as

“observing online communities, such as discussion boards in an academic context, but not actively participating” (p.134).

### *The Social Engagement Cycle and Its Collaborative Loop*

Integrating elements drawn from the scholarly literature, I have developed a cyclical model of social engagement to conceptualize the process of an online exchange that occurs between a social media user and a follower (see Figure 1). This cycle consists of four primary stages: (1) *consideration*, (2) *evaluation*, (3) *engagement*, and (4) *interaction*. Social media use, as a resource, is continuous across the stages. In discussing how this model operates, I will refer to a person who uses social media in general as a “user.”



*Figure 1. Social Engagement Cycle*

The first stage of the cyclical model is the *consideration* phase. During this stage, a user considers the meaningfulness of the content that he or she has either received or is contemplating sharing with others. According to Gasser, Cortesi, Malik, and Lee (2012), youth consider information needs based on three contexts: (1) *personal*, (2) *social*, and (3) *academic*. Their need for information and their motivation to seek it varies according to context. Among youth, the main criteria used to evaluate information are topicality, cues, heuristics, and visual and interactive elements (Gasser, Cortesi, Malik & Lee, 2012). In this early stage of the social engagement cycle, the opinions of friends, family, and followers that have interests similar to those of the user can influence the user's decisions regarding what content might be meaningful, entertaining, or useful.

Once a user has become serious about a matter of interest, that user advances to the *evaluation* stage, where relevancy of the content is assessed by both the user and the follower. Also during this period, the six psychological principles of social influence identified by Cialdini (2009) – *reciprocation, commitment and consistency, social proof, liking, authority, and scarcity* – are discernibly considered by the user, followers, and prospective followers.

In the online world, relevance is critical because relevant content of the user creates a social relationship with others (Schaefer, 2012). Social networking platforms enable two-way, collaborative communication among users. As a result, one may author and contribute content just as easily as one may read or view it. However, relevance adds value to the conversation, which usually results from one person's listening to another in

order to understand that other person's world view. This type of personal attention tends to develop a social relationship of trust online.

Relevance also builds trust within the user's online micro-community, and it increases the reach and exposure of the user's messages. Additionally, assessing the relevancy of one's message helps one to recognize what content will contribute something of value to the online conversation. Since hyper-connected Millennials seem to demand relevancy, it often determines how they behave toward one another in their online interactions.

As an "always-on" generation, Millennials also have a unique ability to discern the quality and veracity of the information they find and to communicate effectively their findings. In general, members of the current generation of undergraduates are adept at making meaning of their experiences through "thin-slicing," which is defined as "reading deeply into the narrow slivers of experience" (Gladwell, 2007, p. 44). Recognizing the potential to glean insight from content shared online, Levine and Dean (2012) observed that "digital technologies place an accent on learning and encourage group activity, shared work products, and consumer-driven content" (p. 22).

The next stage in the cycle is *engagement*, during which the relationship between the user and the follower takes on greater significance. It is during this stage that one decides to act and clarifies the degree to which one will act. This stage is critical to the continuation of social engagement between the user and a particular follower, as each party evaluates the quality of the exchange. If the two parties share a positive experience,

they are more likely to build a relationship of trust and to welcome future online encounters with each other.

Also, necessary during this stage is the perception of transparency and reciprocity between the two parties. Transparent communication, along with provision of meaningful content to a follower, increases the user's opportunity to continue a relationship with that follower. According to Schaefer (2012), "content is the currency of the social web" (p. 65).

The final stage, *interaction*, is where authentic helpfulness is exchanged through social media. Following a pleasant experience during the *engagement* stage, sustained communication during the *interaction* stage forms the criterion on which the user determines whether or not to continue an online relationship with a particular follower. Furthermore, if the user's experience is positive, there is a greater likelihood that the user will enlarge his or her social network by connecting through social media with additional members of the follower's network. Basically, what distinguishes this stage from the *engagement* stage is that one must decide to engage (*engagement* stage) before he or she can interact continuously (*interaction* stage) with another. Consequently, the need to foster trust and provide authentic helpfulness during online social engagement is vital to establishing a meaningful relationship with sustainable loyalty among a relevant audience. Social media greatly enhance one's ability to impact the decisions of others, either positively or negatively, during both the *engagement* stage and the *interaction* stage. Because Facebook users have an average of 338 friends in their social networks

(Smith, 2014), the amplification of one person's advocacy in this age group can quickly allow him or her to reach an audience of thousands.

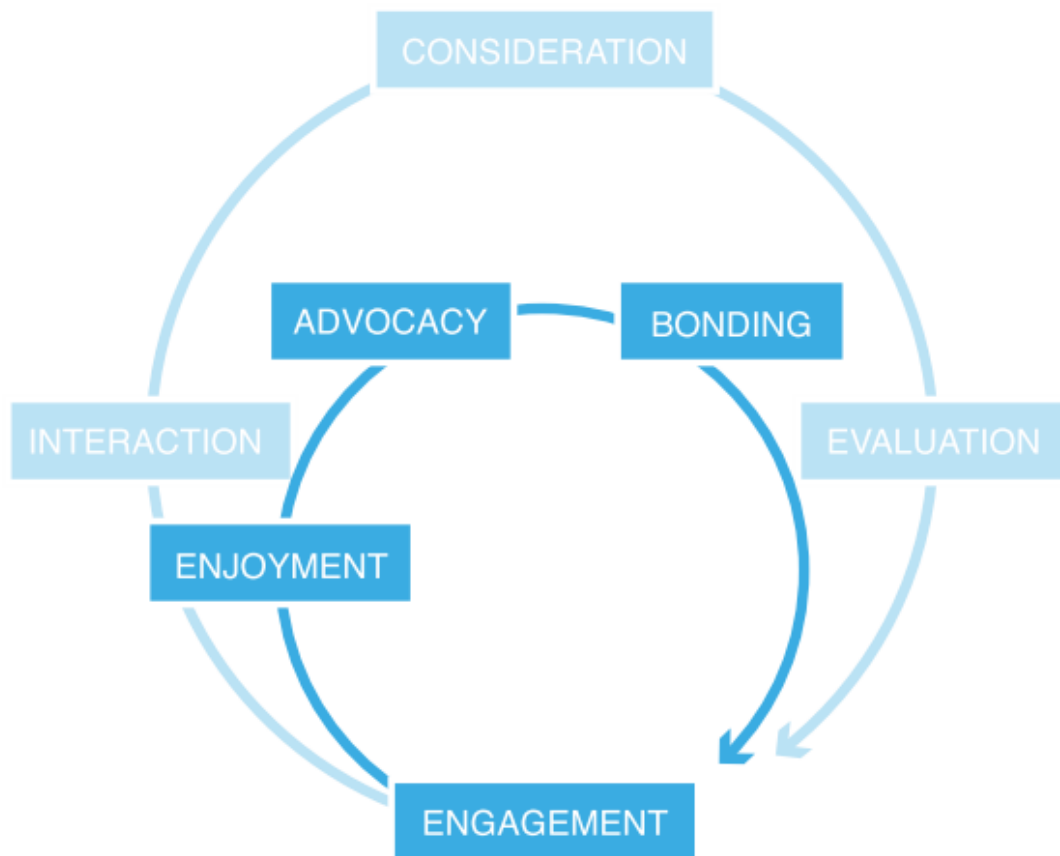


Figure 2. The Collaborative Loop

Within the cyclical model of social engagement, an inner cycle may emerge, depending upon the relationship between a user and a follower. I call this inner cycle a *collaborative loop* (see Figure 2). Persons who enjoy engaging with their followers develop a synergistic bond, which creates a loop of collaboration within a social network

to the degree that one or more followers become advocates of the user's content by sharing it with others. Schaefer (2012) has stressed that in the online world it is impossible to sustain influence without creating and moving consistent, compelling content. Accordingly, social networking platforms enable a collaborative exchange of organic two-way communication, which increases the likelihood that meaningful content will be viewed and considered by an even larger audience of followers. This collaborative loop, in turn, influences prospective followers to consider joining the user's social network, thereby enlarging the user's social influence.

Conversely, those who have a bad or even mediocre experience are likely to avoid a user or even terminate a friendship with the user, rather than spread negative influence to their own social networks. Negative interaction outside the collaborative loop may potentially diminish the user's online stature, leading others to reconsider the user's opinions, thus creating a double adverse impact on social networking. An extreme form of negative interaction through social media is known as cyberbullying among young people. Research shows that 11% of U. S. teens have reportedly been the victims of some form of bullying (Nansel *et al.*, 2001). Also, a 2011 Pew Internet and American Life Project survey found that 88% of teens using social media had witnessed others being cruel or mean within these online forums (Lenhart *et al.*, 2011). Any such experiences during the interaction stage of the social engagement cycle would clearly hold the potential to break the collaborative loop and prevent advancement to the interaction stage.



## Summary

Most college students today are well versed in a culture of hyper-connectedness and are acutely aware of how to use social media to manage interpersonal exchanges among their peers. Students look to others like themselves to guide their actions and to receive general feedback that reinforces or enhances their self-esteem. Social networks facilitate academic and social integration on campus by establishing connectivity among students, which can help them to feel welcome on campus, to alleviate feelings of uncertainty associated with the transition to college, and to become comfortable in their home away from home. Research shows students' social media use influences their identity development, including how they present and perceive gender, race, ethnicity, and social class among peers. In addition, social media use helps students identify others on campus with similar interests, opinions, personality traits, backgrounds, and lifestyles.

In this chapter, I have described the characteristics of Millennials and their use of technology. I have examined the construct of social student engagement and students' motivation to engage others through social media. My review included a discussion of the related concepts of student involvement and integration and their relationship to student success. I have also discussed how social networking platforms enable students to explore different online identities. I reviewed six basic principles of social influence drawn from the psychological literature. I described three styles of social interaction that emerged from my review of the literature. Finally, I conceptualized what I call the *social engagement cycle* and its *collaborative loop*. In the following chapter, I will explain the

methodology employed in my own investigation of how deeply-engaged students make use of social media to establish an influential online presence.

## CHAPTER 3

### METHODOLOGY

In this study, I made use of a qualitative methodological approach that integrated descriptive analyses of in-depth interview data and social analytic metrics. In my investigation, my focus was on the unique experiences of nine undergraduate students who granted me permission to examine their social media use. As the researcher, I selected these students to participate based on objective indicators of their having an influential online presence. My study sought to understand each participant's investment of both time and psychological energy in his or her online interaction with peers, consistent with traditional definitions of student engagement, but with a focus on ways in which each participant's online activity was uniquely reflective of the digital medium. In this chapter, I present details of the research design, characteristics of the participants, and procedures for collecting and analyzing the data.

#### Research Design

As indicated previously, I used a qualitative methodological design for this study, albeit one that integrated use of both verbal and numerical data. According to Patton (2002) the investigator using this approach is not required to be a "qualitative methods purist," because "qualitative data can be collected and used in conjunction with quantitative data" (p. 68). In this particular instance, my qualitative data consisted of transcripts from a series of in-depth interviews, and my quantitative data consisted of publicly available social analytic metrics.

### *In-depth Interview Approach*

Although my study included analysis of both qualitative and quantitative data, I adhered to a phenomenological approach, following a sequential exploratory design (Creswell, 2003), in which I gave priority to the qualitative aspects of the study. Use of such an approach allows a researcher to construct an understanding of research participants' "lived experiences" of a particular phenomenon. According to Lichtman (2013), phenomenology characteristically starts with concrete descriptions of instances in which the phenomenon under investigation tangibly manifests itself in a participant's life. Next, the researcher reflectively analyzes these experiences, identifying general themes that capture the essence of the phenomenon. The aim of the researcher is to discern meaning that is conveyed both explicitly and implicitly in the data. According to Creswell (1998), the resultant description of the phenomenon incorporates two distinct elements, "the *textual description* of what was experienced and the *structural description* of how it was experienced" (p. 55).

In this study, the phenomenon under investigation was online student engagement. The purpose of my study was to identify online behaviors of highly engaged undergraduate students that parallel those traditionally manifested by such students in their direct interaction with peers, so as to better understand how the concept of student engagement has evolved to reflect the growing use of digital media among today's undergraduate students. The intent of this study was to hear the voices of individuals—as both senders and receivers of messaging—and glean an understanding of their perspectives and experiences relative to student academic and social engagement.

Use of in-depth interviewing is customary in exploratory research, because it allows the researcher to discover participants' feelings, knowledge, and lived experiences related to distinct phenomena. The voices of my participants were important to me in describing their experiences with social student engagement. I recognized that before I could fully capture their voices, I needed to collect descriptive data to develop a comprehensive understanding of their perspectives and how they gave meaning to their experiences.

In contrast to written questionnaires, interviews yield data that can be used to develop explanations, often uncovering unexpected results. They are useful when the focus of the study is on understanding a particular phenomenon in a real-life context. In my study, interviews were used to gain a rich description of each participant's life experiences, perceptions, thoughts, and feelings. My aim was to explore the experiences of the nine college students and to discover the meaning embedded in these experiences (Creswell, 1998; Lichtman, 2013).

In this context, the strength of the phenomenological approach was that it enabled me to infer from my data key concepts and themes that characterize student engagement within the digital realm. This approach does not lend itself to testing empirical hypotheses or drawing more general conclusions about larger populations. Rather, its purpose is to identify common interpretations of experiences shared among a particular group of research participants. The phenomenological approach enabled me to base my descriptions of social media use on the lived experiences of the nine students selected to participate in my study.

A phenomenological research orientation helped me explore my research question in the following way. I began with an interest and a guiding purpose, which was to understand how collegiate online thought leaders' social media use paralleled on-campus behaviors traditionally manifested by highly engaged students. Common themes emerged as a result of my inductive analysis of each successive interview. For instance, during my initial interviews, I asked myself how the responses to my questions relate to social student engagement. I looked for patterns as preliminary labels to describe common interpretations of life experiences. Using my initial interviews as a frame of reference, I compared my findings against my next interviews, all the while revising my models as needed without inflexible preconceptions. As each new finding and possible explanation emerged, I checked it against previous interview data. Eventually, I developed the patterns of "authentic helpfulness" and "meaningful content" as initial labels signifying patterns that might explain references to common experiences. As properties of my categories became well defined, linkages or explanations of category relationships surfaced as ideas such as the social engagement cyclical model, the *collaborative loop*, and three styles of online student engagement. In this way did I adhere to the phenomenological methodology in which I sought to understand the life experiences of the nine undergraduate students and discover social phenomena implicit in the data itself resulting from their interpretations of their online encounters.

