Are There Perks to Being a Twitter Wallflower?
Peripheral Participants in a Twitter-enabled Learning Space in Public Relations and Higher Education

by

Andrea Tavchar

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Social Justice Education - OISE
University of Toronto

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Abstract

Despite widespread perceptions of the “digital native” generation, the majority of college- and university-age young people, 18-plus, do not engage Twitter as a “learning technology”. Students’ reluctance to use Twitter within educational and professional contexts catalyzed this mixed-methods investigation of students’ engagement with #Humberpr, the online community of practice for public relations (PR) students at Humber College, a Canadian post-secondary institution.

Despite the fact that industry expects PR graduates to be knowledgeable in the professional use of Twitter, during my seven years teaching undergraduate and post-graduate social media courses at Humber College, the majority of PR students were observed to engage only peripherally within the requisite Twitter learning environment. There is scant research on the peripheral participant in social media networks, and even less on student-practitioner interactions. To explore these understudied areas, my three research foci were: students’ perceptions of Twitter use; experiences using Twitter in education; and Twitter’s influence on the learning experience of peripherally-participating students. Building on situated learning theory (Lave & Wenger, 1991), students’ differential engagement within #Humberpr was investigated using mixed-methods (survey, focus groups, and interviews). Tracking #Humberpr use over four months, students were categorized as peripheral or active users.
My research findings reveal that *peripheral participation* (traditionally identified as “lurking”) warrants understandings and recognition not only as a legitimate but as a complex and rich learning modality. To recognize the “Twitter wallflower” as a peripheral participant and not merely a “lurking,” silent, and disengaged non-participant, allows for nuanced understandings of technology-enhanced learning not adequately captured by most relevant contemporary scholarship. This study offers voice to a misunderstood majority of students who struggle with the transition between personal and professional use of educational and social media networks. Many described their choice to remain on the “periphery,” as resulting from feeling they have “nothing to say”.

Contributing to educational and situated learning theories, and to online learning and digital media studies, my quantitative and qualitative findings demonstrate the critical importance of expanding conceptions and analyses of learning communities and technology-enhanced education. This study highlights the need to develop flexible learning spaces that best prepare young people with the digital literacies required for technologically-mediated communications, particularly in contexts of professional education. (362 words)

*Key words: digital native; Lave and Wenger; peripheral participant; community of practice; hashtag; situated learning theory; Twitter*
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After almost eight years, it’s safe to say that my PhD experience was more a journey than a race. Either way, it’s been quite a ride, not only re-invigorating my love of learning, but transforming the way I see the world.

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You see things. You keep quiet about them. And you understand. You’re a wallflower.

- Stephen Chbosky, The Perks of Being a Wallflower, 1999
Chapter 1
Using Social Media for Public Relations Education

1 Introduction

Increasingly, instructors at all academic levels and across a range of academic disciplines are introducing social networking tools in their classes. Undoubtedly, this is in response to the participatory culture that has evolved from Web 2.0 technology, which has nurtured a generation of “digital natives” (Prensky, 2001), young people whose participation is witnessed, seemingly ubiquitously, through their Facebook posts, YouTube uploads and tweets. Yet the reality is that online engagement - if defined as the contribution of original content - is low, relative to the number of account holders across social networking sites (SNS) (Crawford, 2009; Lee, Chen, & Jiang, 2006; Neilsen, 2006; Preece, Nonnecke & Andrews, 2004; Walker, Redmond, & Lengyel, 2010).

As a public relations (PR) educator, I use Twitter for several purposes: for in-class interaction and commentary when hosting a guest speaker, as a means of informal information sharing outside of class, and as an opportunity to engage with external stakeholders such as alumni and PR practitioners. Over my seven years of experience teaching social media and introducing Twitter for applied PR learning, I have found that many students refrained from becoming actively involved on Twitter, despite their alleged ‘digital native’ status and purported confidence in their social networking skills. It seemed that many were reticent about applying “living technologies” (Kennedy, Judd, Churchward, Gray & Krause, 2008, p. 119) - their online social skills - to their academic and professional skill development. As Kennedy, et al. point out, “the transfer from a social or entertainment technology (a living technology) to a learning technology is neither automatic nor guaranteed” (p. 119). Similarly, Ito et al. (2008), in their work on digital media literacy, take a position that institutions do not need to oversee young people’s acquisition and use of social media, but rather take on the role of “supporting moments when youth are motivated to move from friendship-driven to more interest-driven forms of new media use,” (p. 35). Kennedy et al. and Ito et al. both acknowledge the challenges that students face when asked to take the digital leap from their social comfort zone, which is the shift from a living or friendship-driven space to a learning- or information-sharing space.
Ross (2012) reminds us that “[t]hese tools [social networking sites] and environments are neither innocent nor culturally neutral, though as they are ‘inscribed with social meaning, power relations, possibilities for and restrictions on the expression of personal identity’” (p. 203). Power relations exist not only between young people and their parents, teachers and future employers who co-exist in an online space, but also with the site providers – those who developed the technology to encourage users to display a public profile and share streams of personal information. boyd (2008a) identifies these intersections as examples of social convergence, resulting in the collapse of context for the social networkers. Bringing these tools into academic contexts produces additional tension for the social networking site users (Marwick & boyd, 2010, p. 17), which is frequently manifested by varying degrees of peripheral participation.

I was surprised to witness my students’ reluctance to post content publicly in a space where I expected to see familiarity with, and assimilation of, digital media. This tension prompted my research into the use of social networking sites (SNS) in education. My specific context of interest is the use of Twitter as an informal learning tool in an applied college PR program. My work explores Twitter as a community of practice (CoP) where PR students have an opportunity to engage with and learn among peers, faculty and industry experts; further, it examines the tension experienced by students who are reticent about participating in a Twitter community. Peripheral-participation discourse within SNSs is an under-researched area, not only because SNSs are a 21st-century phenomenon, but because of the publicness of the tools and the associated challenges with identifying the spectrum of peripheral engagement.

Lave and Wenger’s (1991) situated learning theory is a relevant framework for this exploration because of its foundation in ‘apprenticeship or mentorship-type’ learning and its own evolution into a broader understanding of situated learning contexts, which include virtual spaces. Situated learning theory defines the criteria for a community of practice and addresses the nature of participation. Situated learning places learners on a spectrum from active to peripheral, rationalizing what makes for a legitimate peripheral participant in a learning space.

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1 Peripherality will be addressed more thoroughly later in this chapter and again in further detail in the context of my research study in Chapter 5.
Influenced by my background in post-structuralist feminist studies, the notion of the ‘other’, the marginalized, or the silent audience resonated with me, particularly given the irony of the broader backdrop of a participatory culture discourse. Studying social media in the context of the peripheral participant investigates a highly public and accessible space through the eyes of those who are silent, whether their silence is through choice or coercion. Wenger (1998) is particularly relevant here, as he strives to differentiate between self-selected peripheral positioning and the marginality that is associated with power relations. Wenger states that “whether non-participation becomes peripherality or marginality depends on relations of participation that render non-participation either enabling or problematic” (p. 167). Looking at the role of Twitter in PR education, my research explores peripheral participation in PR learning, including the conditions under which students choose to reside in the periphery of engagement or are forced into the margins because their presence may be problematic, and silence is their only option.