### *Social Analytics*

The quantitative data used in my study consisted of social analytic metrics from social networking platforms. I used this data both to select my research participants and to identify patterns and themes emerging in their online activity. Social analytics is an emerging branch of inquiry in which statistical analyses are applied to quantitative data, collected through the normal functioning of social networking sites, in order to draw conclusions regarding various aspects of online activity within the general population. Typically, it involves using technology to gather data in which a researcher can potentially detect patterns of behavior. Another term used in association with social analytics is "social analytic metrics," which refers to calculated scores used to numerically represent various aspects of online activity by frequency or degree (see Appendix E for a list of available metrics pertaining to specific social networking platforms).

Social analytics has drawn significant attention among researchers, because its statistical analyses are based on "datasets whose size is beyond the ability of typical database software tools to capture, store, manage and analyze" (Manyika, 2011, p 1). At the core of the growing interest in the methodologies employed in this emerging field of inquiry is the realization that unprecedented amounts of digital data are available to researchers for analysis. De Laat, Lally, Lipponen, and Simmons (2007) propose that these methodologies can "assist in describing and understanding the patterns of participant interaction in [networked learning and computer-supported collaborative learning]" (p. 88) and provide useful analytical data about online activity and

relationships. According to De Laat *et. al.* (2007), the methods of social analytics offer a “valuable complementary analytical tool for richer understandings of the processes occurring in Networked Learning Communities” (p. 101). They further explain that the tools of social analytics can add value to a broader methodological approach, as a means of triangulating data.

As social analytics has emerged as a distinct branch of inquiry (Sponder, 2012), some academic and professional fields are embracing its science and renaming it to uniquely reflect their areas of focus. For example, the term “social media analytics” is often used in the cyber world to refer to social analytics. The business world is increasingly referring to social analytics as “social business analytics” (Sponder, 2012, p. 289). Some educational researchers have introduced the term “social learning analytics,” which they define as the analysis of student activity data collected through social networking platforms and other web applications (e.g. Blackboard, Moodle) during the teaching and learning process (Shum & Ferguson, 2011; Siemens & Gasevic, 2012; Siemens & Long, 2011). To avoid confusion, I will use the term “social analytics,” through the remainder of this thesis, when referring to the field of study, and “social analytic metrics,” when referring to the descriptive statistics resulting from the analytical process.

My social analytic metrics were based on data from blogs, university social networks and community sites, other information sharing sites (e.g. Hootsuite, twtrland, Brandwatch, Demographic Pro, Keyhole, Simply Measured, Followerwonk, Nexalogy Search), discussion forums, external social networking sites (e.g. Facebook, MySpace,



Google +), Flickr, Instagram, Pinterest, Tumblr, innovation hubs (e.g. centralized customer community to create innovation), Wikis, ratings and reviews, Twitter, and YouTube. I will explain my use of these metrics in greater detail in the section entitled Data Collection.

I also used social analytic metrics to select my research participants. All were active Bucknell students, 18 years of age or older, who had shown extraordinarily high levels of online engagement and social influence, as measured by their “Klout Scores,” numerical values between 1 and 100. This measure of social engagement is based on an algorithm developed by Klout; a San Francisco-based company founded in 2009. Klout assesses social media use and online interactions based on data from more than 400 signals within eight different networks, such as Twitter, Facebook, Google+, and Instagram, and updates each person’s Klout Score every day (Klout, 2014; Carte, 2014). PeerIndex and Kred provide similar applications.

In theory, the higher the Klout Score, the more social influence a user has online. According to Klout (2014), the majority of the signals used to calculate an individual’s social score are derived from combinations of attributes, such as the ratio of reactions a person generates compared to the amount of content he or she shares. The score also takes into account factors such as how selective the people who interact with a person’s content are. Additionally, the algorithm estimates the value of the engagement a person draws from unique individuals. In other words, the higher the score, the more influence one is believed to have within his or her digital networks.

Ideally, the Klout Score predicts one's capacity to influence others or the probability of one's doing so, similar to how a credit score indicates one's probability of repaying debt. Klout creates a "personalized assessment of influence" that ranges from a score of 1 to 100. According to Schaefer (2012), the "world average is about 19," and among those with a more commanding online presence, "someone with a score of 30 shows expertise, whereas a score of 50 or more means leadership and expert status" (p. 98).

While some may abhor the idea of a company judging or grading them on their daily online interactions, it is already happening, and organizations are paying attention to these social scores. According to Schaefer (2012), "Klout scores are public, and everyone who participates on the social web has one whether he or she wants it or not" (p.98). However, if someone wants his or her social scores to include other social media platforms in addition to Twitter, then he or she must register on the Klout website and opt in (Schaefer, 2012). Although Klout can never measure all personal influence on the web, Schaefer states that the company is becoming increasingly adept at identifying people who are skilled at creating, aggregating, and sharing content that circulates online. This social exchange, according to Schaefer, is a "legitimate marker for influence on the social web." He explains that "people creating content is an action" and "having a link clicked or a messages retweeted is an effect" (p. 98).

## Procedure

Consistent with the nature and purpose of the investigation, I approached only college students to participate who had maintained a highly visible presence online. They were willing to volunteer as participants and comfortable in discussing their general experiences with the social web. The following is a summary of procedures for participant recruitment, characteristics of the individual participants, and methods of data collection and analysis.

### *Participant Selection*

In this study, I used class directories available on Bucknell's student involvement network to initially identify approximately 140 undergraduate students as possible participants, based on a population of about 3,500 students, randomly selecting the first participant from the directory and systematically selecting every 25<sup>th</sup> student listed thereafter. I then ranked this initial list of 140 potential participants from highest to lowest, based on the students' Klout Scores, according to Klout.com, Klout Extension for Google Chrome, Geocodes, and Hootsuite.com. Because the focus of the investigation was on the experiences of students with exceptionally high levels of online engagement, I chose individual students from this list and invited each to participate in the study, in descending order, beginning with those ranked highest.

I used e-mail to invite the selected students to participate in my in-depth interviews (see Appendix A). I obtained student email addresses from the online Bucknell Directory and other public directory resources. As an incentive for their

participation, I provided each student \$25 at the conclusion of an in-depth interview. In compliance with conventions pertaining to research on human subjects, a copy of my Informed Consent Form (ICF) was sent via email to each interested respondent with a confirmation of his or her interview appointment. Before conducting my interview with each participant, I reviewed the ICF and requested the participant's signature. At the beginning of the interview, I provided each participant with a hard copy of the ICF (see Appendix B).

### *Participants*

A total of nine students participated in my study, including two first-year students, two sophomores, two juniors, and three seniors. The group was comprised of five females and four males, of whom five were Caucasian, one African-American, one Hispanic American, one Hispanic/African American, and one Asian. At the time of the study, the group's average Klout Score was 44.1, with a total of 2,544 Twitter followers and 8,773 Facebook friends. Collectively, the participants had sent 43,717 tweets, averaging 37 tweets per day, for a total of 23,400,183 impressions.

Beyond these general characteristics, I will provide a brief personal profile of each participant to describe his or her background and engagement on campus. The identities of the participants have been protected by using pseudonyms, and any identifying data has been altered to maintain their anonymity.

*Nancy*

Nancy is a 21-year-old Caucasian female senior from southern Florida, who is majoring in political science. She graduated from a prestigious private, coeducational boarding and day prep school in Connecticut, which serves 300 students in grades 9 through 12. Her interests include fashion, photography, travel, beaches, and puppies. Last summer, she was employed as a public relations intern, working for a tech start-up company based in New York City. During her junior year at Bucknell, she studied abroad in Europe and learned Italian and Spanish. She had been on the Dean's List, was active in student life, served on a student activity committee, and was a member of a campus sorority.

At the time of her interview, Nancy had a Klout Score of 57. The social networks that she frequents include Instagram, Facebook, Twitter, Pinterest, LinkedIn, and Google +. She had 1,360 Friends on Facebook and posted 2,449 pictures.

*Judy*

Judy is a 21-year-old Caucasian female senior from Pittsburgh, Pennsylvania, who is majoring in mechanical engineering. In 2010, she was awarded a four-year merit aid undergraduate scholarship for women in science, mathematics, and engineering. She graduated from one of Pennsylvania's oldest private prep schools, which enrolls 720 students from kindergarten through 12<sup>th</sup> grade. Last summer, she was employed as an industrial engineering intern for a large manufacturing corporation based in Eastern Pennsylvania. Her on-campus involvement includes serving as planning committee

member for CHOICE, a Bucknell living community that offers substance-free housing and programming for students, and as a student leader for the InterVarsity Christian Fellowship.

At the time of her interview, Judy had a Klout Score of 40. The social networks that she frequents include Facebook, Twitter, LinkedIn, and Google +. She has 680 friends on Facebook and has posted 457 photos.

### *Jane*

Jane is a 21-year-old female senior, of Asian descent, from the greater Boston, Massachusetts metro area, who is majoring in biology with a minor in environmental studies. Following graduation, she hopes to begin a career in pharmaceutical sales or consumer product/healthcare research and development. She graduated from high school in Massachusetts. Her interests include environmental issues, food, health, pharmaceuticals, and women's leadership. She has been a member of a campus sorority and has held leadership positions in various campus activities.

At the time of her interview, she had a Klout Score of 51. The social networks that she frequents include Facebook, Twitter, Pinterest, and more recently LinkedIn. She has 1,098 Friends on Facebook and has posted 2,509 pictures.

### *Shane*

Shane is an African American male junior from Boston, Massachusetts, who is earning a double major in economics and sociology. He is a recipient of a scholarship for socially and economically disadvantaged students. Last summer, he was employed as an

intern for U.S. Senator Elizabeth Warren's Boston office. He graduated from a charter high school in Boston. He is a member of a campus fraternity and has served as its Vice Polemarch.

Shane also indicated that he is interested in humor. "I might come across a story that is humorous, and it makes me laugh," he said, "I'll share it; I'm big on humor, so like nine times out of ten I tweet something that makes somebody laugh."

At the time of his interview, Shane had a Klout Score of 42. A few weeks later, his score increased to 62. The social networks that he frequents are Facebook, Twitter, and Instagram. Shane has 1,256 friends on Facebook and has posted 638 photos. Among the participants I interviewed, Shane was the most active on Twitter, averaging 18 tweets per day.

### *Rodney*

Rodney is a 20-year-old Hispanic American male junior from the greater Los Angeles metro area in California, who is pursuing an interdisciplinary major in mathematics and economics with a minor in environmental studies. He also is a recipient of a scholarship for socially and economically disadvantaged students. Last summer, he was employed as an intern for a large entertainment corporation in southern California, where he worked with the corporate communications staff and corporate social responsibility group to write blog features on the corporation's sponsorship of neighboring community schools. During the previous summer, he worked as a community organizer for the Los Angeles Alliance for a New Economy, where he helped

manage the organization's "Don't Waste LA" project, in partnership with its small business coalition in the greater Los Angeles area. Before attending Bucknell, he graduated from a charter school in southern California. His interests include social media, technology, sustainability, green business, and entrepreneurship. His on-campus involvement consists of serving as a student volunteer for Bucknell's Office of Civic Engagement.

At the time of his interview, Rodney had a Klout Score of 56. The social networks that he frequents include Twitter, Facebook, Instagram, Pinterest, Foursquare, LinkedIn, and Google +. He also currently writes for a national blog. He has 1,232 friends on Facebook. At the time of his interview, he had 854 followers on Twitter—the most of any participant in the study—and averaged seven tweets per day.

### *Sheri*

Sheri is a 19-year-old Caucasian female sophomore from a small town in eastern Pennsylvania, who is pursuing a double major in psychology and education. She is a student-athlete who plays on one of Bucknell's athletic teams.

At the time of her interview, she had a Klout Score of 45. The social networks that she frequents include Facebook, Twitter, and Google +. She has 650 friends on Facebook.

### *Brad*

Brad is a 19-year-old Hispanic/African American male sophomore from the greater Los Angeles metro area in California, who is majoring in biomedical engineering



and management for engineers. He is a recipient of a scholarship for socially and economically disadvantaged students. He graduated from a high school in southern California. His interests include music and spirituality.

At the time of his interview, Brad had a Klout Score of 58. The social networks that he frequents include Instagram, Facebook, Twitter, LinkedIn, Snapchat, MySpace, and Google +.

### *Melissa*

Melissa is an 18-year-old Caucasian female first-year student from Chicago, Illinois. She has not yet declared a major. She graduated from a prestigious private prep school in Chicago. She is interested in art and photography.

At the time of her interview, she had a Klout Score of 55. The social networks that she frequents include Flickr, YouTube, Instagram, Facebook, Twitter, LinkedIn, and Google +. She has 1,165 friends on Facebook and has posted 2,038 pictures.

### *Sam*

Sam is an 18-year-old Caucasian male first-year student from a small town in central Pennsylvania, who is majoring in biology. He graduated from high school in central Pennsylvania. He is a sports enthusiast.

Before my interview with him, Sam's Klout Score was above 40, which qualified him as a candidate for my study. However, at the time of his interview, it had dropped to 37, and shortly following our meeting, it rebounded. He currently has a score of 46. The

social networks that he frequents include Instagram, Facebook, Twitter, Moodle, LinkedIn, and Google +. Sam has 1,223 Friends on Facebook and has posted 266 photos.

### *Data Collection*

Data was collected through in-depth interviewing, which was conducted in January and February of 2014. Interviews with participants were audio recorded, to ensure preservation of details shared during the interviews, and thorough transcriptions of the interviews served as the basis for subsequent analysis.

In keeping with the qualitative design and methodology selected for this research project (Lichtman, 2013; Creswell, 1998), the following data collection approach was used regarding (a) *settings*, (b) *participants*, (c) *procedures*, and (d) *analysis* for conducting the interviews: (a) *settings*—each participant was interviewed in a mutually agreed upon location, which was a distraction-free and neutral environment, to make the interview experience as comfortable as possible for each participant; (b) *participants*—all participants volunteered to be interviewed; (c) *procedure*—each participant was interviewed in one session, and interviews were conducted using a semi-structured interview format (see Appendix C); (d) *analysis*—the interpretation of the data was open-ended, such that the meaning that was made of the information collected was not predetermined or finalized at the outset.

### *Social Analytic Metrics*

Although the primary method of data collection used in this study was in-depth interviews of my participants, I also accessed supplemental data to expand upon my

thematic analysis of their interview transcriptions. The supplementary data consisted of reports on each participant's online activity from February 1 through March 31, 2014. These reports included the following social analytic metrics: (a) *volume of mentions*, (b) *conversation mapping*, (c) *sentiment*, (d) *reach and exposure*, (e) *engagement*, (f) *audience growth rate*, and (g) *influence*. Social analytic metrics are collected when a user connects to a social networking platform, such as a Facebook page or Twitter account.

For the purposes of this investigation, I relied on social influence scores from Klout and Followerwonk to track social media activity of my participants. These key metrics helped me to assess social student engagement among my participants, because they served as aggregate measures of the extent to which any of the participants' messages and content were being shared and used by others. As such, they reflected to varying degrees each of the more specific metrics mentioned above. In reviewing the social influence scores, I tried to evaluate the size of each participant's engaged audience of followers and friends that actively listened and reacted to his or her online messages.

It is important to emphasize that audience size does not necessarily translate to influence. Just because a student has a large social following on Twitter does not necessarily mean that student influences his or her followers. Influence is what encourages or inspires people to take action. Therefore, when a student interacts online with those who are influential within that student's area of interest and he or she receives feedback, or even an endorsement, from a trusted social influencer such as a college professor, it can be extremely encouraging to that student.

Tools such as Klout, Followerwonk, PeerIndex, and Kred measure influence by assigning a score to one's social media use and online interactions. Each company uses its exclusive methodology for determining influence by giving different weight to metrics such as reach, comments, and likes, to formulate a number that represents one's overall social influence. These tools use key indicators such as Twitter replies, retweets, and list memberships, which are especially helpful in finding influential people in very specific topic areas; Google+ comments, shares, and +1s; Facebook likes, shares, and comments; LinkedIn recommendations, interactions, likes, and comments; and Pinterest repins, likes, and comments.

### Data Analysis

I conducted my qualitative data analysis, following an emergent strategy, during each phase of my investigation: data collection, data interpretation, and narrative report writing. I began with an interest and a guiding question, but I revised my earlier decisions about what types of data should be collected through social analytics and how the data should be collected as my research progressed (see Appendix D).

My focus was on understanding the meaning of my participants' descriptions of their use of social media as part of their college experience. I used an emergent strategy to analyze my interview data, based on the nature of the data itself (Lichtman, 2013). Thus, my data analysis continuously evolved until my data collection from my interviews ended. Metaphors, analogies, and themes emerged as a result of my inductive analysis, where particular principles and concepts emerging from the interviews were

examined, constructed, and shaped. To interpret the participants' experiences, I searched for themes, categories, and patterns. In each participant's narrative, I considered aspects such as the physical surroundings, the multiple digital devices used, the preferred social networking platforms, the relationship with the online audience (i.e., the followers), the social interactions among the members of the audience, the type of social media activity, the outcome, and the time frame. I considered only those elements in the narrative that related to its essential meaning, so that all identified themes would contribute to a deeper understanding of the phenomenon of online student engagement.

For example, during my first interview, I asked myself these questions: What is going on here? What is the situation? How does this relate to student engagement? The patterns of "authentic helpfulness" and "meaningful content" as initial labels came to my mind. I then coded my next interview, using the first as a frame of reference to compare the data from the two interviews, all the while revising my models as needed, without inflexible preconceptions. As each new finding and possible explanation emerged, I checked it against other findings from the data. Eventually, several theoretical constructs began to emerge in my thinking as possible explanations for patterns in participants' references to "authentic helpfulness" and other principles of online student engagement.

My strategy was to extract direct quotes from the interview transcripts to serve as illustrative examples of emergent themes, as described by my participants themselves. I then compared across these passages to see what elements were essential to the participants' experiences of the phenomenon of online student engagement. This approach enabled me to report my findings in a way that captured the unique experiences

of my participants, yet made the phenomenon of online student engagement understandable and recognizable to anyone who had experienced it. My presentation of the data also made clear how the participants' experiences as members of the Millennial Generation differed from my experience as a Baby-boomer.

In addition to identifying emergent themes, I conducted a content analysis of the interview data, in which I coded manifestations of the constructs identified previously in Cialdini's (2009) work on social influence. In reporting my findings, I again made use of passages from the interview transcripts to illustrate how principles of social influence manifested themselves in the lived experiences of my research participants.

Using the social influence scores from Klout and Followerwonk, I then looked for natural groupings among my nine participants. In addition to comparing participants' Klout Scores, which were based on an algorithm that included metrics from multiple social platforms, I compared their Social Authority scores from Followerwonk, which were based on Twitter retweets, rather than numbers of followers. Based on these comparisons, I segmented those students with higher scores and those with lower scores (see Appendix D).

Finally, in order to strengthen my analysis of social student engagement, I reexamined the interview data, using the established segments as a screen to sift through edited versions of the transcripts and my interview notes. In so doing, my intent was to identify any additional patterns or themes that distinguished among the segments. I then examined my interview data a third time to get at the essential meaning of each participant's experience within his or her specific grouping. At this iteration, I sought to

identify common themes, categories, and patterns that were unique to the members of each group, as reflected in their personal narratives.

During this phase of my data analysis, I drew upon the scholarly literature to conceptualize a model of online student engagement that incorporated an engagement cycle and collaborative loop, and used this model to interpret the participants' accounts of their online activity. My analysis of the characteristics of the students within each segment was likewise informed by patterns emerging in the relevant literature. In my report of the findings, I used excerpts from the interviews to help articulate what participants believed to be their levels of engagement with followers who actively listened and reacted to their online messages.

### Summary

In this study, I used a qualitative phenomenological approach for descriptive analysis of interview data and used quantitative data for selecting research participants and segmenting them into sub-categories. The phenomenon of interest was social student engagement, as experienced by nine undergraduate Bucknell students, who displayed extraordinarily high levels of online influence, as measured by their Klout Scores. The intent of the study was to identify distinguishing patterns of student engagement emerging in their online activity and to examine similarities and differences between these patterns and more traditional forms of student engagement on campus. My aim was to discover the nine college students' knowledge of, experiences with, and feelings about

the phenomenon of online student engagement. The voice of each participant, as presented in this study, was important in describing this phenomenon.

In this chapter, I described my research design; disclosed my procedure for recruiting and selecting participants; provided a brief personal profile of each participant; explained my methodology for collecting and analyzing my interview data; and reviewed the social analytic metrics that I used to analyze patterns emerging in quantitative measures of each participant's online activity.

In the next chapter, I present my participants' responses thematically to capture important information in relation to my overall research questions. A cluster of three interrelated patterns of influence, corresponding to patterns of online behavior identified in the prior literature, emerged from my analysis of the social analytic metrics: collaborator, connector, and contributor. I will describe each of these categories and will present illustrative examples of characteristic attitudes and behaviors drawn from my interviews with the nine students.



## CHAPTER 4

### FINDINGS

This study examined the life experiences of nine students at Bucknell University, with a focus on their social media use. In this chapter, their responses to open-ended interview questions are thematically presented to capture information related to the study's overall research question. A semi-structured interview protocol was used to capture their voices and experiences. The qualitative results I present in this chapter are a summary and presentation of overarching themes, as reflected in selected quotes.

Using an inductive process, I performed a thematic analysis of the transcriptions and my interview notes, pertaining to the research participants' patterns of self-presentation online. This analysis was informed by a theoretical framework set forth by Cialdini (2009), which incorporates six factors affecting social influence: (1) *reciprocation*, (2) *commitment and consistency*, (3) *social proof*, (4) *liking*, (5) *authority*, and (6) *scarcity*. In analyzing the impact of the digital medium on traditional patterns of social inhibition, I focused specifically on a phenomenon that previous authors have termed the *spiral of silence*. I also sought manifestations of three styles of online engagement discussed previously in the scholarly literature. In addition to the thematic analysis of interview content, I conducted a separate analysis of patterns of online influence emerging in social analytic metrics collected on each of the nine participants. In this chapter, selected quotes drawn from the interview data will be used to illustrate each of three general patterns emerging in the quantitative data: (1) *collaborator*, (2)

*connector*, and (3) *contributor* (Appendix D explains the social algorithm I used to justify my segmentation).

### Online Self-Presentation

Each of my participants was asked to describe his or her online persona. In response, several of the participants discussed the significance of maintaining one's reputation and the risks associated with online indiscretions. For example, Sheri, a sophomore, described how she evaluates the appropriateness of her content. She mused, "I'm pretty cautious about the pictures that I allow my friends to tag me in because I'm friends with my grandmother."

Shane, a junior, emphasized not only the importance of maintaining his own reputation, but also those of his associates.

I try to project the best image I can because I know I represent more than myself.

I know it takes only one bad apple to ruin the bunch, so I don't want to be that bad apple. I do my best to project a good image on social media.

Elaborating further on this point, Shane expressed concern specifically about the effect of his online activity on the groups in which he participates on campus.

I am in a fraternity, I am a student at Bucknell University, and I am a member of [an educational opportunity program sponsored by a national foundation]. I feel like I represent these entities online. For instance, my bio says I am a member of the Bucknell Class of 2015. Let's say I tweet some very reckless things on the Internet about crime, or let's say I even committed a crime or something like that.

Everyone would say, “A Bucknell student has committed a crime.” So I would never want anything to reflect negatively on Bucknell because it would also reflect poorly on my record here. I also represent other groups such as my family, my fraternity, and the [national foundation]. My image affects their images too, so I’d just rather not have anything ruin their reputations resulting from my poor choices.

What both Shane and Sheri described is an awareness of their *online self-presentation*. Using the psychological concept of self-presentation, this term refers to projection of an ideal image through content that is shared publicly online and cultivation of an online persona that is linked to one’s personal and professional reputation (Junco, 2014). This concept is similar to what is known in the business world, as promoting one’s brand.

Jane, who was a senior at the time of our interview, was mindful of her image online because she was seeking employment with a pharmaceutical company. In discussing her online activity, much of her attention was focused on cultivation of career opportunities, as reflected in the following quote.

I’m careful what I say online, because I want to be perceived as successful. I want to be perceived as having fun, but also doing well. I want people to see I’m working hard and deserving of the opportunities I’m receiving.

She further explained how she uses LinkedIn to connect with Bucknell alumni in hopes they will help her land her first career opportunity.

I'm really trying to get into pharmaceuticals. I'm using LinkedIn to meet all kinds of people in different positions; everyone from scientists to sales reps to managers. I want them to notice me. I want them to see my credentials because it's not like they have your resume in front of their mirror every day. If I stay active on LinkedIn, then my profile will pop up; maybe they'll even poke around on my page. I just want to stay relevant; that's all. That's why I use LinkedIn. That's why I connect with people on there.

All of the participants were aware of the consequences of saying inappropriate things online, and for good reason. Advancements in technology now enable institutions to synthesize online conversations by topic from across the social web with deep listening applications such as Nielsen Buzz Metrics and Radian6 (Brito, 2012). Students need to be aware that 26% of collegiate admissions officers and 37% of company hiring managers use social media to screen applicants (CareerBuilder.com, 2012; Kaplan, 2012).

Judy, a senior, provided perhaps the best example from among my interviewees of what Ito *et al.* (2009) define as “messaging around” (p. 53) online, which is a multifaceted process of informal learning and youthful experimentation with digital technologies. The authors explain that young people learn over time by trial and error what is culturally appropriate and acceptable through participation in social media. For instance, they learn cultural norms of their peer groups by communicating with their peers, discussing sensitive issues, and sharing successes without bragging.

According to Judy, who was one of only seven female students majoring in mechanical engineering, gender is an occasional subject of conversation among students

within Bucknell's Department of Mechanical Engineering. "There are not a lot of women in Engineering," she explained, "so we are always talking about gender, gender roles, joking about it, and sometimes taking it too far." According to her, female students represent less than 20% of those in her degree program. In our interview, she elaborated on how she had used social media to promote a more gender inclusive environment within her department.

Guys just don't really understand feminism. So whenever there were articles online about feminism and things related to it, we would send them back and forth to each other and have some pretty interesting online conversations. In fact, these discussions were so interesting to me; they motivated me to take a Sociology 100 class as an elective. In this course, I learned a lot about gender and performance of gender. So I brought back a lot of the articles and concepts, which I learned in that class, to my Mechanical Engineering classmates, and we discussed them among each other.

Brad, a sophomore, described his version of "messaging around" on the social web. He said that he only includes people in his social network once he discerns that the cultural signals and clues in their online profiles are similar to his personal traits.

If they have the same views as me, have a quote that I like, they are around the same age, they like a mutual friend, or someone that I know, then I will usually follow them. I would trust them on a social network. Usually I try to follow people that I've interacted with, like on campus. So, if I see one of my friends

retweet the same person, and I like their stuff, then I'll go check out their page and follow them too. That's sort of our way of branching out to meet new people.

All of my participants agreed that posting sensitive content does affect one's online self-presentation. Researchers have found that Facebook users experience certain feelings of remorse, even regret, for having posted content containing sensitive topics, such as alcohol and drug use, sex, religion, politics, and profanity; content with strong sentiment, such as offensive comments and arguments; and lies and secrets. According to these same researchers, some of the reasons why people might have posted content that they would later regret posting are that they wanted to be perceived favorably; they did not consider the possible consequences; they misjudged the cultural norms among those in their social circles; they posted when in an emotionally charged state, such as anger; they did not think about the audience that would see a post; they did not foresee how their posts would be interpreted by their intended audiences; or they did not understand how the Facebook platform worked (Wang *et al.*, 2011).

Echoing these sentiments, Judy said she avoids sharing risky comments and pictures on social media.

I think it is risky for a senior who is applying for jobs to keep a profile picture of her drinking at a party with a red plastic cup or posting nasty comments to people online. Any of those kinds of things would make me regret it later.

A similar view was expressed by Melissa. She explained that political conversations can become offensive online.

In high school, I was in an honors politics class where the class was half Romney supporters and the rest Obama supporters. My teacher set up a Twitter account and instructed us all to share relevant articles on Twitter about the presidential election. This was how I got involved in Twitter, because I was following him. He would retweet our comments. His page gained a lot of followers since we could see what everyone was posting—even people who weren't part of our class. Some of the tweets that others posted were offensive, and you needed to be careful not to react with anger, but it was like watching a live debate.