1.1 Purpose

The purpose of my mixed-methods study is to explore the experience and perceptions of peripheral participants in a Twitter-enabled learning space for public relations students enrolled in any of Humber College’s three public relations programs. The notion of peripheral participation in social media is a relatively new concept, and it is a challenge to isolate a potentially ‘invisible’ audience. However, the participatory nature of social media and the associated pressures to ‘perform’ identity online make this study compelling. Because public relations students are expected to gain competency in social media as a tool of professional practice, framing within the context of public relations education makes the study even more relevant. Furthermore, student pressure on post-secondary institutions to provide experiential learning opportunities to better equip them for the workplace drives home the necessity to interrogate social media as a space where power relations are at play. By investigating the role of the peripheral participant, this study contributes to the discourse that asserts social media is “not innocent or culturally neutral” (Ross, 2012, p.203), and - without taking a technologically deterministic view - explores the influences of a social networking site on learning.

My thesis asks if there are perks to being a Twitter wallflower, focusing on the peripheral participant in a Twitter-enabled learning space in public relations and higher education. The term wallflower is used synonymously with peripheral participant, and it is this notion of the
wallflower or peripheral participant that warrants further explanation in the context of my research. A participant is understood to mean one who actively, consistently and visibly engages with SNSs, while a peripheral participation suggests participation that is less-than-full engagement (Wenger, 1998, p. 165). At the extreme end of peripheral participation lies non-participation. In the context of SNSs, I consider a non-participant to be a non-account holder, which means they lack access to the site. A SNS account holder that chooses not to visibly engage on the site falls under the peripheral participant umbrella. Subsequent use of the term peripheral participant in my paper will include the full range of peripheral or less-than-full engagement, and will assume that the peripheral participants are Twitter account holders. After all, even though a wallflower may be a peripheral participant, they are still present in the space in question.

As a background for the key themes addressed in the thesis, Chapter 1 provides an overview of the use of Twitter in applied learning. I describe the relationship between participatory culture and social media as well as the implications for communication and the field of public relations specifically. The overview addresses Twitter, providing a background on the social networking tool of inquiry. Given that the balance of the study focuses on students’ perceptions of Twitter use in education, the overview touches on Twitter engagement by faculty who ultimately determine whether Twitter will play a role in a student’s education. At the conclusion of Chapter 1, I address the significance of the study and identify three research questions. Chapter 2 defines situated learning theory and explains why Lave and Wenger’s theory was selected as the framework for examining Twitter use in public relations learning. Chapters 3 and 4 review key literature as it pertains to the study. Chapter 3 examines current studies of peripheral participation research which defines the lurking experience and explains the challenges and benefits of limited online engagement. Chapter 4 examines current empirical studies of Twitter-in-education research. Chapter 5 addresses the mixed-methods approach employed in this study and provides an overview of the data collection tools, including rationale and procedures for each. The chapter also outlines the proposed approach for data analysis and logistics. Chapter 6 reports the study’s findings according to research method, offering a detailed account of both the quantitative and qualitative data. Chapter 7 discusses the findings according to each of the three research questions. Chapter 8 provides a conclusion for the study, highlighting practical implications of Twitter use in education, study limitations and future research directions.
1.2 Overview of the Use of Twitter in Applied Learning

The following overview locates my study within the current digital and social media environment and addresses some of the prevailing issues and assumptions that have inspired my research.

Since my research investigates the relationship between social media and education, I will address social media’s role in facilitating a participatory culture; I will focus on the unique affordances of social networking sites as communication tools and the associated challenges of online privacy. I will examine the digital native label, attributed to today’s young people, to better understand the social media literacies post-secondary students possess. I will briefly examine Twitter, as it is the specific social networking site of choice in my research. I will address PR and its relationship to social media from the perspective of both a professional field and an academic discipline. The overview will also address experiential learning in PR education, necessitated by the PR profession’s requisite use of social networking sites. I will also consider the role of faculty in PR education, focusing on faculty’s current engagement with social networking sites as teaching tools.

1.2.1 Participatory Culture and the Drive Toward Social Media Use

Immense pressure exists for young people and, by extension, educators to engage in the participatory culture facilitated by Web 2.0 technologies, which heralded a new era of communication, mediating two-way communication across networked channels (van Dijck, 2013, p. 5). This two-way communication, labelled ‘social media’, generated excitement at the prospect of having communications tools that would contrast the existing one-to-many model of mass media, and “nurture connection, build communication and advance democracy” (van Dijck, 2013, p. 4).

Rosen (2006), in his now frequently cited PressThink blog post, “The people formerly known as the audience”, addressed the movement from mass media to social media by suggesting that the audience of mass media is now the former audience since the paradigm has shifted, and everyone can be a content producer as well as a consumer.

Audiences now contribute to the participatory culture defined by Jenkins, Clinton, Purushotma, Robison, and Weigel (2009) as “…a culture with relatively low barriers to artistic expression and
civic engagement, strong support for creating and sharing one’s creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices” (p. 3). Participation in social media is principally marked by enthusiastic engagement with social networking sites. Defined as “a type of social media, (social networking) sites primarily promote interpersonal contact, whether between individuals or groups; they forge personal, professional or geographic connections and encourage weak ties…” (van Dijck, 2013, p. 8). Participation is encouraged on a personal level, but according to Jenkins, et al. and van Dijck, on professional and academic levels as well, which is a particularly relevant point in the study of SNS use in experiential learning, which I will address more fully later in this chapter. In a recently released book, Participatory Culture in a Networked Era, authors Jenkins, Ito and boyd (2016) debate the definition of participatory culture, particularly in the context of social networking sites which promote individual rather than collective performance (p. 30-31). Boyd, in Jenkins et al., suggests that selfies for Instagram are not examples of participatory culture” (p. 10), pointing out that in social media “the focus is on individual participation through performance, not through listening” (p. 26). Jenkins, in Jenkins et al., clarifies that “to be participatory these activities have to involve meaningful connections to some larger community (even if only the cohort of classmates in the local school)” (p. 10). Ito, in Jenkins et al., expands on the point that participatory culture is “about being part of shared social practices, not just engaging with an online platform or piece of content” (p. 11). Jenkins, in Jenkins et al., reinforced that he did “not think technologies are participatory; cultures are.” (p. 11). The result of this discourse suggests that a requirement of participatory culture is that an individual’s actions be meaningful to another individual, group or community.

The almost breathless enthusiasm of media, parents, and youth for the promise of a participatory culture might suggest ubiquitous adoption among social media users. However, a clear definition of ‘online participation’ remains elusive, as indicated by Jenkins, et al. (2016). Studies over the past decade have varied in their reported participation levels, which depended on how the researchers defined participation. Ross, Terras, Warwick and Welsh (2011) cited research by the

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2 In a collection of essays, Ratto and Boler (2014) reflect on the role of “digital and digitally-mediated forms of making” (p. 1) as “politically transformative activities” (p. 1). The essays provide evidence to support Jenkins, et al.’s (2009) perception of participatory culture.
Nielsen Norman Group stating, “in most online communities, 90% of users are lurkers who never contribute; 9% of users contribute a little; and 1% of users account for almost all the action” (p. 221). Van Dijck and Nieborg, cited by Jenkins et al., shared somewhat more encouraging statistics in a “2007 Forrester survey of U.S. adults online which found that 52 percent of people online were ‘inactives’ and only 13 per cent were ‘actual creators’ of so-called user-generated content” (Jenkins, Ford, S., Green, J., 2013, p. 154). A recent PEW Research Centre survey reported that, as of August 2012, “overall 56% of Internet users do at least one of the creating or curating activities we studied and 32% of Internet users do both creating and curating activities” (PEW Research Center, 2013, Creators and Curators). The survey defines creating activities as “the posting of original photos or videos online that they themselves have created.” In addition, PEW defines curating activities as “taking photos or videos that they have found online and repost them on sites designed for sharing images with many people” (Creators and Curators). These statistics reflect online activities, but they may not be indicative of Jenkins et al.’s (2016) reference to “meaningful connections to some larger community” (p. 10) in participatory culture.