All of my participants appeared to manage online relationships among their peers without any guidance from educators. In many ways, college students take for granted technology as “their way of life” (Martinez Aleman & Wartman, 2009, p. 16) without receiving much information about privacy, civil discourse, or ethical and moral online decision-making in their college courses (Junco, 2014). During my interview with Nancy, a senior, she asserted that her generation is learning online together.

Generally, students at the university are interested in what their peers are experiencing—both those who are a little younger than ourselves and those who are a little older, like recent graduates. We are interested in finding out what's happening around them and what's going on in certain social circles. Honestly, I think I can speak for my generation; we are really interested in seeing what other peers are experiencing so we can anticipate the same or avoid their mistakes. Social networking satisfies our need to see, like, what everyone else is doing.

A similar view was expressed by Shane. As an African American student, majoring in sociology and economics, he described several of his online exchanges about racial diversity on college campuses.

There was an argument a while ago on Twitter about historically black colleges/universities or predominantly white institutions, so I sort of chimed in on the discussion and I asked for people's opinion. I didn't necessarily choose a stance because I just wanted to be informed. I believe it's always good to engage in conversation even if it may result in uncomfortable conversations. I believe uncomfortable conversations produce the best results. I feel all interaction is good for people because it means we are advancing as a society. If young African American males never tweeted about—not to say that all African American males hate [predominantly white institutions], but if some African American males didn't tweet: "Can't stand this school because of a lack of diversity" then you'd probably never know that they felt that way. Social media helps put the issue out there, gets people thinking, and makes you aware that this is a problem. I know it helps me understand how people feel about this issue, so I think these discussions are beneficial to mankind as a whole.

To summarize the overall patterns of self-presentation that emerged among my participants, each was protective of his or her online persona, but did express his or her true identity (e.g., none engaged with others in pseudonymity or anonymity). All reported investing both substantial time and psychological energy in their online exchanges with their peers, consistent with the traditional definition of student engagement. All were



citizen influencers within their respective micro-societies, as evidenced by their high Klout Scores. However, during my interviews, I was surprised by each participant's lack of awareness of his or her social influence. All responded similarly to my compliment about their influence online, which was with a cavalier shrug of the shoulders and roll of the eyes as if to utter, "I assume everyone has it." However, such is clearly not the case. In the next section of this chapter, I will examine characteristics of my participants' online activity in relation to six traditional aspects of social influence that have previously been affirmed in the academic literature.

### Principles of Online Social Influence

Although my study was not designed to test generalizable hypotheses empirically, I still wanted to search for patterns, recurrent themes, or any consistencies in my participants' behaviors as part of my thematic analysis of their personal experiences. To help me better understand the intricacies of their online interactions and gauge their social influence, I used six fundamental psychological principles set forth by Cialdini (2009) as themes: (1) *reciprocation*, (2) *commitment and consistency*, (3) *social proof*, (4) *liking*, (5) *authority*, and (6) *scarcity*. From my analysis of the interview transcripts and notes, these six principles indeed emerged as salient. These six principles helped me to understand how each participant interacted online with others; to conceptualize a *social engagement cycle*, which included a *collaborative loop*; and to segment my participants according to their social influence into three groups: (1) *collaborators*, (2)

*connectors*, and (3) *contributors*. I will describe each of these categories in detail later in this chapter.

The first of the six aforementioned principles, *reciprocity* (Cialdini, 2009; Schaefer, 2012), which is probably the single most powerful creator of connection and influence online, was most frequently mentioned by the participants in my study. Nancy explained during her interview, “If I’m doing something I enjoy or if I find something I really like then I’m going to share it with others, because my audience has the same interests as I do.” Since Nancy had studied abroad previously in Europe, several of her followers, who were studying in Europe at the time of our interview, wanted to visit some of the same sites she had toured earlier. Nancy explained how she used social media to help them.

I like to think that I’m relatively helpful to my followers. I’ve had people in the past come up to me personally or online and say: “It was really cool that you went there and that you saw this. Can you please tell me more information about it, or can you send me the link to that, or can you give me directions to that restaurant, or which airline did you fly to get there?” That’s always helpful obviously. It’s helpful to share articles. They are helpful to me in the same way. I always try to geotag where I’m going or hashtag what I’m doing to help others. It’s helpful because if I see something, or I read something and it piques my interest, then I get excited about it. I really like how social media helps me be helpful to other people, to be engaged in their own interests, and to help them broaden their own horizons.

A like sentiment was expressed by Brad. He elaborated on his desire to help others who are experiencing similar struggles.

I try to be a source of help to overcome struggles of life. In a sense, I'm a teacher. I express online what I have learned so far in life. It's like a documentary. I reflect on how I felt that day and write about it or tweet about it. A lot of people are aware that I didn't actually grow up well off. I have a single mom, and it was hard growing up. I went through tough times and stuff. So getting accepted to Bucknell on a scholarship is a huge thing for me. That itself was a big struggle, but I overcame it. Dealing with a family sickness was another big struggle for me. Still yet is just getting through college, so I tweet a lot about my struggles at college.

The significance of *commitment and consistency* (Cialdini, 2009; Schaefer, 2012) was also confirmed by my participants. When asked, "Who is your ideal audience?," all of the participants responded similarly. Aside from celebrities, they all follow others like themselves. Sheri, for example, described her commitment to her teammates.

I'd say [my ideal audience is] pretty similar to me because they are my same friends and my same teammates. A lot of my teammates on campus are of the same mind. We are balancing sports and our school work. Obviously my family is of interest to me. So I would say that my ideal audience is very similar to me.

Rodney expressed a similar commitment, but to those whom he had identified as having mutual interests with him.

I have found that monitoring and listening among multiple platforms is helpful to me in identifying prospects who I could learn from; following them; search and

share topics of mutual interest with them—that is, something personal, or something professionally; engage with them by sharing my experiences, wisdom, or insights; and finally trying to earn their respect and trust.

Sheri explained the importance of *social proof* (Cialdini, 2009; Schaefer, 2012) in the online world, citing her friends' responses when they receive "likes" or when their tweets are retweeted to others.

I think everyone feels appreciated when they get 'likes' or their stuff is retweeted. Especially with Twitter, my friends will retweet each other's tweets all the time. I think it makes them feel closer together, as if they are all on the same page and reinforces our common interests.

*Likability* (Cialdini, 2009; Schaefer, 2012) was also found to be important to those I interviewed. All the participants expressed their desire to be liked by others. No one would expect their responses to be otherwise, especially since I interviewed young people. However, from my limited review of my participants' social networking platforms, I observed they used these platforms to document their interactions on campus as a sort of virtual scrapbook or as social proof of their activities.

The fifth principle of social influence that served as a basis for my analysis was *authority* (Cialdini, 2009; Schaefer, 2012). Responses from my participants appeared to confirm the importance of the principle of authority as it related to their online interaction with others. For example, Rodney said he portrays a "mentor type image" to his Twitter followers, asserting a belief that he is an authority figure online. In preparation for college, Rodney had learned how to research scholarships and financial aid opportunities

for himself. Although he had been accepted to Bucknell, he continued investigating other college opportunities, mainly out of habit, and he decided to share his findings with high school students and school counselors. Rodney explained how his followers on social media viewed him as an authority or as a resource for information.

I soon had messages from sophomores in high school—private direct messages—and they were telling me that their family isn't in the best financial situation and asking for my advice. They gave me their story and asked me: "What would be the best way to get scholarships for a university?" They asked me how much tuition costs per year, how much can be covered with financial aid, and how they could cover the rest of tuition by themselves. They asked me: "So what would you suggest and when would you suggest I start applying for scholarships?"

Rodney sympathized with those high school students who looked to him for help and he tried helping them, which also demonstrated his reciprocity. He explained how he understood the plight of his followers.

When I was a junior and senior in high school, I was going through the exact same process: applying to stuff; applying to colleges and just going through more stuff. In the process, I would tell myself in two years I'm going to be at a different campus. Where do I want that campus to be? What do I want to be learning? How am I going to get there? How am I going to pay for it? That's always one of the biggest things people think about is the cost. Of course, we always think about the quality of the education we get, but what are you willing to pay for that college education? A lot of times that is what stops a student. Their family doesn't

have enough income or that it would be too expensive for them. So I'm hopeful that these scholarships can help them ease the costs so that they could go to the college they really want to go to.

Sam presented a different view of authority. He expressed a sense of assertiveness and empowerment, with his smartphone in hand, to challenge authority. Watching a game from his residence hall room, he will challenge a referee's call or question a sports broadcaster. He explained how he uses social media to challenge authority.

I tweet some things about a sports team—like how I didn't agree with a call or something like that. Somebody will give me feedback and say they didn't agree with the ref's call either, and then it turns into a conversation about the game or stuff like that. I'll tweet about the commercials during the Super Bowl. Usually, somebody responds to me, and they often say: "I thought the same thing."

The social behaviors of both Rodney and Sam confirm that meaningful content is important in social engagement because it creates influence in the absence of experience and actual authority. Schaefer (2012), in an interview with Robert Cialdini, quoted him as saying: "People will perceive the value of the individual and the content based on how many other people are accessing it. That's evidence of its validity" (p. 74). Elaborating on this point, Schaefer (2012) asserted that the talent to "create and distribute meaningful content can be a legitimate source of online influence even apart from an individual's actual experience, capability, or personal accomplishments" (p. 75).

The final principle of social influence that was examined in this study was *scarcity* (Cialdini, 2009; Schaefer, 2012). Although Schaefer (2012) has asserted that

digital content can be difficult to leverage except in those rare cases in which true and scarce authority value is attached to the content, this view was not necessarily reflected in the comments of my participants. For instance, of those I interviewed, most had a more self-centered, almost narcissistic, view of scarcity. They were not concerned how others viewed what they had to offer as a form of scarcity, but rather they believed that their insights were unique and individualistic mainly because they attended Bucknell. In some respects they were correct, in that not everyone can attend Bucknell. Additionally, there is probably some truth to the notion that everyone can offer uniquely personal insights on most topics.

Brad explained his thoughts on scarcity in this way, “I think I’m young, but very knowledgeable online; I have been through a lot but have also gained a lot of experiences, so people usually listen to me for the most part when I say things.” A similar view was expressed by Shane about his individuality. “I definitely think I portray myself in an amazing way on social media,” he professed, “I think I’m an amazing person in person, and I know that sounds cocky, but this is how I feel.”

### Breaking the Spiral of Silence

What I learned from my interviews is that social engagement through the online world can sometimes provide a reprieve from the real world negative interaction known as the *spiral of silence*, where people hesitate to share their opinions for fear the majority may not share their same views. *Spiral of silence* theory states that the decision to express an opinion is influenced by surveillance of the social environment to gauge whether the

majority shares the opinion (Noelle-Neumann, 1974; Glynn *et al.*, 1997; Shanahan *et al.*, 2007).

Shane said during his interview that when he attends his classes, he never “diverts” his peers’ attention from what the professor is lecturing on, even when he reads an opposing view that is shared with him by one of his online followers. He said, “I want to avoid being labeled as confrontational by others.” Nancy said that she is often exposed to either extremely liberal or extremely conservative points of view on campus. “I never challenge anyone in a class; however, I will search a topic discussed in class on social media for clarification of both sides of the argument,” she explained, “to me, social media provides a level playing field.”

Another example of the spiral of silence was mentioned by Rodney during his interview. He explained this social phenomenon in the following way.

In a classroom discussion, you don’t want to get anyone mad, because this happens in a lot of class discussions. In order to avoid getting anyone mad, you tend to choose to stick to a very safe point of view, in hopes that someone says “well, I believe in this too,” even though that person may not. It’s just sometimes, in classroom discussions, you just don’t want to be labeled someone who has a confrontational point of view, because it’s the teacher that’s talking.

Whether students have the same point of view as a teacher or not, according to Rodney, they do not always mention what they want to say in class, usually out of respect for the professor. In contrast, Rodney explained how social media use facilitates dialog.



But online, you're seen as your own educator. You have your conversation with experts and whatever you post that's your opinion. It's not influenced by anything. It's not like your professor is standing right behind you saying: "Are you sure you want to send that?" So let's say I post something, and then someone comments on it, and that person responds to me, saying "I don't agree with your point of view," but then contributes something further to my discussion. To me, this is refreshing and much more interesting than you saying: "Oh, I don't agree with this." Instead, on the social web, you go back and forth and there are people online, who might not get back to you right away, but they reply and send you a short response—maybe an article, maybe they send you a link and then you're, like, alright, I'll read the article. You read it and then you say, "Now I see where you're coming from."

Rodney further explained how social media use helped him comprehend world views that differed from his own and to understand opposing opinions of others.

Recently, I was in an online chat covering a certain topic, and one of my followers disagreed with me. We continued our discussion, and eventually we concluded, saying to each other, "okay, we may not agree, but I want to hear what you have to say." So I feel the social web helps you express your opinion or fortifies your beliefs or opinions more because your audience is mixed. It provides a public forum for publishing your internal thoughts. That's one of the coolest things about the social media. You say things that you don't always have the opportunity to say out loud in class. You post it so you get to see different

comments—different points of view that wouldn't typically be expressed in a classroom or maybe in a conversation with others at lunch.

It appears from my observations that although campus communities among Millennials have transformed into online micro-societies, the principles of traditional student engagement persist in the online world. The fundamental principles of personal interaction continue to endure, regardless of whether they apply offline or online, which explains how some users gain social influence and how the cycle of social engagement operates. It also explains how synergy from online interaction develops into occasional loops of collaboration among young people. Understanding these intricacies of social influence helped me to identify three different patterns of social student engagement among my research participants, which I will describe next.

#### Affirmation of Three Styles of Online Engagement

As mentioned previously, a *collaborating* style emerges as the dominant representation of online influence within the scholarly literature. Based on the analysis of my data, I can affirm that the *collaborating* style was commonly manifested among my research participants, consistent with previous studies of online influence among college students. This style was particularly evident in my two participants with the highest Klout Scores.

As previously noted, there is also evidence within the literature that the *connecting* style is a viable model for online influence within more advanced scholarly circles (Veletsianos, 2012), though its prevalence among students does not appear to have

been previously explored by educational researchers. From my findings, I can affirm that the *connecting* style was applicable to some of the participants in my study as well, consistent with previous findings on faculty, which would suggest that even neophytes at least occasionally bring this style of influence to online discourse within the academic community.

The final style of online interaction discussed in the literature is *lurking*, which involves viewing content without engaging others (Dennen, 2008; Junco, 2014). Although the *lurking* style has been previously observed as a pattern of online behavior, this style of engagement has generally not been directly linked to the concept of social influence within the literature to date. In interpreting my data, I found that some of the participants in my study actually did manifest behavior consistent with that of the *lurker*, suggesting that a more reticent style of online engagement does not preclude the exercise of social influence. In describing the form that such behavior took among the participants in my study, I would use the term "contributing," as distinct from "lurking," to reflect the fact that they were indeed influential members of their online communities.

Using social influence scores that were based on Twitter retweets, I grouped my nine research participants into three clusters corresponding to the three styles of online engagement: *collaborator*, *connector*, and *contributor* (see Appendix D). Based on the results of this analysis, I classified: (1) Rodney and Sam as *collaborators*, each with a Social Authority score of 34; (2) Brad, Shane, Nancy, and Melissa as *connectors*, with scores at or between 26 and 17; and (3) Jane, Sheri, and Judy as *contributors*, with scores below 17. From my thematic analysis of the interview transcripts and my review of their

respective social analytics, I can affirm that each participant's style matched one of the three aforementioned descriptions of online engagement.

Despite the differences in their styles of online interaction, there are several essential characteristics common to the *collaborator*, *connector*, and *contributor*. First, each is immersed in social media activity. Social network platforms were frequently mentioned by my participants as a source for their news and information. All said that they received most of their news about current events from social media. Take for example Nancy, who explained her daily routine during our interview.

I actually use a lot of different outlets online. First thing I do when I wake up is check my phone. I know that sounds very attached to technology, but it's like reading the daily newspaper for me. Next, I check Twitter; I get CNN updates on my phone. I primarily interact with others online. When I'm in school, I spend a great portion of my time doing research and things for my schoolwork. In my leisure time, I spend a good amount of time on Facebook, a lot of time on Instagram, and again on Twitter. I also spend a lot of time on sites like Pinterest and Stumbleupon, because they are good outlets to find smaller blogs, articles, news stories, and things that you wouldn't normally find on your own if you didn't know exactly where to look. I'd say I use all the social networks pretty evenly.

Although Nancy's actions may not sound out of the ordinary, they represent a change in human interaction. All of my participants believed strongly that their social media use

helped them make meaning of things and influenced their decisions to engage with others online.

The second characteristic I found common among the *collaborator*, *connector*, and *contributor* was that each participant operated within the *collaborative loop* of the *social engagement* cyclical model described in Chapter 2. Each participant manifested varying degrees of providing authentic helpfulness, sharing meaningful content, and relating to a relevant audience. These behaviors were displayed with more confidence and social media acumen among the *collaborators*, which in turn seemed to strengthen their self-esteem and self-presentation, thereby enhancing their learning experiences (see Figure 3). For example, during Rodney's interview, he described how he conscientiously provides meaningful content on the social web. He explained, "I try to make my content relevant, interesting, timely, and entertaining. I always try to remember social media is social and to be successful I know I need to be personable." Later in the interview, Rodney shared his obsession with always being connected to a relevant audience.

I make an effort to enlarge my social network, because I believe each small organic conversation invites me to engage in a more meaningful conversation, becoming a member of a larger group or more important conversation and making me part of a bigger connection.

To strengthen my analysis, I reexamined edited versions of the transcripts and my interviewing notes, informed by the six fundamental psychological principles set forth by Cialdini (2009). In the remainder of this chapter, I will describe the characteristics of each cluster, based on my findings.

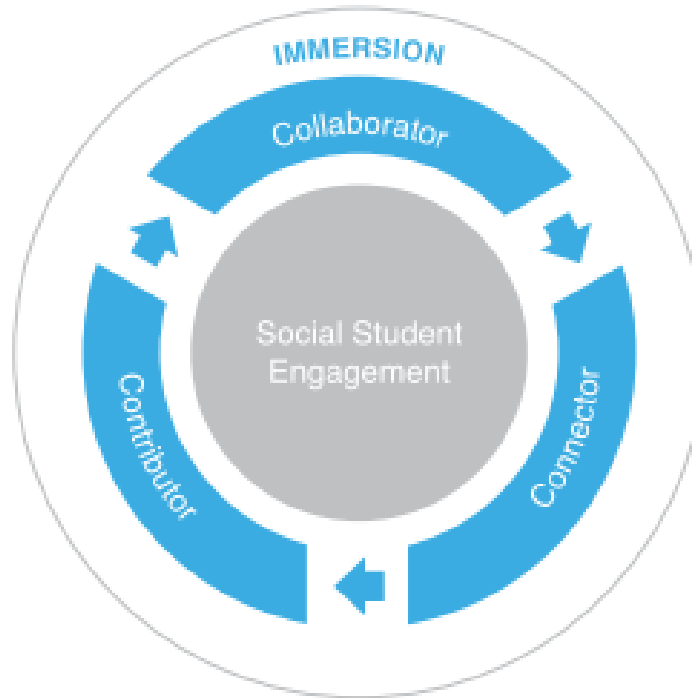


Figure 3. Three styles of online engagement.

### *Collaborator*

As mentioned previously, *collaborators* exemplify three characteristics. First, they have an assertive online presence, because they exemplify a class of social media users that together have a sizable audience with a sizable reach, as evidenced by their high Klout Scores. Rodney and Sam are examples of students in this group who can sustain a high level of engagement across multiple social media channels. They are engaged in six or more social media channels and have an above-average engagement

score. *Collaborators*, such as they, not only make a dedicated effort each day to be focused on social media, but also make it a core part of their go-to-college learning experiences. These students cannot imagine attending college without an active presence in social media.

The second characteristic of *collaborators* is that they exemplify altruistic behavior, because social media use is a sociological phenomenon, not just a technological one. *Collaborators* are helpful to their followers and are always willing to go the extra mile to answer questions. Rodney, in his interview, mentioned how he participates in incentive programs online and then shares what he finds with his followers. One characteristic I noticed during my interviews with Rodney and Sam was their strong preference to remain impartial, so that they could stay above the fray in any debate and avoid suffering the consequences of showing a bias toward someone or something. That is not to say they don't feel passionate about things, but it is their preference to remain impartial. They have their long-term agendas, but they might also have short-term initiatives they want to promote. For Sam, the first order of business might be tweeting about sports events. For Rodney, it might be sharing among his Twitter followers a coupon for the grand opening of the Sweet Frog, a local yogurt parlor, so that his followers do not miss out on a free promotion.

Rodney explained that when a member of his online community asks him for advice, he feels obligated to help.

I assume they have been resourceful as I have been. I know that they have approached their school counselor and someone at a local government agency for

help before they come to me, so I feel a commitment to respond. I assume they weren't able to get help, so I must do it.

He said he was sure his followers would not ask him unless they really needed his help. In other words, they have been "crowded out" (Stern, 2013, p. 132), in his mind, by others. Therefore, he sees his followers as the next-most-worthy recipients of his goodwill.

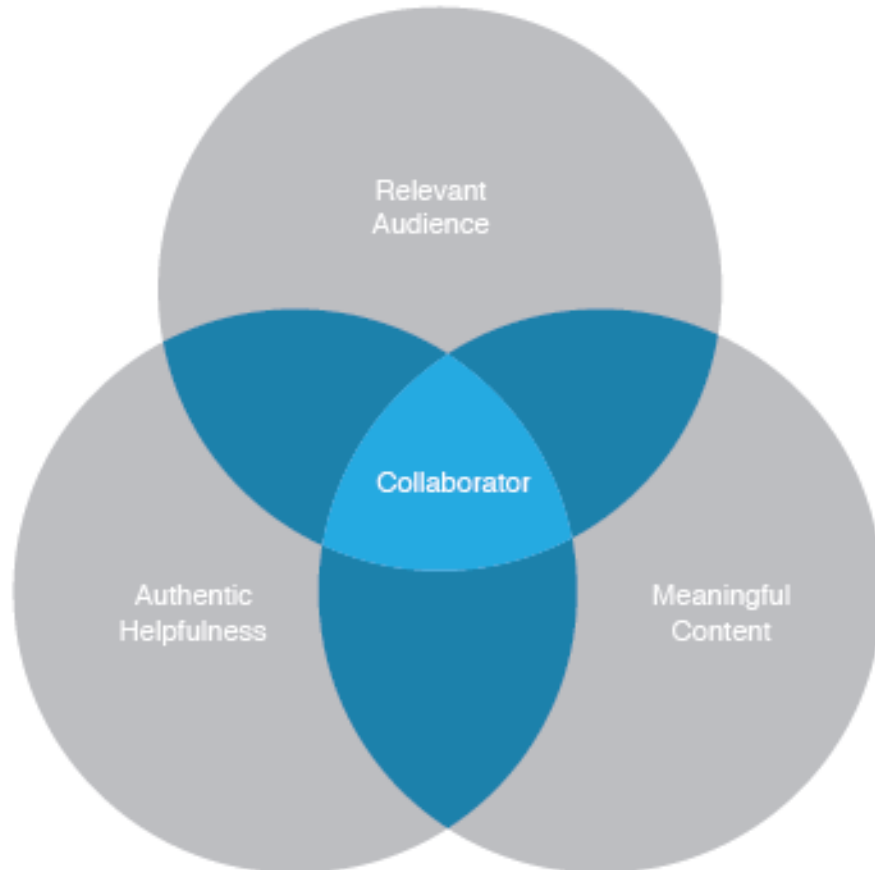
The final characteristic of *collaborators* is that they invite action, because of the level of authentic helpfulness they have established in their respective networks of interdependence. Exemplifying this stance, Rodney explained during the interview how he uses social media to expand his social network by becoming a helpful resource to others.

Social media allow me to hone in on people I want to engage with. They could be a potential contact, prospect, celebrity, or thought leader. Social media help me learn about their interests, opinions, and what they care about. By monitoring their tweets regularly, I can get a sense of their tone, personality, and interests, so I can relate to them in conversation. I make it a habit every day to spend time learning about them, what they are interested in, if there are similarities and if I can connect with them. I want to earn their trust by regularly providing meaningful comments on articles they might share. I strive to be on their top-of-mind and become a resource of helpful comments.

*Collaborators* are trusted by their audiences because of their authenticity. They have "virtual" influence because they provide authentic helpfulness with meaningful



content to their relevant audiences (see Figure 4). As mentioned previously, reciprocity in the online world is probably the single most powerful initiator of social interaction and influence (Schaefer, 2012).



*Figure 4.* A collaborator seeks a synergistic connection with a relevant audience through authentic helpfulness and meaningful content.

### *Connector*

*Connectors* form the next group, which consists of Brad, Shane, Nancy, and Melissa. The characteristics of the *connector* can be best illustrated by Melissa, who is a

first-year student from Chicago. She explained to me that she glances at her iPhone every couple of hours, but during her spare time she looks at it more often. She uses numerous social network platforms throughout the day, but mainly prefers Facebook, Instagram, Twitter, and Snapchat in that order. Melissa explained she does not like to devote too much time to her email. She described during the interview how she uses social media.

I think as time goes on people my age, and a little bit younger, are moving further away from Facebook because we're more passionate about sharing pictures than posting messages. A few years ago we were writing on each other's walls and messaging online; this activity has heavily decreased among my age group. I have a cousin, who is 15 years old, and she can attest to that too. She barely has a Facebook presence online anymore. I follow [Twitter] a lot like if I'm following a sport or a team game that I can't watch online. So, you know, I just kind of check it as I go.... I'd say I check it as much as I check everything else, but checking Twitter doesn't take as much time.

What makes Melissa a *connector*? The most obvious criterion is that a *connector* knows a lot of people. A *connector* is a person who believes he or she knows everyone; one who is gregarious and intensely social. In describing her circle of friends, Melissa offered the following.

I'm friendly with a lot of people on campus, similar to when I was in high school. It's the same thing. So when I post pictures standing with a person, it kind of shows that you're friends with a lot of people, and others can see that.

Melissa posts many group photos. In fact, her Twitter personal profile picture is a crowded group photo of her with nine of her friends. Usually, a profile picture is a portrait photo of the user only. In breaking from this convention, Melissa seemingly uses the social web to document her interaction on campus or as social proof of her network.

*Connectors* are college students who are engaged in six or more channels, but have moderate to high Klout Scores and low Social Authority scores (see Appendix D). *Connectors*, such as Brad, Shane, Nancy, and Melissa, are active in many different social networks, but tend to focus on sharing their observations and passing on information they believe is relevant to their followers. They are people who love or believe in something so much that they want to tell anyone and everyone about it. They are passionate, and they talk about what they observe, even if no one is listening. Their ambition may be to transition to a *collaborating* style, but they may still feel apprehensive to embrace the full multi-way conversation that deep engagement entails. Shane, a *connector*, described how he believed his humorous tweets were relevant to his followers.

In the academic sense, I'm very aggressive in that I want to learn. I want to be more engaged. I want to do the best I can, and I want to put my best foot forward all the time. Something I really hold dear is my fraternity's belief in achievement, and I feel like whatever I get involved with I put my all into it. I might come across a story that is humorous, and it makes me laugh. I'll share it; I'm big on humor, so like nine times out of ten I will tweet something that I believe will make somebody laugh.

The next characteristic of *connectors* is that they appear quite self-assured and confident in their self-presentation; believing they are mentors to their audiences. They believe they are trusted by their followers, because they believe they offer an authentic source of information. They think they are promoters and defenders of their communities. The *connector* may not have the same size community or the same reach as the *collaborator*; but he or she still has a loyal and relevant audience. Thus, the *connector* can be a valuable resource to student affairs professionals in promoting campus events, programs, co-curricular activities, or other initiatives. They appear to be trusted among their followers and thus they do influence their respective micro-communities.

Student *connectors* can be advocates in their circles, aiding and influencing their friends through organic conversations, but their content is not retweeted as often as that of the *collaborator*. Since retweets are a critical measure of social success on Twitter, the *connector's* social content tends to lack the relevancy to a general audience that is a distinguishing characteristic of the *collaborator's* content. Instead, student *connectors* tend to engage with others when there is a mutually beneficial relationship, and these relationships usually exist on Facebook, Twitter, or Instagram.