1.2.2 Negotiating Social Networking Sites

boyd (2008b) alerts us to the realities of social networking sites that may help justify the varying levels of engagement. Social networking sites are unique online spaces in that they are both mediated and networked. Mediated technologies, such as television, radio and print publications, share particular characteristics, such as persistence, replicability and scalability (p. 125-6; boyd, 2014, p. 11). In the online context, persistence refers to the fact that posted content remains permanently available; replicable content can be remixed and shared at any time, by anyone, anywhere; and scalable content refers to the fact that material can be shared with invisible audiences across great numbers. Audiences are invisible when content is available in a public space and accessible by anyone – parents, teachers, employers, peers and strangers. In addition to these realities of social networking sites, boyd, in Jenkins et al. (2016), discusses specific literacies associated with social media participation.

I would argue that true participation requires many qualities: agency, the ability to understand a social situation well enough to engage constructively, the skills to contribute effectively, connections with others to help build an audience, emotional resilience to handle negative feedback, and enough social status to speak without consequences (p. 22).
The qualities boyd identifies are consistent with the notion that participation implies a
meaningful connection to a community through social interaction, and not simply an individual
act such as a selfie post.

1.2.3 The Challenge of the Privacy Paradox

At the same time that they recommend users invoke privacy settings, SNSs encourage openness
as an important facet of the tool. Networked spaces, such as SNSs, are “bound together through
technological networks such as the Internet and mobile networks” (boyd, 2008b, p. 125),
connecting account holders and allowing for their content to be searchable. Collectively, this
means that a networked, mediated space “could consist of all people across all space and all
time” (boyd, 2008b, p. 126). The result, when data is searchable and privacy settings can be
compromised, is what boyd labeled social convergence and context collapse (boyd, 2008b; Ross,
social contexts are collapsed into one” (p. 18). As boyd points out, “Even in public settings,
people are accustomed to maintain discrete social contexts separated by space” (p. 18). The
result is that SNSs have created a unique space that requires a new set of literacies that
today’s young people are not born with, despite the digital native rhetoric. They need to be taught how to
navigate an environment where their personal, academic and professional lives intersect. And for
this reason, it is important for educators to be mindful of the affordances of SNSs when they ask
students to transition from living to learning spaces online.

Another important factor to remember is that the players involved in social networking sites not
only include the participants or users, but also the providers - corporate owners and architects -
of the sites. Despite the popularization of the notion that the Internet has offered prosumers “a
platform that is at once global and free” (Shirky, 2008, p. 77), the political economy of social
networking sites reveals a different story, one where the SNS providers have a significant
influence over online content and its distribution. Van Dijck (2013) suggests a transformation
took place after the advent of Web 2.0 in 2004, which saw the movement away from networked
communication between users to what she called ‘platformed’ sociality, identifying social

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3 A technical definition of Web 2.0 emerged in 2004, and Swabey attributed the definition to publisher Tim
networking sites such as Facebook, YouTube, LinkedIn and Twitter as platforms. Van Dijck labels this movement “from participatory culture to a culture of connectivity” (p. 5). The implications of this shift are monetary. Social networking companies have combined the online social interactions, willingly supplied by the users, with the “automated connectivity of the platforms” (p. 12) to essentially mine the content for the purpose of selling the data. According to van Dijck, “connectedness is often invoked as the pretense for generating connectivity, even now that data generation has become a primary objective rather than a by-product of online sociality” (p. 12). Van Dijck stresses that it is most advantageous to the company owners to know “…users ‘true’ identity, their preferences, and behavioural data. Most major SNS prohibit the use of fake names or anonymous identities (Facebook, Google +)” (p. 34). The power relationship that exists between the SNS developers and users leaves the users vulnerable because they share a desire to network with each other despite the privacy they compromise.

The “privacy paradox” is defined as the pressure to share personal information online (boyd & Ellison, 2007; Livingstone, 2008), where online self-disclosure is seen as “a form of currency users exchange in order to participate in the economy of SNS” (Bateman, Pike & Butler, 2011, p. 88). Social interactions, such as the ones afforded by SNS including Facebook, are a prospective user benefit, and worth compromising one’s privacy over (Taddicken & Jers, 2011, p. 149). This willingness to trade one’s privacy might explain why Facebook has over one billion current users4.

Although Facebook, for example, and Twitter to a lesser extent, promote the fact that they have privacy settings as a means of protecting users’ data from exploitation, Papacharissi and Gibson (2011) pointed out that “[t]he individual…is only able to attain a compromised or prescribed autonomy defined by the site’s architecture. Through privacy settings that have been predetermined, the individual is confined to a few options that s/he has played little or no part in shaping” (p. 83). Because of the associated risks with privacy settings, Van den Berg and Leenes (2011) suggested “[u]sers are unaware of who has access to their personal profile and content, because architecture and design of SNS is such that it provides individuals with a false sense of security and privacy” (p. 214). Debatin, Lovejoy, Horn and Hughes (2009) offered that

4 As of March 31, 2016, Facebook had 1.65 billion monthly active users. See www.newsroom.fb.com/company-info/.
“although many [SNS users] restrict their profiles, they do not seem to fully understand that their level of privacy protection is relative to the number of friends, their criteria for accepting friends, and the amount and quality of personal data provided in their profiles” (p. 102). Despite the privacy paradox, online privacy issues are increasingly important. According to Leslie Regan Shade (2008), “Despite Canadians’ claims that they are concerned about their personal privacy, the OPC [Office of the Privacy Commission] survey highlights how surprisingly ignorant they are of privacy legislation” (p. 81). Shade calls on the Canadian government to reconsider users’ rights to both social and informational privacy, arguing the importance of “recognizing the essential nature of privacy as a human right integral to one’s dignity” (p. 90). Awareness of privacy issues associated with social media use is emerging as one of a number of important literacies all social media users must develop.

1.2.4 Debunking the Digital Native Myth

The discourse claiming young people’s ubiquitous involvement on Facebook and other social media including Pinterest, LinkedIn, Instagram, and Twitter\(^5\) (Pew Research Center, 2015) has caused the media and some academics to inscribe millennials with digital native status (Selwyn, 2009). Coined by Marc Prensky (2001), a self-described educator, gamer and ‘futurist’, the term digital native has been popularized by media for its catchiness, suggesting that today’s youth are “all ‘native speakers’ of the digital language of computers, video games and the Internet” (p. 1). The notion of the digital native is technologically deterministic, suggesting that a technological tool can define today’s and future generations’ social and digital media prowess. Benkler (2006) suggested that “Different technologies make different kinds of human action and interaction easier or harder to perform. All other things being equal, things that are easier to do are more likely to be done, and things that are harder to do are less likely to be done” (p. 17). Benkler’s perspective on technological determinism may explain the adoption of social media – the gap in technology access is closing and ease of technology use has improved. However, as Benkler pointed out, “all other things are never equal. That is why technological determinism in the strict sense...is false” (p.17). boyd (2014) also dismissed the technologically deterministic explanation for young people’s relationship with social media. According to boyd, technologies do not affect

\(^5\) These social networking sites were selected as representing the five most popular. See: PEW Research Center (2015).
all people in the same way; instead, “[r]eality is nuanced and messy, full of pros and cons. Living in a networked world is complicated” (p. 15). As evidenced by my classroom experience, students’ relationships with technology usually differ not because of access but because of students’ disparate levels of digital literacy.

Much of the academic discourse suggests the digital native label is a misnomer (Helsper & Eynon, 2010; Livingstone, 2008; Selwyn, 2009). In fact, many academics eschew the notion of the digital native, supporting instead the idea that online literacy is a requirement to successfully navigate the Internet, and Web 2.0 particularly, because of the precarious boundaries established by privacy settings. Individuals lacking Internet skills are particularly vulnerable (boyd & Hargittai, 2010, p. 22), and many academics agree that digital natives’ current digital literacy skills are unremarkable (Helsper & Eynon, 2010; Livingstone, 2008; Selwyn, 2009). According to Selwyn, young people’s use of technology can be “passive, solitary, sporadic and unspectacular” (p. 373), a sentiment echoed by Livingstone, who suggested that “young people’s Internet literacy does not yet match the headline image of the intrepid pioneer” (p. 110).

Livingstone made a distinction between media literacy as it applies to mass media and the critical thinking skills required to navigate web 2.0. According to Livingstone, “critical literacy must be broadened to include information searching, navigation, sorting, assessing relevance, evaluating sources, judging reliability, and identifying bias” (p. 108). Jenkins et al. (2009) cited the definition of 21st-century literacy by the New Media Consortium as the set of abilities and skills where aural, visual and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power to manipulate and transform digital media to distribute them pervasively, and to easily adapt them to new forms (p. 28).

In addition to these literacies, Jenkins et al. identified textual literacy and social skills developed through collaboration and networking (p. 29) as core competencies which “expand their required competencies, not push aside old skills to make room for the new” (p. 28). Jenkins, et al. reminded us that basic reading and writing skills are essential for young people’s successful navigation of the digital world.

Jenkins, et al. (2009) called on educators to “encourage youth to develop the skills, knowledge, ethical frameworks and self-confidence needed to be full participants in contemporary culture” (p. 8). After all, a digital native, by simply being born into the technology, is no match for the
social media architects who define privacy settings, develop search functions that allow SNS content to escape temporal boundaries, and encourage self-disclosed content. A variety of literacy skills are required to navigate this space and to maintain autonomy and control over personal identities.

The digital native label should be debunked because, as boyd stated, it “is often a distraction to understanding the challenges that youth face in a networked world” (p.176). Helsper and Eynon (2010), Livingstone (2008) and Selwyn (2009) validated my own observations of students’ experiences with technology in learning, moving away from Prensky’s and others’ technological determinism as reflected in the digital native concept. Echoing Jenkins, et al. (2009), young people need to be taught skills to help them navigate these complex, networked spaces.

Despite the fact that my students had accounts on key social networking platforms, and most knew how to use the basic functions, they frequently didn’t leave visible traces of their activity. They behaved like observers, like wallflowers. In fact, their actions were often described, pejoratively, as lurking, implying a lack of online engagement. My study reframes behaviour that has been identified as lurking and validates it as peripheral participation.

Learning about the peripheral participant’s experiences mattered to me because I realized that these students would not gain the necessary PR-related social media skills, particularly networking with external stakeholders, on their own. I also recognized that, although my focus was on PR students, these experiences were likely consistent with students across a wide range of disciplines.

Being mindful of the challenges associated with social networking, I nevertheless propose that the use of these tools in higher learning, particularly in public relations education, is unavoidable if academic institutions intend to be responsive to the skills demanded by the 21st-century workplace. The imperative is that teachers must teach these skills to students who must learn them.
1.2.5 Understanding Twitter

Launched in 2006, a group of programmers who were looking for a way to send text on their cellphones developed Twitter (Picard, 2011). Since then, Twitter has become one of the most popular social networking sites, boasting over 310 million active monthly users in the first quarter of 2016, up from 305 million active monthly users in the last quarter of 2015. According to PEW Research Centre (2015), Twitter is used by 23% of total Internet users. Users are dominantly male, under 50 years old, college-educated and urban-centered. Revenue is generated through advertising and totals approximately $595 million per quarter (Isaac, 2016).

Twitter’s mission, according to its website, is to “give everyone the power to create and share ideas and information instantly, without barriers.” Selecting Twitter for classroom use is a practical choice. Twitter functions as a microblog or social texting tool limiting messages, or tweets, to 140 characters. And it is an information sharing site linking followers to other online resources, such as news sites (Dunlap & Lowenthal, 2009a, p. 5). Through the use of link shorteners such as Bit.ly (Lowe & Laffey, 2011, p. 184), these text messages can become information-rich resources when a message connects one’s followers to useful and relevant material. Although the premise of the tool is to encourage networking, users may also rally around topics of mutual interest (Dunlap & Lowenthal, 2009b, p. 131), facilitated by the use of a hashtag represented by the pound symbol (#), (Lomicka & Lord, 2012, p. 49). Interestingly, Twitter has stated on its own blog, and subsequently reported in The Atlantic (Leetaru, 2015), that “you don’t need to tweet to be on Twitter….40% of our users worldwide simply use Twitter as a curated news feed of updates that reflect their passions” (para. 7). Humber’s social media courses have used Twitter, and specifically #Humberpr, since 2009 as a means of building community, sharing PR-relevant information and developing real-world PR skills.

1.2.6 A Public Relations Focus in Social Media Studies

Studying social networking sites, particularly in the context of applied PR education, is multifaceted. The role of SNSs as a potentially ubiquitous tool in education is already being studied from the perspective of its effectiveness as a collaborative communications aid in the classroom,

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6 Twitter website information accessed from www.about.twitter.com/company, May 9, 2016.

7 Twitter website information accessed from www.about.twitter.com/company.
as shown in the literature review that is presented later in this thesis. But the exploration of SNS’s value in PR education moves beyond its role as a supplementary classroom aid and propels it into the role of a mentorship or internship tool. In fact, it is a space where PR students not only observe PR activities in practice by following relevant industry practitioners, but it affords students the opportunity to engage directly with these stakeholders through experiential learning. Social and digital media have become a crucial component of the PR practitioner’s toolkit and PR jobs increasingly require social media skills for employment. Valentini and Kruckeberg (2011) highlight the connection between public relations and social media:

Public relations scholars have been claiming a key role in these discussions about the online environment, especially in relation to its role in organizations and their publics. Some scholars have claimed that public relations has found its ‘reason of expression’ in the digital technologies because social media are mostly an environment of social interactions in which organization-public relations can occur. (Valentini & Kruckeberg, 2011, p. 5)

Web 2.0 technology equipped the PR profession with the very mechanism needed to fulfill what James Grunig, American PR theorist, regarded as the highest purpose of PR, which is two-way synchronous communication between an organization and its stakeholders (Hunt & Grunig, 1994, p. 9), and not easily attainable until now. PR practitioner Deirdre Breakenridge (2008), echoes Grunig, stating

[Consumers] desire direct communication, to hear firsthand about products and services, to be able to ask questions and receive quick responses, to hear a person’s voice and to learn the company’s position on an issue in its industry, and to believe they can trust the people behind their favourite brands (p. 4).

On a similar note, the central theme of The Cluetrain Manifesto, a business book and website, is that “markets are conversations” (Levine, Locke, Searls and Weinberger, 2001, 95 Theses section, para. 1) and that online platforms are changing the mass media marketing approach by facilitating two-way communications more like conversations between companies and their clients. The PR profession has embedded the notion of the social media platform as a conversational space in its core principles.