What distinguishes a *connector* from a *collaborator* is a lack of authentic helpfulness. This is not to say that a *connector* is unhelpful in any way, but rather that a *connector's* motivation to provide help is based on his or her self-awareness, free of all other influences, whereas the *collaborator's* motivation stems from a feeling of obligation to help another. When Shane was asked to describe the benefits of interacting with others online he responded in characteristic style.

I never really thought about it like that honestly. An interaction—well, I guess—to be honest, I love to talk. So, it’s nice to talk to people about what I’m thinking. When asked to describe his ideal audience, Shane explained how he interacts with others on the social web.

I don’t think I necessarily have an ideal group. I mean, I don’t really care. I don’t necessarily want young kids following me; I don’t see what that does for me. I just don’t feel like I have an ideal group. I never thought about having an ideal group. I just saw Twitter as a way to connect with people. So, I guess I’m friends with people who have an interest in me or who follow me.

In response to the question, “How helpful are you to your followers?” Shane replied, “I don’t think I’m really helpful; I provide entertainment sometimes.”

### *Contributor*

*Contributors* are college students who are engaged in five or fewer social media channels and who have moderate Klout Scores and Social Authority scores below 17, indicating that their social content is seldom retweeted by others. *Contributors* such as Sheri, Judy, and Jane, have a very strong presence on just a few social networking sites, where they focus on engaging others deeply when and where it matters most. The social media activities among this group tend to involve listening rather than actively participating in conversations. *Contributors* are slow to engage meaningfully in online interaction or are just getting started, and thus prefer the shallow waters of social student

engagement over the deep waters. However, *contributors* are not “lurkers” (Dennen, 2008), since they are active social media users with high Klout Scores.

A *contributor* is one who is reflective; a student who looks for a point of entry into the discussion. Although not concerned about being viewed as an authority online, a *contributor* seeks likability (but not obsessively) and expects loyalty. An example of a *contributor* is Jane. She was one of 3 million users who retweeted to their respective micro-communities a “selfie” taken by Ellen DeGeneres with Jennifer Lawrence, Bradley Cooper, Meryl Streep, Julia Roberts, Brad Pitt, and Kevin Spacey, during the Academy Awards. At the time of this study, this photo broke the record for most retweets with 1.7 million in less than an hour, was “favorite” over 700,000 times, and generated so much traffic on Twitter that it crashed the social platform. Jane’s retweet of the photo was sent 23 hours after DeGeneres’s original post at 7:06 p.m. on March 2, 2014.

Jane expressed how she is not concerned about being viewed as an authority online, how she seeks likability, and how she expects loyalty.

I don’t want a lot of attention really. I don’t feel like I need it. I want to associate with people who can appreciate me, because I appreciate them for more of their subtleties. I’m friends with people who are willing to make an effort to be my friend. I think that goes back to the connection thing. If I haven’t talked to someone in a while, and I received a message from them out of the blue, that means they were thinking about me, and that’s what’s important to me and typical of the people I’m more likely to trust. If I’m going to be a friend with someone, I’m going to expect loyalty. I expect reciprocation.

Describing herself as a listener, Sheri explained how she interacts online with others.

I don't post online political views. I don't try to start crazy arguments, just as I would not if someone met me in person. So, I think I'm more like a listener—someone who floats under the radar.

*Contributors* are more likely to use social networks mainly for distributing information to help keep their audiences informed. Whether it is Jane telling her sorority sisters about an upcoming community service project or Sheri updating her aunts about her college experiences, each uses her social network for distributing and contributing relevant content to others. Sheri mused during the interview about her aunt's interest in her well-being.

Most of my interaction is with my friends here at Bucknell or my friends at other colleges. However, most of my time when I'm posting pictures is spent thinking about how my family will think about it. Like I said before, I do care what my aunt thinks about me. I want to maintain the same relationship we have offline online. You see, my mom is one of eight, she has five sisters. I just think it is funny because my oldest aunt is probably 58 or 59—60 at least, so she's a different generation for sure. I know that if I post a party picture—like I really respect my aunts and what they think of me, like I'm Irish and we are a really close family and we get together a lot, so I really respect their opinion of me and so—I always kind of run a filter through my mind of whether my mom approves of this picture, or will my aunts approve of this picture, or will my grandmother

approve of this image. If so, then I put it up. So their opinions are definitely important to me, and I would rather have their approval than be considered a cool party girl with my friends. My older aunt spends like half of her day on Facebook because she is retired. She spends a lot of time on Facebook. My cousin has her own page for her jewelry site so she will spend a lot of time looking at that and looking at my cousin's page and my profiles and she leaves her comment like: "That's so pretty, I'm glad you're having fun."

Regardless of their groupings as *collaborators*, *connectors*, or *contributors*, all the student participants expressed an expectation of instantaneous communication from the university. Apparently once social-media-obsessed Millennials are enrolled at a post-secondary institution, they expect that online interaction will continue with instantaneous communication (e.g., Facebook, Twitter, emails, text messaging). For instance, Shane recalled how Bucknell's Admissions Department incorporated social networking into its orientation program to help him and other first-year students introduce themselves to each other before arriving on campus.

Before I got [to Bucknell], Admissions had created a Bucknell Class of 2015 group on Facebook for all new students to introduce themselves to everyone. I posted messages on their page three times. Since I'm black, I stood out to people anyway. But people responded to what I said on Facebook, and it helped me get friend requests from people I didn't even know before. By the time I had arrived, I was already familiar with a lot of people because of my interaction with them on Facebook. Many have since become some of my coolest friends. Social media



give you an outlet to meet people. Without it, I would have come here not knowing anyone; everybody would not have known anyone.

All the participants expressed similar sentiments regarding their expectation for the institution to provide them with interactivity, frequent updates, and Internet mobility. With the popularity of social media among students, educators need to understand and leverage this resource to improve their work with students, consistent with Tinto's (1987, 1993) predictive model of student integration, which describes how both academic and social interaction contribute to students' persistence in college.

### Summary

In this chapter, I presented the results of a study of nine influential college students' use of online social networking. I described their patterns of online self-presentation, and cited applications of six principles of social influence set forth by Cialdini (2009): *reciprocation, commitment and consistency, social proof, liking, authority, and scarcity*. I discussed how the research participants made use of online media to escape social pressures against dissent that typically prevail in face-to-face interaction, a phenomenon known as the *spiral of silence*. Informed by the prior literature on patterns of online social interaction, I affirmed the applicability of three styles of online engagement to my research participants: *collaborative, connective, and contributory*. In the following chapter, I will discuss the practical implications of these findings for student affairs professionals and others seeking to promote student

engagement in the digital age. I will also raise a number of related questions that remain unanswered and will offer recommendations for further research.

## CHAPTER 5

### CONCLUSION

The aim of this study was to examine the online activities of students who have been identified as influential in the cyber world, in order to determine if they manifest patterns of behavior that are consistent with more traditional notions of student engagement. Through my analysis of both qualitative and quantitative data, I sought to further ascertain what unique forms student engagement takes within a digital context. Although I found that traditional elements of student engagement were evident in students' online activity, every interaction was amplified because of the hyper-connectedness of Millennials. With the development of social networking platforms and advancements in mobile devices, the phenomenon known as student engagement has transformed itself to include online interactions where a student communicates with a relevant audience, shares meaningful content, and exhibits exchanges of authentic helpfulness.

As a qualitative phenomenological investigation, this study consisted of an in-depth examination of the personal experiences of nine undergraduate students, chosen on the basis of their shared experiences of deep immersion in social network sites. As such, it was not designed to test generalizable hypotheses empirically. However, with respect to the individual participants, all reported substantial investments of both time and psychological energy in their online interaction with peers, consistent with traditional definitions of student engagement, but in ways that were uniquely reflective of the digital medium. A process of open-ended questioning was used to collect verbal data, which was

then thematically analyzed, in combination with quantitative social analytic data, to identify the unique ways in which student engagement occurs within an online setting.

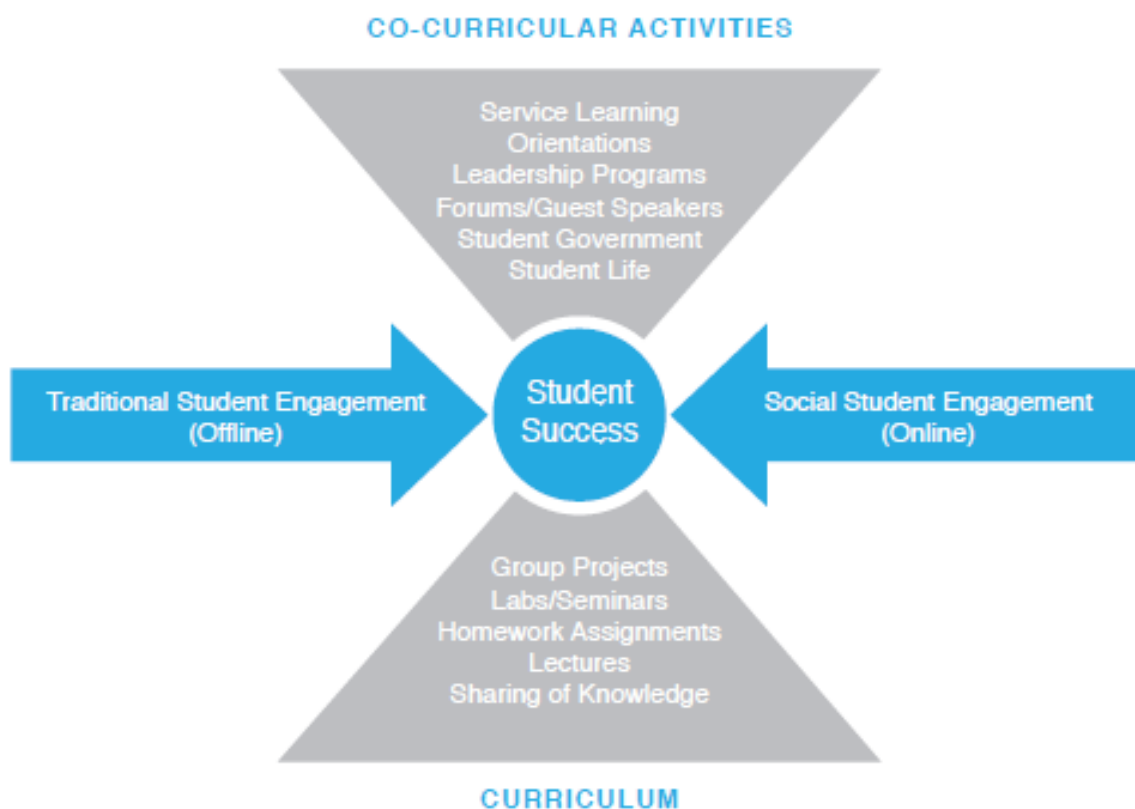
The following is a summary of my observations from interviewing my student participants and reviewing quantitative data on their online interaction:

1. All of the participants believed the social web revives “dormant” relationships.
2. All believed they received more support from their social ties on the social web versus their face-to-face interactions among acquaintances on campus.
3. All used social networking sites to keep up with close social ties.
4. All indicated that the social web had helped them to increase the number of their relationships that they would characterize as close.
5. All agreed that they had close ties because of their use of social networking and believed they were less likely to become socially isolated than they would otherwise be.
6. All were mindful of their online presence. Each strived to present an authentic personal identity.
7. Although all were immersed in social media use, their social analytic metrics revealed distinct groupings based on the three styles of online interaction: *collaborator*, *connector*, or *contributor*, identified from a review of the educational literature.
8. All believed their online interactions helped their audiences, but each had a different motivation for using social media to engage with others, which was reflected in one of the three patterns of influence.

9. All sought to enlarge their respective audiences.
10. All sought relevant and meaningful content in online postings of others.
11. All viewed social media as conducive to a culture of reciprocation.
12. All believed social media use helped them to understand multiple points of view.
13. All used social media to collaborate with others, based on a pattern that I have characterized as the *loop of collaboration* within the *social engagement cycle*.
14. All displayed behaviors or held perceptions consistent with the principles of *reciprocation, commitment and consistency, social proof, liking, authority, and scarcity* in their use of social media.
15. All believed that social media use encourages an expression of ideas and thoughts; countering any “spiral of silence” that may exist offline.
16. All believed that social media use contributed to their learning and student life.

#### Alignment of Traditional and Social Student Engagement

The college years are a time of significant growth and change for students as they confront new ideas and experiences that may change what they already know and believe. Faculty and student affairs professionals that understand these changes will design courses and programming that meet the needs of students and support their continued development by incorporating social media use in both curricular and co-curricular activities (see Figure 5).



*Figure 5.* An alignment of both traditional and social student engagement with curriculum and co-curricular activities contributes to student success

From my investigation, I have come to the conclusion that interactions through social media do not replace traditional forms of student engagement, but instead complement them and perhaps, in some cases, even enhance them. I believe the positive benefits of engaging students online outweigh any adverse side effects. I see five main advantages of social media use among undergraduates. First, social media use helps students to efficiently manage their relationships and motivates them to network with others outside their individual comfort zones. Second, immersion in social media use encourages student collaboration. Third, social media use compels students to engage in

reflection to make meaning of new information, when integrated into curricular and co-curricular programming. Fourth, advancements in social analytics provide unobtrusive tools for measuring student outcomes. Finally, social media use increases dialog between students and their campus communities. Student *collaborators*, *connectors*, and *contributors* all want to be engaged by their institutions through continually instantaneous communication.

### *Relationship Management and Networking*

From my interviews of my student participants and my review of their social analytic metrics, I have concluded that social media use accelerates networking and helps manage relationships among undergraduates. All my student participants counted on the university to provide them with interactivity, frequent updates, and Internet mobility. This expectation was formed early during the process of admission to the university. Once they enrolled, they expected that online interaction would continue with instantaneous communication (e.g., Facebook, Twitter, emails, text messaging).