Gaining a better understanding of how to teach social media to PR students is imperative because PR is a thriving field with an increasing reliance on the effective use of SNSs in strategic communications initiatives. Employment opportunities in the public relations field have consistently increased over the last few years, which should continue over the coming years,
according to Service Canada’s 2015 report, *Professional Occupations in Public Relations and Communications*. The explanation for growth, according to the report, was “due to … company demand for communications in order to reach both internal and external clienteles” (Outlook section, para. 2). The report also stated that qualified candidates for PR employment usually have a university degree in a communications-related discipline, coupled with strong communication skills (Service Canada, 2015, Education and Training section, para. 1). A PR practitioner responsible for social media at a company or organization is often called a community manager. The community manager role is responsible for an organization’s social networking sites by tracking online communities for organizational mentions, reporting on analytics, and responding to comments posted by consumers and other stakeholders. Resumes and profiles increasingly cite community management skills. According to a Mashable article, “on LinkedIn alone, the number of people who have added community management to their skills list is up 46% year-over-year” (Lytle, 2013, para. 3). A consistent approach to the role of community manager is hard to find because social media management is a new aspect of the PR profession. According to a Marketing Magazine article, “Every business has its own definition of the job and, as a result, community managers across the industry have widely ranging responsibilities and a disparate amount of power” (Martin, 2013, para. 3). PR practitioners must wield social networking tools as a core competency because they are more likely, as communicators, to be early adopters with higher proficiency levels in communication, and companies are increasingly expecting new hires to be “versed in social media technologies” (Kassens-Noor, 2012, p. 10-11). Students in each of the three PR programs are required to complete a social media course as a component of their PR curriculum. For students in the bachelor of PR and in the post-graduate certificate program, the social media course is offered in the first semester of study. Students in the advanced PR diploma program complete an equivalent course in their second semester of study. Students in

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8 [http://mediastudies.humber.ca/programs/degree/public-relations-bachelor.html](http://mediastudies.humber.ca/programs/degree/public-relations-bachelor.html)

9 [http://mediastudies.humber.ca/programs/postgraduate/public-relations.html](http://mediastudies.humber.ca/programs/postgraduate/public-relations.html)

10 [http://mediastudies.humber.ca/programs/diploma/public-relations.html](http://mediastudies.humber.ca/programs/diploma/public-relations.html)
the bachelor of PR program also complete a second, more advanced social media course in their eighth, and final, semester of study. The social media course includes the following elements: 1) the evolution of communications theory; 2) a study of key social networking platforms; and 3) an exploration of PR ‘best practice’ social media use across a variety of agencies, corporations and organizations. Students are evaluated on a variety of course deliverables, with much of the online posting requirements restricted to Blackboard, Humber College’s chosen learning management system. Through these courses PR students are prepared for a variety of practitioner roles, including that of community manager.

PR students are therefore in a unique situation versus students in other disciplines because they must not only gain the literacies associated with social networking sites for their personal and academic benefit, but they must also gain experience in the corporatized use of the tools for the practice of their future professions. Encouraging PR students to publically navigate social networking sites for their learning is consistent with the connected learning approach (Jenkins et al., 2016). According to Jenkins et al., “We need to consider what’s required to connect these sites of informal learning to educational institutions, so that what young people learn outside of the classroom gets valued in school, leading to further educational opportunities (i.e. higher education) and further economic opportunities (employment, professional development)” (p. 68). There is currently a dearth of research related to the teaching of social media in public relations studies, offering additional incentives to examine PR as a specific academic discipline in educational discourse.

1.2.7 Experiential Learning in a College-Level Program

Since their inception in 1967, Canadian colleges have played a vastly different role than universities in the educational landscape. Mandated to provide applied learning opportunities across a broad spectrum of disciplines, colleges prepare students with job-ready skills to increase their employment options. Despite their success in this regard, a November 2012 environmental scan of the emerging educational trends in the post-secondary landscape commissioned by Humber College (Humber College, 2012) found that Ontario lags in productivity compared to the U.S. This finding has resulted in the Ontario government’s “interest in developing increased opportunities for students to experience entrepreneurial and/or experiential learning during their post-secondary careers” (p. 56). Professors across all academic disciplines are encouraged to
identify opportunities to engage students in experiential learning, in an effort “to increase the labour-market readiness of students” (Humber College, p. 56). Students, in turn, have voiced their needs, and in a *Globe and Mail* article they were “…calling for ever more work experience – like internships or field work – to be built into their education…” (Bradshaw, 2013, para. 3). Colleges offer applied learning through skill development both in class and through work placements, apprenticeships and volunteer opportunities. Humber College’s three public relations programs all offer work placements of between 8 and 14 weeks with industry practitioners who work within a range of PR environments, including agencies, corporations and non-profit organizations. From the first semester of their programs and throughout all of their courses, PR students are encouraged to immerse themselves in the PR industry by joining associations such as CPRS (Canadian Public Relations Society) and IABC (International Association of Business Communicators), listening to guest speakers, and responding to volunteer opportunities at PR-related events.

The emergence of social media in the mid-2000s has offered yet another avenue for integrating students into practical or situated learning environments, as shared by Jenkins et al.’s (2013) and van Dijck’s (2013) in their respective insights about SNS affordances. The three PR programs introduce their students to #Humberpr, a hashtag that evolved from an inaugural social media class in 2009 and has become a situated learning space. Over the years, students and faculty have used #Humberpr to communicate directly with each other regarding coursework, engage with external industry guests and announce college-related events. It has also extended its usefulness by connecting some students with external alumni and industry practitioners for the purposes of real-time, real-world industry networking, in line with Wenger’s (1998) concept of situated learning. Such interactions have yielded volunteer opportunities, information interviews, work placements and, occasionally, entry-level jobs upon graduation.

Although #Humberpr is introduced in the first social media course, the affordances of social networking platforms expose some students to the hashtag prior to their enrollment in the PR program. For some students, interaction also extends beyond graduation. Given the public nature of the hashtag, engagement on #Humberpr is voluntary and non-mandated. No grades are associated with posting or following tweets. Instead, activity on #Humberpr is considered an added value of the PR programs, providing networking and mentoring opportunities.
While the value of Twitter, for example, in an educational context is potentially “robust” (Lowe & Laffey, 2011, p. 184), I have learned from my social media teaching experience that, despite the high adoption rate of Twitter among college and university students, their use of the tool is relatively pedestrian, limited primarily to personal status updates. When I introduced students to #Humberpr in the social media course, I encouraged them to engage with each other, as well as faculty and external stakeholders. Consequently, some began to appreciate the wider-ranging benefits of Twitter and recognized the networking potential of the tool, as well as the challenges of maintaining a professional online identity. Many, however, refrained from participating on the hashtag entirely. As Ross (2012) has stated, social networking sites are “neither innocent nor culturally neutral” (p. 203), raising the stakes on participation and offering a potential explanation as to why so many were dissuaded from participating.

Relevant to Twitter in education discourse is recognizing both the affordances of experiential and/or situated learning and the consequences associated with the public nature of the tool. My study explored the paradox between the affordances of social networking sites in the context of experiential learning and the limited academic and professional engagement on these sites among Humber PR students.

1.2.8 Faculty Engagement with Twitter

Even though students may be technologically savvy and demand online experiential learning opportunities, faculty ultimately determine the role technology will play in their educational experiences. Until recently, the prevailing approach was that digitally-savvy students didn’t need to be taught online social networking skills because they were already considered digitally native. Many educators have cast this misguided perspective aside, in favour of a more realistic approach where students do, in fact, need guidance. According to boyd (2014),

Rather than assuming that youth have innate technical skills, parents, educators, and policymakers must collectively work to support those who come from different backgrounds and have different experiences. Educators have an important role to play in helping youth navigate networked publics and the information-rich environments that the internet supports (p. 180).

As with the students, however, some faculty remain reticent about technology use in the classroom, exhibiting varying degrees of confidence and engagement with the tools.
There have been many reports on young people’s use of social networking sites and many studies exist regarding students’ use of SNSs in education, but it is important to understand the faculty’s positioning in the digital space. Seaman and Tinti-Kane (2013) studied higher education faculty’s use of social media tools, both personally and professionally, and the value of the tools in their teaching (p. 1). Seaman & Tinti-Kane’s study (2013) was “a representative sample of U.S. teaching faculty from across all of higher education” (p. 5) and found that instructors’ use of social media tools in teaching (41%) lags behind their personal (70.3%) and professional use (55%). While faculty in humanities/professions are more likely to use social media in the classroom, they use Twitter less than any other social media, regardless of type of use. Most relevant to my study is the finding that “over three-quarters of all teaching faculty report that digital communications has increased their communication with students” (Seaman & Tinti-Kane, 2013, p. 5). Although it is unclear if the impact is felt on or offline, it is a noteworthy achievement in student-faculty relations, at a time when some may still be questioning whether Facebook and Twitter have a role in higher education.11

As indicated in the Seaman and Tinti-Kane (2013) study, social networking sites can increase communication between faculty and students. Social networking sites such as Twitter allow for situated learning opportunities between students, faculty and external stakeholders. Further, faculty’s role on social networking sites extends to that of social connector, particularly when the platform is public. For faculty as social connectors, “this means building and leveraging social networks to implement pedagogical methods much richer and dynamic than the traditional classroom experience” (Remund & Freberg, 2013, p. 2). In addition, “social connectors themselves model many of the public relations leadership competencies both inside and outside of the classroom” (p. 3). Remund and Freberg’s best practice advice for social connectors includes: “being active on social media sites, both professionally and personally; modeling effective online reputation management; and, encouraging collaboration and partnership between students and professionals via social media and other digital means” (p. 3).

11 In 2012, Concordia University organized a student advisory group of Communication Studies students, facilitated by Dr. Leslie Regan Shade, to discuss the challenges and opportunities associated with the use of social media in the classroom. The session was intended to help shape future policy on the use of social media in the university’s classrooms. www./concordia.ca/cunews/main/stories/2012.01/19/social-media-in-the-classroom.html
Because social networking sites are conduits for communication among a variety of stakeholders, they are particularly powerful tools in facilitating dialogue between participants. Sherry Turkle (2015) in her book, *Reclaiming Conversation*, advocates for more conversation in teaching:

> These days, teaching by conversation is talked about as crucial (after all, the stated goal of putting content online in the flipped classroom is to have more dynamic in-class conversations). But at the same time, there is pressure to use technology in classrooms in ways that make conversation nearly impossible. Interestingly, this technology is often presented as supporting student ‘engagement’ (p. 242).

Turkle (2015) intends conversation to be a face-to-face experience. If social networking sites, through situated learning in communities of practice, can help facilitate dialogue among participants, this may transition to offline conversation. In this case, technology may indeed deliver on its promise of supporting student engagement.

For public relations students, the notion of learning and practicing PR through conversation is a vital skill to develop. Faculty should consider taking up the challenge of engaging with technology and developing strategies that connect students to other stakeholders and promote social interaction both online and off.

### 1.3 Significance of the Study

Studying the role of peripheral participants in a Twitter-enabled situated learning space for PR and higher education addresses the following gaps found in the current Twitter use in education research.

#### 1.3.1 Facilitating Situated Learning Through Twitter

Students’ calls for greater situated learning to facilitate job-ready skill development is conventionally addressed through work placements, internships and apprenticeships. In these contexts, situated learning is a social space, known as a community of practice. Since the emergence of social networking sites such as Twitter, communities of practice might also be found in virtual spaces. Consequently #Humberpr, a community of practice for Humber College’s PR students, can potentially prove to be a situated learning space for PR skill
development. While some studies\(^\text{12}\) have acknowledged that students have access to external stakeholders for academic and professional learning through social networking tools, further work should more intentionally investigate the relationship between students and prospective online mentors, rather than leave it as a ‘surprise’ at the end of the study. Through the survey questions and additional probing in the focus groups and one-on-one interviews in this project, a better understanding of this relationship can aid in the effective facilitation of these applied skills in virtual spaces.

1.3.2 Legitimizing the Peripheral Participant in an Online Environment

While the majority of studies\(^\text{13}\) in online communities of practice focus on the active participant experience, an increasing number of studies are delving into the role of the peripheral participant. However, these studies typically describe the peripheral participant as a ‘lurker’\(^\text{14}\), and are intent on developing remediation strategies to encourage these participants to de-lurk or engage on the site. Isolating peripheral participants has proven challenging, particularly on SNSs, which are acknowledged to be “complex socio-technical contexts” (Debatin, et al., 2009, p. 102; Tufecki, 2008, p. 33) where users are often described as invisible. A few studies are recognizing the role of the peripheral participant as a valid online community member. My study addresses the peripheral participant as a valid and engaged member of a Twitter-enabled learning space and, through quantitative and qualitative research methods, aims to legitimize the role of the peripheral participant.

1.3.3 Understanding the Influences on Peripheral Participants’ Online Learning

While studies have acknowledged that Twitter is not a ubiquitously effective teaching tool for all students (Costa, Beham, Reinhardt, & Sillaots, 2008) and finding that peripheral participants can

\(^{12}\) Reference is made to the following studies: Dunlap & Lowenthal, (2009b); Rinaldo, et al. (2011); and Veletsianos, (2011).

\(^{13}\) Studies referenced in this section are included in Chapter 4 – An Examination of Current Studies of Twitter in Education

\(^{14}\) The term ‘lurker’ will be explained in detail in Chapter 3 – An Examination of Current Studies in Peripheral Participation.
learn through observation in an online learning space (Dennen, 2008; Elavsy, Mislán & Elavsky, 2011), these studies focus on academic spaces where the principal interaction is between students and faculty. Further exploration into Twitter’s influence on the peripheral learner, is intriguing, given Twitter’s publicness, which offers access to external stakeholders and the highly motivating promises of industry specific information, contacts and opportunities. My study will allow us to understand participants’ spectrum of online engagement levels, as well as their motivations and barriers to use. In-depth one-on-one interviews will further our understanding of this phenomenon.

1.3.4 Discipline-Specific Twitter Use

A number of academics studying Twitter in education have identified the need to explore discipline-specific Twitter use. (Gao, Luo & Zhang, 2012; Junco, Heibergert & Loken, 2010; Kassens-Noor, 2012; Kennedy, Judd, Dalgarnot & Waycott, 2010; Lowe and Laffey 2011; Veletsianos, 2011). The role of peripheral participation in a Twitter-enabled learning space specifically within a PR context is a contribution to the study of Twitter use in education because PR students have taken a social media course and are learning about the value of social media in a professionalize PR context. These factors may influence the findings.