As I recounted in Chapter 4, Shane disclosed his race to the Class of 2015 Facebook group, which was originally organized by the Admissions Department. The Department used Facebook as part of its orientation program to help Shane and other first-year students introduce themselves to each other before arriving on campus. “Without [social media],” explained Shane. “I would have come here not knowing anyone.” Use of social media accelerates rituals of initiation and encourages networking among undergraduates. I observed firsthand that college students look to others like

themselves to engage with them online, to guide their actions, and to protect and enhance their self-esteem at their home away from home. Given the large percentage of students that use social media and the relationship of online engagement to psychosocial outcomes of college, I believe it is incumbent upon student affairs professionals to understand how they can use social networking platforms in to promote student success.

*Encouragement of Student Collaboration through Advanced Use of Social Media*

From my study, I have concluded that social media use amplifies interaction and enhances collaboration. My findings show that student participants who have been identified as influential in the cyber world do manifest patterns of behavior that incline them to collaborate with others. I have observed that hyper-connected Millennials appear to have a world view of learning completely different from that of earlier generations. This reaction may be because, as active users of social media, they feel empowered by its convenience, emboldened by its neutrality, and energized by its appealing culture of trenchancy. In short, use of social media appears to foster a spirit of online assertiveness. Also, social media use in college courses can encourage student cooperation and collaboration (Hollyhead, Edwards & Holt, 2012; Junco, Elavsky & Heiberger, 2012; Schroder & Greenbowe, 2009; Kear, 2011).

I have also observed that active and collaborative learning among Millennials may include multiple informational sources. Traditional aged undergraduates view the world as a series of interconnected informational sources. For example, a source might be an e-book, an expert, someone that has experienced a particular situation previously, a



website, a teacher, a scholarly article, a blog, a Wiki, or any number of other entities or people that possess knowledge. Sometimes this same knowledge is held by multiple sources with varying degrees of completeness and accuracy (McHaney, 2011). For any informational source to be useful to college students, it must be identifiable, accessible, decipherable, accurate, and relevant. Consequently, it behooves student affairs professionals to always challenge students to double check their sources, question the accuracy of their information, and identify those with whom they collaborate online. Sharing this sound advice for proper use of social media in active and collaborative learning will contribute to student success.

*A Compulsory Exercise in Reflection for Meaning Making*

From my thematic analysis of the interview data, I have concluded that social media can be used to help students reflect on their co-curricular activities and how these activities relate to their formal learning. Cialdini (2009) noted, for example, that "our modern era, often termed The Information Age, has never been called The Knowledge Age," because "information does not translate directly into knowledge." Rather, "it must be processed—accessed, absorbed, comprehended, integrated, and retained" (p. 231).

I believe one way to make efficient use of lectures is to encourage the learner to reflect upon a topic online and engage his or her social network. Encouraging online collaborative activities, through the use of such pedagogical devices as discussion questions and follow-up class discussion, allows students to process and apply new knowledge and capitalize on differences in learning styles. Other educational researchers

have expressed similar thoughts (Junco, Elavky & Heiberger, 2012; Junco, Heiberger & Loken, 2011). Student affairs professionals can serve a unique role as advocates of reflective learning by using social media to help students to process concepts that will lead toward student success.

### *Unobtrusive Tools for Measuring Student Outcomes*

Through my review of social analytic metrics pertaining to participants' use of social media, I have seen firsthand how social networking platforms can be used as unobtrusive tools for measuring student outcomes. Social networking platforms offer student affairs professionals new sources of data to assess the effectiveness of future student engagement interventions and programming, as previously noted by Junco (2014). Social engagement data can now be synthesized from across the social web with deep listening technology such as Nielsen Buzz Metrics, Radian6, or uberVU via Hootsuite. Each of these tools can be used to monitor data from Twitter, Facebook, LinkedIn, Google+, Reddit, Flickr, Vimeo, blog posts, blog comments, premium news sources, and others.

According to Junco (2014), "In times of increased scrutiny of higher education and calls for improved accountability, it is essential that we properly evaluate our programs and services, social media or otherwise, to provide evidence of positive outcomes" (p. 86). The benefits of doing so are that student affairs professionals support their students by ensuring that what they do matters and that they support the continued

growth of the profession. Thus, social media provide student affairs professionals with unobtrusive tools for measuring student outcomes that contribute to student success.

*Students' Desire for Social Engagement with Their Institutions*

From my phenomenological study of nine student participants, I have concluded that the rise of Internet technology, mobile devices, and social networking platforms has led to a new wave of social student engagement that differs from traditional forms of face-to-face interaction among members of the campus community. These digital innovations promote a student culture of hyper-connectedness, accessibility to abundant information, empowerment through online collaboration, and networking with scholars. Since students spend a significant amount of time with social media, administrators at higher education institutions are beginning to recognize the enormous potential of connecting with their students through various social media channels for admissions, community-building, and retention efforts. Despite this realization, student affairs professionals seem to cling to the old paradigm. Most student affairs professionals have only a cursory understanding of social media or choose to avoid the topic altogether (Junco, 2014).

Administrators, faculty, and student affairs professionals would do well to re-evaluate how they use social network platforms in their campus communities to avoid broadcasting one-way messages. They would also be well advised to replace their outdated approaches and instead adapt to a culture of social student engagement where they can adequately address needs and expectations of hyper-connected Millennials.

They need to recognize that innovation in social networking technologies is moving faster than anyone could have ever anticipated, without any foreseeable slowing. Tools are changing, networks are merging, online start-ups are being acquired, and students' use of social media is constantly evolving. Educators need to stay ahead of the game. Schaefer (2012) has observed that an "entire generation is learning to move through life by rapidly assimilating data in small, searchable bits, usually through a cell phone" and he predicts that "within a few years, smartphones will be the predominant 'first screen' access to the Internet" (p. 23-24).

Student affairs professionals can play a leadership role in guiding their campus communities to establish a culture of social student engagement; however, they first need to embrace social media use. This process begins with the realization that each student is unique in his or her needs and characteristics. Thus, it is essential to identify which students are *collaborators*, which are *connectors*, and which are *contributors*.

In particular, student affairs professionals should seek out opportunities to engage *collaborators* as advocates for the university. Student *collaborators* are important, because they find and share information and meaningful content, and influence audiences, unlike members of the other two categories. Another reason why collaborators are a key student constituency is that they have high social engagement scores. Today, students have access to innovative technology that gives them a voice, and their voice can be amplified across the social web. According to research conducted by Klout, the content posted by "influencers with a Klout Score of 75 . . . 'lasts' on Twitter (through retweets) up to 70 times longer than that of people with a score between 30 and 70"

(Schaefer, 2012, p. 132). Student *collaborators* are influential because they are connected. Their experiences influence the actions of their peers. Engaging them and supporting them over time can be mutually beneficial. Therefore, this segment of the student body requires a different level of engagement by student affairs professionals.

How students use social media opens new collaborative forums for feedback to those who listen—namely faculty, administrators, and student affairs professionals. Again, identifying student *collaborators* should be a priority in addition to establishing a culture of social student engagement on campus. Doing so enables an institution to gain valuable feedback, which in turn benefits the university and all of its students.

In summary, student engagement is a broad construct, encompassing salient academic and non-academic aspects of the student experience, which comprise active and collaborative learning. Student engagement includes participation in educational activities. It consists of formative communication with faculty and staff. It includes involvement in service-learning experience. Finally, student engagement takes into account one's feeling legitimate and supported by university learning communities. Hyper-connected Millennials have a view of learning that is completely different from that of earlier generations. Insofar as Millennials' view consists of a series of interconnected multi-screen devices and social networks, social student engagement represents a transformation of the traditional construct of student engagement. Thus, social student engagement enhances collaboration and amplifies interactions with salient academic and non-academic aspects of the student experience. Student affairs

professionals play a vital role in aligning both traditional and social student engagement with academic and non-academic activities that contribute to student success.

### Recommendations for Student Affairs Professionals

I believe the views of my participants are consistent with those of most Millennials, as portrayed in the scholarly literature (Levine and Dean, 2012; Howe and Strauss, 2000, 2003). From my qualitative investigation and analysis, I offer five recommendations to student affairs professionals for their adoption at their institutions:

1. *Establish a culture of social student engagement.* Encouraging a culture of social student engagement makes an institution of higher education not only modern, innovative, and adaptive, but also relevant. Social media use supports civil discourse, and teaching students how to use it effectively enables them to become citizen influencers. As noted by Junco (2014), “student affairs professionals have an opportunity and obligation to help students learn how to be good online citizens” (p. 162). Student affairs professionals can encourage a culture of social student engagement by using social networking platforms as the cornerstone for all their programs, assessing core services and programming offered by the institution, measuring how they engage with students, improving processes, developing student relationships, and achieving academic outcomes. For example, resident life administrators can use social media to match students with similar interests, by encouraging first-year students to review online profiles of their peers and identify potential roommates based on the information presented. Once

first-year students arrive on campus, orientation staff can use social media to help identify and assess personality styles, interests, and special talents among first-year students.

2. *Develop an online ambassador program.* I would urge student affairs professionals to harness the enthusiasm of this social media obsessed generation by inviting students to become advocates for the university, particularly student *collaborators*, whose defining attribute is their social influence. Students want to be online advocates because they are invested in their institutions' success. They have aligned themselves with their institutions' core objectives and are willing to represent their schools actively.
3. *Establish feedback loops for all campus programs and services.* Social media open new collaborative forums for feedback for those who listen—namely faculty, administration, and student affairs professionals. Doing so enables the university to gain valuable feedback on its curriculum and co-curricular activities, which will benefit both the institution and its students.
4. *Craft social media policies that are inclusive of student dialog and that articulate a commitment to a culture of social student engagement.* Again, an institution becomes modern, innovative, adaptive, and relevant through a culture of student engagement. All policy statements must convey professional expectations of online communication and civil discourse, which are essential for building a campus community and helping students to be successful in society (Junco & Chickering, 2010). A university's social media policy can convey a commitment

to a culture of social student engagement by encouraging students to comment on policy; engage in debate; and share images, photos, and videos taken by the university. A well-conceived social media policy also encourages feedback loops which students can comment on university programs and services.

5. *Teach students how to use social media effectively.* Institutions should offer courses, seminars, or workshops on how to effectively engage others through social media. Students should not be left to learn on their own how to skillfully use social media. They must understand how to search the Internet effectively for employment opportunities, career development, information on building and maintenance of social networks, opportunities to engage other students in academic and co-curricular activities, and forums for collaborative peer-to-peer learning. Possible learning outcomes from such instruction might include: (a) identify the tools by which one can study the effects of social media in our culture; (b) describe how social media use enables the formation of community in our society; (c) analyze how identity is shaped through social media use; (d) critically examine how social media technologies affect constructions of youth, gender, race, and ethnicity; (e) assess how student engagement through social media can enhance formal and informal learning and student development; (f) engage in debates on whether social networking platforms can be a vehicle for progressive social change; and (g) critique contemporary debates about whether it is possible to abstain from social media use in the digital age.



### Future Research

Social networking platforms provide a wealth of behavioral information for future educational researchers. I recommend that further research be conducted on these unique forums for student engagement, with a focus on identification of best practices for incorporation of online engagement into salient academic and non-academic programs. I recommend that quantitative studies, designed with large samples of student participants, be conducted to further our understanding of the phenomenon of social student engagement. Educational researchers might consider expanding on my provisional construct of the *social engagement cycle* and its *collaborative loop* or may seek to confirm my groupings of *collaborator*, *connector*, and *contributor*. Future researchers might also pursue greater insights into specific audiences of students, including a deeper understanding of what their followers are interested in and which content they are sharing and talking about most. A number of interesting questions warrant further investigation. For example, from what domains do students share content? Who among them is the most influential or engaged? Who influences these leaders? Since I have found that students tend to gravitate toward three styles of online interactions, future researchers might develop questions or hypotheses to expand on the differences among these three styles. For instance, what specific behaviors are manifested by members of each style when collaborating with other students?

Another recommendation for further research is justified by the limitations inherent to my study. I only studied students on one campus—Bucknell University. Since this institution is a highly selective, private liberal arts university that serves a student

body comprised primarily of motivated and privileged students, its unique curriculum and clientele may have influenced my findings. Thus, I would recommend a replication of my study on other campuses. For example, I believe it would be beneficial to determine whether or not there is a difference in style of online interaction among those attending private versus public institutions.

I would also urge researchers to explore how social analytics can be used to further explain online behaviors and predict possible learning outcomes. Examining social media use among college students holds great promise for future educational researchers.

### Summary

Findings from my qualitative investigation indicate that there are unique forms to social student engagement resulting from Millennials' digital ecosystem. For example, the concept of an online persona has added a new layer of complexity to current understandings of self-presentation. Based on my findings, it appears that traditional principles of social influence are applicable to online interactions. The *social engagement cycle* and its *collaborative loop* are helpful in describing the phenomenon of social student engagement. Also, my investigation affirmed that concepts of relevancy, authentic helpfulness, and meaningful content are relevant to online exchanges. Three categories of online student thought leaders emerged from my research: *collaborators*, *connectors*, and *contributors*. Interview data revealed that the participants valued connectedness, sought acceptance and gratification from online listeners, displayed skills

in filtering through dense information, used social media as their primary source of news, and gravitated to others online who had interests similar to theirs. While these observations contribute to a deeper understanding of today's digitally connected undergraduate students, I was even more amazed by the sheer volume of dense information that is publicly available on social networking platforms. Collectively, they can provide a wealth of behavioral information for future educational researchers.

The results of this study also have implications for student affairs professionals and institutional researchers. My hope is that administrators, faculty, and student affairs professionals will understand the benefits that social student engagement can contribute to student learning and development, social support, and subsequently student success. I hope that institutional researchers will work to verify the effectiveness of institutional efforts to enhance learning experiences for students and encourage a culture of collaboration both online and offline. Social media enable student affairs professionals to collect data unobtrusively to assess interventions that will help students. Social media use has transformed the way we interact with others both online and offline. Therefore, it should be viewed by student affairs professionals as part of, rather than apart from, our understanding of student engagement.

## APPENDIX A

## INVITATION TO PARTICIPATE IN INTERVIEWS

Sender: Education Department, Graduate Thesis Study

Subject line: Share your experiences with using social media

Dear (Student's Name):

In an effort to better understand the ways in which students make use of technology to connect with the campus community and to enhance their learning experiences at Bucknell University, I would like to invite you to participate in a study of student social engagement.