1.4 Research Questions

This study addresses the gaps found in previous research on Twitter use in education, by exploring a discipline-specific group of public relations students and their engagement levels on Twitter when using it as a situated learning space. The focus of the study is on the various influences that affect participation levels. The following three questions guide the study:

RQ#1: What are the PR students’ perceptions of Twitter use in PR education?

RQ#2: What are peripherally-participating PR students’ experiences in using Twitter in PR education?

RQ#3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?
1.5 Chapter Conclusion

While young people’s adoption of social networking sites has been well documented, with media and others ascribing them with digital native status, their engagement with social networking sites in an emerging educational context is wrought with challenges. SNSs are public and networked technology spaces that demand literacies beyond that of a young person’s social interactions. For this reason, exploring students’ transitions from “living” (Kennedy, et al., 2008, p. 119) to “learning” (p. 119) technology use is a valuable, but under-researched, area in higher education. Prompted by my own students’ reticence to engage with Twitter in their PR education, my study focuses on the peripheral participant’s experiences. Addressing the gaps in the literature, my study examines the online relationships between peripherally-participating students and prospective mentors in an online experiential learning space. By exploring PR students’ perceptions of and experiences with Twitter, my study identifies the key influences, either positive or negative, that drive Twitter engagement for informal learning. My study also contributes to the Twitter in higher education discourse not only through the specific discipline of PR, but by legitimizing the peripherally participating learner in an online community of practice.

Chapter 2 provides a theoretical framework for examining an experiential learning approach that brings students and prospective mentors together into a community of practice.
Chapter 2
Examining Twitter Use Through Situated Learning Theory

2 Introduction

The purpose of my study was to gain an understanding of the role of social media in education and, in particular, the implications of learning informally in a networked and mediated online space like Twitter. The following chapter first addresses the difference between formal and informal learning. It subsequently explains the relevance of using Lave and Wenger’s (1991) situated learning theory as a framework for examining Twitter use in PR education. One key element of the theory is the notion that learning takes place in CoPs, and I examine social networking sites as possible online CoPs. Another key element of the theory is the concept of a legitimate peripheral participant. I deconstruct the term into three parts: participation, peripherality and legitimacy, analyzing each part in the context of a virtual community of practice. The chapter concludes with an explanation of the relevance of the theory to my research.

2.1 Defining Informal Learning

To gain an understanding of the role of social media in education, it is helpful to differentiate between formal and informal learning environments. A traditional classroom, with its focus on cognitive learning and knowledge transfer, is considered a formal learning space. Sawchuk (2008)\textsuperscript{15} shared an approach that defines informal learning in a meaningful way for social media in education, citing David Livingstone’s notion that “information learning and informal education are largely defined…in terms of the character of the knowledge form or structure as ‘situational’ (as opposed to pre-established)” (p. 6), where pre-established is associated with an institutional learning space. According to Sawchuk, Livingstone’s model of informal learning refers to “both taught and untaught learning carried out either in self- or collectively-directed ways or with the guidance of an expert other (eg. mentor, teacher, coach)” (p. 6).

\textsuperscript{15} Peter Sawchuk’s paper (2008) was referenced in Terrie Lynne Thompson’s (2010) work, and proved a starting point for informal learning research in this paper.
My interest is in how social media, as a potential informal learning environment, integrates into a more formal, institutional learning framework, particularly given its networking capabilities. In my study, #Humberpr is not only the informal learning space in question, where participation is voluntary and transcends individual classes or courses, but it is also integrated across the program and involves a variety of players. Jenkins, et al. (2016) referred to this approach as connected learning:

> The core of connected learning is this understanding that it takes relationships to open up opportunity. That’s why the focus is on learning within the context of social engagement and shared purpose, where young people are learning to get things done with both peers and adults (p. 86).

The social networking environment affords students the opportunity to engage with a variety of stakeholders in a public forum through apprenticeship or receiving mentorship. The purpose of my research is to understand the implications of peripheral participation in such a networked space. The experience of peripheral participants is particularly relevant because only a minority of individuals with access to online spaces actively engage.

### 2.2 Introducing Situated Learning Theory

To investigate the implications of peripheral engagement within this informal space, I turn to Lave and Wenger’s (1991) situated learning theory. With a focus on the informal, tacit learning gained in a social practice, Lave and Wenger’s theory offers an alternative to the cognitive models of traditional learning, which focus on the concept of transferring knowledge. Addressing the interaction between novice and expert in learning, Lave and Wenger’s theory, in their own words, “rescued the idea of apprenticeship” (pg. 29). Situated learning theory is founded on a social theory of learning and considers that knowledge gained in the context of apprenticeship-type learning comes from the interactions not only between the learner and the expert, but also in interactions with “peers and near-peers” (p. 93). These interactions allow a learner to gradually assemble a general idea of what constitutes the practice of the community…who is involved; what they do; what everyday life is like…how people who are not part of the community of practice interact with it; what other learners are doing; and what learners need to learn to become full practitioners” (p. 95).

Lave and Wenger (1991) moved away from the literal interpretations of apprenticeship, which practitioners historically had applied in a trade-focused learning model, to a more theorized...
interpretation (p. 31), conceptualized as situated learning, which focuses on learning as a core component of social practice (p. 31). In addition, they claim “that there is no activity that is not situated. It implies emphasis on comprehensive understanding involving the whole person rather than ‘receiving’ a body of factual knowledge about the world, …and on the view that agent, activity and the world mutually constitute each other” (p. 33).

It is this holistic view of learning, conducted informally and outside of a traditional classroom environment, which resonated with my interests in teaching a highly applied skill such as social media to students in an applied PR program. It was obvious to me that students would best learn the literacies associated with the connectedness of the social media platform in situ, in a context where students use the tools authentically, interacting directly with a relevant stakeholder community.

2.3 Framing Social Networking Sites as Communities of Practice

The framework Lave and Wenger (1991) invoked for situated learning theory was the community of practice. The most heavily cited aspect of Lave and Wenger’s (1991) theory is the notion of situating learning within “sociocultural practices of a community” (p. 29). Lave and Wenger, by their own admission, do not clearly define community of practice, with the concept “left largely as an intuitive notion” (p. 42). Wenger (1998) further developed the concept of community through three dimensions of practice that must be present in a community for it to be considered a community of practice: mutual engagement, joint enterprise, and shared repertoire. I will summarize each of these three aspects of community of practice. By mutual engagement, Wenger suggested that in a community of practice, community members are “engaged in actions whose meanings they negotiate with each other” (p. 73), which appear to extend beyond the knowledge of the job or task and into the social relationships among the members (p. 74). By joint enterprise, Wenger expected community participants to share a common goal that they develop through joint negotiation and for which they share a mutual accountability (p. 77-78). By shared repertoire, Wenger identified the tools of interaction, suggesting they should allow for expression of membership and identity, including “…words, routines, gestures, stories, symbols and actions …that the community has produced or adopted in the course of its existence” (p. 83).

In their 2009 book, Wenger, White and Smith addressed the inevitable question as to whether an online space, such as a social networking site, can be a community of practice. Wenger, et al.
suggested that “(n)o matter how technology-enabled they are, communities remain social entities and it is by enabling social processes that technology contributes to the emergence of communities” (p. 191). Wenger, et al. addressed the benefits of public technology-mediated spaces and stressed that platforms that elect to remain private or self-contained, “may cut off the community from broader networks and from spontaneous interactions with the rest of the world” (p. 51), referring to the users of open platforms as having a “networking mindset” (p. 51). Wenger, et al. adapted the definition of community of practice to reflect the technological affordances of a digital space by reframing the dimensions of community of practice – from mutual engagement, joint enterprise and shared repertoire to community, domain and practice.