You have been chosen to participate in this study, based on your Klout Score, which indicates that you are among those students who have maintained a highly visible presence online. If you choose to participate in the study, you will be asked to meet with me for an interview, which will last about 60 to 90 minutes. You will also be asked to grant me permission to review various writings that you have posted online, which might shed further light on information drawn from your interview. If you are interested in participating, please contact me, so that I can tell you more about what your participation will entail. If you are not interested in participating, I would like to know that as well, so that I can plan accordingly. As compensation for your participation, you will receive \$25.

Please be assured that all information that you provide will be confidential. No individual's answers will ever be identified in any report. In addition, your participation is voluntary, though I hope you will respond.

Thank you for your consideration!

Sincerely,

Max Meng  
Researcher

APPENDIX B  
INFORMED CONSENT

**Project Title:** Understanding the deeply engaged mindset among active Bucknell students

**Purpose of the Research:** I understand that the purpose of this study is to obtain a better understanding of how Bucknell students who have been identified as having an influential online presence use digital media to engage with other members of the Bucknell community.

**General Plan of the Research:** I understand that as a participant in this study, I will be asked to participate in an in-depth interview in which I will be asked a series of questions about my use of social media and my involvement with other members of the Bucknell community. My answers to all of the questions will be kept completely confidential. Only the researcher will know my actual identity, as I will be identified by a pseudonym in any report of the findings. Also, the researcher may review and analyze my publicly accessible online postings.

**Estimated Duration of the Research:** I understand the personal interview will take me no longer than 60 to 90 minutes to complete.

**Estimated Total Number of Participants:** I understand that the researcher expects to collect in-depth interview data from approximately eight participants.

**Voluntary Participation:** I understand that my participation in this study is completely voluntary. If I agree to participate, I may change my mind at any time and for any reason. I may refuse to answer any questions and/or withdraw from the study at any time and to withhold my data without penalty.

**Benefits of Participation:** I understand that I will earn \$25 at the conclusion of the in-depth interviews for my participation in this study.

**Confidentiality:** I understand that my answers to all of the interview questions will not be completely anonymous. However, all digital and hardcopies of the information that I provide including audio recordings and transcripts of my interview will be stored on a password protected personal computer, access to which is limited only to the researcher. In both the interview transcripts and any reports of the research results, I will be identified only by a pseudonym. This reduces the likelihood that I could be identified with my answers.

**Discomforts:** I understand that it is possible that some of the questions that I will be asked might cause me to become upset, ashamed, or embarrassed. However, I also understand that I can decline to answer any question or to withdraw from the study completely without penalty or loss of any benefit to which I am entitled.

**Risks:** I understand that, aside from the risk of discomfort as indicated above, there are no other known risks to me from participating in this research. I also understand that, in the event that I experience substantial discomfort, it may be helpful to discuss any problems that I experience with the Psychological Services staff.

**Questions?** If I have questions or concerns, I understand that I may contact the principal investigator Max Meng, graduate student within the Education Department, at 570-452-2774, or Joseph Murray, Ph.D., faculty advisor for this research project, at 570-577-1324. For general questions about the rights of human participants in research, I may contact Matthew Slater, Ph.D., Chair, Institutional Review Board, matthew.slatter@bucknell.edu, 570-577-2767.

By signing below, I acknowledge that I have read the above description of the research, that I agree to participate in it, and that I am 18 years of age or older.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## APPENDIX C

## INTERVIEW PROTOCOL

1. How do you spend your time online?
  - a. Describe what a typical hour of your online activity would look like.
  - b. Do you mostly use Facebook? Twitter? Blogging? (Other media sites and tools could include: websites; email; social networks; mobile devices; message boards; online games; blogs; photo-, audio- or video-sharing sites; and microblogs)
  - c. What motivates you to engage in these activities?
  - d. Do you usually go online with a particular purpose in mind or is it more free-flowing?
2. Describe the image of yourself that you present online.
  - a. How do you think you are perceived by those who interact with you online?
  - b. What are your interests and how do you emphasize them?
3. How often do you think about the impression that you're making on others through your online activities?
  - a. To what extent do you care about the image that you project?
  - b. How do you want to be perceived?
  - c. Describe how you feel when followers leave comments or recognition such as likes, retweets, and views on your posts or photos? How do these benefit you?
4. How would you describe your ideal audience? In other words, who are the people that you are most interested in interacting with online?
  - a. What do they do and what do they care about?
  - b. How similar are their interests to your interests?
  - c. What is important to them?
  - d. What do you do to make sure you are connecting with the type of people that you've described?
5. How do you enlarge your social network?
  - a. How do you know when to jump into a conversation?
  - b. How does your conversation lead to social collaboration?
6. Tell me more about your relationship with your followers.
  - a. How helpful are you to your followers?
  - b. How helpful are your followers to you?

- c. Describe someone whom you are most likely to trust?
7. How frequently do you post content online?
- a. What kind of content do you typically post?
  - b. What types of content do you believe are most engaging to your followers?
8. How effectively do you feel your university is using social media?
- a. How does the university's support for use of new media motivate you to share information about campus programs and services with your followers?
  - b. How does it affect the ways that you participate in campus learning experiences?



## APPENDIX D

### JUSTIFICATION FOR SEGMENTS

The aim of my examination of publicly available data on my participants' online activity was to understand better how they engaged with their audiences and how influential their interactions had been within their online micro-communities. According to researchers, there is a causal link between Twitter use and student engagement (Junco, Heiberger & Loken, 2011; Junco, Elavsky & Heiberger, 2012). As explained in chapter 3, I used the Klout Score to select my participants, because this metric measures overall online influence, using a numerical scale from 1 to 100, with higher scores representing greater influence. This social score is highly correlated to clicks, comments, and retweets. It uses more than 35 variables on Facebook and Twitter to measure true reach and estimate the amplification probability of messages. According to Klout, true reach is the size of an engaged audience and is based on followers and friends who actively listen and react to messages. Amplification of these messages is the likelihood that they will generate actions such as retweets, mentions, likes, and comments.

Although each participant was recruited because of his or her high Klout Score, during my interviews with the participants, it became apparent to me that there were varying degrees of social engagement among the respondents. I felt I needed another metric model to further segment my participants, distinguish between their spheres of social student engagement, and validate my thematic analysis of the transcriptions and my interviewing notes. At first, I gathered publicly available data from all of my

participants' social networking platforms, pertaining to their number of followers, friends, connections, repins, tweets, retweets, replies, mentions, shares, likes, comments, YouTube embeds, and other indicators of online activity, in hopes of gauging each participant's level of social influence. I attempted to measure the levels of my participants' interaction, as indicated by their sharing of content with their online communities. In the online world, these are "often referred to as engagement metrics, which can be measured for each social media site" (Brito, 2012, p. 114). Each social media site uses different engagement metrics. For a comprehensive listing of these metrics among the respective social networking platforms, see Appendix E.

Since the number of social networking platforms varied among my participants, and because of the density of information available, I narrowed my review to Twitter, which was used by all of the participants and yielded data that was publicly accessible. Twitter is a platform that encourages interaction and conversation among its users. People use it to converse with each other in short messages of 140 characters or less, known as "tweets." Whether sharing breaking news, posting updates about themselves, or following their favorite celebrities, people use Twitter to connect with others and discover new things every day. Currently, there are more than 500 million tweets sent per day and 284 million active users per month (Twitter, 2014b). Use of Twitter is increasing exponentially, and it is most popular among Millennials, although its popularity has experienced significant growth in all age groups since its launch in 2006 (Pew, 2014).

Twitter encourages users to follow and interact with different individuals, company brands, and media outlets by creating streamlined strings of messages tailored

to their interests. People post updates, photos, videos, and links to Twitter as events are happening, enabling insightful, real-time search results. Twitter also provides two-way connections between users and followers. Since it is an open network, the user can follow others to learn about their insights, ideas, habits, and opinions about different interests and subjects. Twitter provides a convenient way for users to discover the latest happenings anywhere from their mobile devices. Also, Twitter is available on a number of smartphones and tablets, making it easy for users to reach many people even when on the go. Users can read, post, retweet, and share different types of content straight from their phones.

However, Twitter does not provide a tool for measuring reach. Thus, I attempted to manually calculate the reach of each of my participants by taking into consideration the total number of followers on his or her Twitter account, total retweets, and the sum of the followers of those accounts that retweeted their messages. When I randomly reviewed the content of my participants' tweets, I reasoned there needed to be a better measurement than simply counting tweet traffic, which led me to seek another metric or social analytic tool that measured content relevancy. Brito (2012) has asserted that content relevancy is important when interacting with others within an online community. He explains that "if content shared within a community is relevant, the metrics will certainly reflect growth and new members will join." However, if content is irrelevant to others then "members will abandon the community to go elsewhere." (p. 120).

I found that content relevancy could be measured by using Followerwonk, an application by MOZ, Inc., which uses an algorithm called a "Social Authority" score.

This metric is based on Twitter retweets, rather than a count of followers. According to Peter Bray and Matt Peters, both of MOZ, Inc., a user's Social Authority score is based on three measurements: (1) the retweet rate of a user's last non-@mention tweets; (2) the recency of the user's activity; and (3) the number followers, friends, and so on. These three factors are optimized in the algorithm via a regression model using the retweet rate (Bray, 2013).

According to Bray and Peters, retweets are the currency of social media. They say retweets are a key measurement of social success and a universal measurement across all social network platforms. Also, they believe that this metric emphasizes the value of originating content. As a result, they stress that their Social Authority algorithm "surfaces a completely different set of top users: those that are extremely effective in engaging their followers" (Bray, 2013).

Based on a ranking of the participants, according to the numbers of followers on their Twitter accounts, Rodney and Shane appeared to have the most reach (see Table 1). However, when using the Followerwonk's Social Authority score, the ranking changed considerably, showing which participants had more social influence among their Twitter followers—that is, which were more likely to have their messages retweeted among their followers (see Table 2). From this ranking, I classified the participants according to their Social Authority scores into three clusters: (1) *collaborators*, which included Rodney and Sam, each with a score of 34; (2) *connectors*, which included Brad with a 26, Shane with a 21, Nancy with a 20, and Melissa with a 17; and (3) *contributors*, which consisted of those with scores below 17.

Table 1. Participants Listed by Total Number of Twitter Followers, February 2014

Name	Class	Klout Score	Followers	Following	Tweets	Tweets/Day	Impressions
Rodney	Junior	56	854	503	13,258	7	11,322,332
Shane	Junior	42	460	739	23,551	18	10,833,460
Sam	First Year	37*	340	297	37	3	12,833,460
Nancy	Senior	57	258	431	1,459	1	376,422
Jane	Senior	51	242	103	62	1	15,004
Brad	Soph	58	183	177	3,836	4	701,988
Melissa	First Year	55	100	87	1,225	1	122,500
Sheri	Soph	45	87	35	151	1	13,137
Judy	Senior	40	20	21	138	1	2,760

\*When Sam was initially invited to participate, his Klout Score was above 40, but it had dropped to 37 by the time of his interview.

Table 2. Participants Ranked by Social Authority Score, February 2014

Name	Class	Klout Score	Followers	Following	Tweets	Twts/Day	Impressions	Social Authority Score
Rodney	Junior	56	854	503	13,258	7	11,322,332	34
Sam	First Year	37*	340	297	37	3	12,833,460	34
Brad	Soph	58	183	177	3,836	4	701,988	26
Shane	Junior	42	460	739	23,551	18	10,833,460	21
Nancy	Senior	57	258	431	1,459	1	376,422	20
Melissa	First Year	55	100	87	1,225	1	122,500	17
Jane	Senior	51	242	103	62	1	15,004	1
Sheri	Soph	45	87	35	151	1	13,137	1
Judy	Senior	40	20	21	138	1	2,760	1

\*When Sam was initially invited to participate, his Klout Score was above 40, but it had dropped to 37 by the time of his interview.

## APPENDIX E

## SHARING METRICS BY SOCIAL NETWORKING PLATFORM

Twitter	LinkedIn	Blog or Community
<ul style="list-style-type: none"> <li>• Replies</li> <li>• Retweets <ul style="list-style-type: none"> <li>○ Modified Tweets</li> </ul> </li> <li>• Favorites</li> <li>• Follower Growth</li> <li>• Total Lists</li> <li>• Total Retweets</li> <li>• Mentions</li> </ul>	<ul style="list-style-type: none"> <li>• Interactions</li> <li>• Engagement Rate</li> <li>• Likes</li> <li>• Comments</li> </ul>	<ul style="list-style-type: none"> <li>• RSS Subscriber Growth</li> <li>• Total Comments</li> <li>• Shares via Social Bookmarking Sites such as Stumbleupon, Digg, or Reddit</li> <li>• Listeners to a live chat</li> <li>• Downloads of a whitepaper</li> <li>• Content rating</li> </ul>
<p>Facebook</p> <ul style="list-style-type: none"> <li>• Page Likes</li> <li>• People Engaged</li> <li>• Engagement Rate</li> <li>• Likes</li> <li>• Shares</li> <li>• Comments</li> <li>• Post-specific Scorecard</li> <li>• Fan Growth (assuming a student hosts a Facebook Page)</li> <li>• Views</li> <li>• User-generated Content</li> </ul>	<p>Google+</p> <ul style="list-style-type: none"> <li>• +1s</li> <li>• Shares</li> <li>• Comments</li> <li>• Total Engagement</li> </ul>	
	<p>Instagram</p> <ul style="list-style-type: none"> <li>• Likes</li> <li>• Comments</li> </ul>	
	<p>Tumblr</p> <ul style="list-style-type: none"> <li>• Reblogs</li> <li>• Likes</li> </ul>	<p>Web analytics</p> <ul style="list-style-type: none"> <li>• Return Visitors</li> <li>• Time Spent on the Site</li> <li>• Page Views per Post</li> <li>• Click-through to a [student's] site from another blog or URL-tracking service such as Bit.ly</li> </ul>
	<p>Vine</p> <ul style="list-style-type: none"> <li>• Revines</li> <li>• Likes</li> <li>• Comments</li> </ul>	
	<p>YouTube (or other photo- or video-sharing site)</p> <ul style="list-style-type: none"> <li>• Comments</li> <li>• Favorites</li> <li>• Embed</li> <li>• Shares</li> </ul>	
<p>Pinterest</p> <ul style="list-style-type: none"> <li>• Repins</li> <li>• Likes</li> <li>• Comments</li> </ul>		

Figure 6. List of sharing metrics by social networking platform.

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