2.3.1 Community

To be a community of practice in the digital space, the community members must develop trust by sharing a common domain and practice (Wenger, et al., 2009, p. 8). Wenger, et al. stressed “learning together depends on the quality of relationships of trust and mutual engagement that members develop with each other…” (p. 8). Development of community can be witnessed through the relationships that emerge when social networking platforms such as Twitter and #Humberpr allow for a confluence of students, faculty, industry professionals and others, where they each can engage on topics of mutual interest.

2.3.2 Domain

An online community of practice must also share a domain of interest that is essentially a unifying identity, a “set of issues, challenges and passions through which members recognize each other as learning partners” (Wenger, et al., 2009, p. 5). The purpose of studying a hashtag environment on Twitter such as #Humberpr is to aggregate those members who share a domain of interest - public relations in this case – but may or may not follow one another.

2.3.3 Practice

Technology provides a community of practice with efficient and persistent resource-sharing capabilities. This suggests, however, that learning how to negotiate these resources is an essential component of participating in an online community of practice. Wenger et al. (2009) stated, “learning a practice is learning how to be a certain kind of person with all the experiential complexity this implies: how to live knowledge, not just acquire it in the abstract” (p. 7). Wenger
et al. discussed the range of opportunities for learning online that moves beyond tools and toward the notion of learning “from and with each other, with the community of practice, engaging in formal and informal actions” (p. 8). The ability to learn from the members of a community of practice, such as a hashtagged community on Twitter, means not only interacting with stakeholders directly, but by accessing other resources on websites and through links and retweeted contacts, inside and outside of the community.

There exists a debate as to whether an online community of practice is an intersection of alternate offline communities joined together by technology or whether the community of practice resides within the social networking site, for example. According to Hung and Yues (2010), technology, such as social media, “supports social interaction” (p. 705) and “encourages member participation within existing local communities” (p. 705). Hung and Yues argued, however, that despite the benefits of social networking tools in bringing like-minded people together online, “…sustaining the CoP may present potential obstacles, such as lack of trust, isolated feelings and other affective factors which can be broadly conceived as lack of a sense of community” (p. 705). On the other hand, Johnson (2001) suggested “the community of practice is what emerges from the designed community” (p. 53), regardless of whether the designed community is traditionally offline or a virtual space. Arnold and Paulus (2010) concurred: “New technologies open new possibilities for creating ‘places’ for people to meet and hold conversations. They also change the cues for context and the boundaries that determine who belongs and who does not” (p.127). Wenger, et al. (2009) addressed the issue head on, even labeling technology-initiated communities as proto-communities, defining them as “amorphous, networked collections of people, places, artifacts and activities that are slowly developing an identity as community” (p. 192). My study establishes #Humberpr as a legitimate community of practice where informal situated learning takes place through voluntary, public engagement between stakeholders who share a common interest in PR and share resources both inside and outside of the community.

Next, it is vital to assess the meaning of participation within these communities.
2.4 Deconstructing the Concept of Legitimate Peripheral Participation

Lave and Wenger’s (1991) situated learning theory intrigued me based on the promise of apprenticeship learning located in a social space within a community of practice. Wenger’s (1998) evolution of the community of practice concept reassured me that digital spaces qualified as learning communities under this framework. However, it is Lave and Wenger’s collective insight around the participants engaged in situated learning that was essential to helping me interpret the learning implications for both participants and peripheral participants in social networking sites.

In its most reductionist form, Lave and Wenger (1991) referred to legitimate peripheral participation (LPP) as the “process by which newcomers become part of a CoP” (p. 29). Borrowing from the apprenticeship model, Lave and Wenger explain that newcomers enter a community of practice with the intention of participating in activities, creating identities and building artifacts that will eventually lead them to mastery of the skills and knowledge of the community (p. 29). Some educational discourse has reproduced this linear interpretation of legitimate peripheral participation (Herrington & Oliver, 1995; Johnson, 2001; Liccardi, et al., 2006), suggesting that participation in a community of practice is essential for learning. According to Johnson, “CoP differs from traditional learning environments because the learning takes place in the actual situation, including the social environment. This means novices and experts, as well as novice movement to expertise are important aspects of CoP” (p. 51).

Because of my interest in peripheral participants’ learning in a virtual space, I found that deconstructing the elements of the term ‘legitimate peripheral participation’ lent a more nuanced understanding that is arguably closer to Lave and Wenger’s intended definition. They articulated this definition in the 1991 theory, and they expanded it in later work which focused on the social interactions, rather than overt participation, that contribute to effective learning. The following section will address notions of participation, peripherality and legitimacy in the context of situated learning theory.
2.4.1 Participation

Moving away from the traditional notion of learning as knowledge transfer toward the notion of situated learning within social practice, Lave and Wenger (1991) concluded that the “teacher/learner dyad” (p. 56) insufficiently captured the relationship of participants in a community of practice. Instead, they recognized that situated learning “points to a richly diverse field of essential actors and, with it, other forms of relationships of participation” (p. 56). Further blurring the lines between the teacher/learner dyad, these other forms include not only experts and novices but also near-peers and the introduction of communities of practice into online spaces. In Thompson’s (2010) research on the learning that occurs in online spaces occupied by self-employed workers, she found that “although these self-employed workers were often aware of their position in an online community, the line between expert and novice is more fluid than the original conception of LPP suggests” (p. 369).

Interpreting situated learning as a socio-cultural practice, Lave and Wenger (1991) suggested that there may be no “illegitimate peripheral participation” (p. 35) forcing clarification on the notion of legitimacy of participation. Lave and Wenger defined legitimate participation as “ways of belonging” (p. 35), and if - as suggested by the authors - illegitimate participation is non-existent, perhaps this is Lave and Wenger’s first hint that peripheral participation is a legitimate position within situated learning theory.

Wenger (1998) addressed the notion of peripheral participant legitimacy more directly in his later work, stating that “our relations to CoP…involve both participation and non-participation” (p. 164) and that “identity construction, (a key element of social practices), is shaped by a combination of the two” (p. 164). Wenger et al. (2009) acknowledged that, particularly with the affordances of an online space, a “great many” (p. 9) of those with access to online communities engage only by reading (p. 9).

…[T]hese readers are called lurkers. From a community of practice perspective, lurking is interpreted as ‘legitimate peripheral participation’, a crucial process by which communities offer learning opportunities to those on the periphery. Rather than a simple distinction between active and passive members, this perspective draws attention to the richness of the periphery and the learning enabled (or not) by it (p. 9).
Wenger (1998) reconciles the dichotomy between participation and peripheral participation through the concept of multi-membership, the notion that individuals take various positions within a variety of communities (p. 158), and that “our own practices usually include elements from other practices to which we do not belong, [and] non-participation is an inevitable part of living in a landscape of practices” (p. 165). Wenger suggested that individuals define their identities and social relations by choosing the communities in which they participate, based on “how we locate ourselves in a social landscape; what we care about and what we neglect; what we attempt to know and understand and what we choose to ignore; with whom we seek connections and whom we avoid” (p. 167-168). In the context of my study, students locate themselves actively within #Humberpr’s community of practice, on the periphery of #Humberpr, and possibly on alternate social networking platforms.

2.4.2 Peripherality

Lave and Wenger (1991) used the concept of peripherality to suggest “that there are multiple, varied, more- or less-engaged and –inclusive ways of being located in the fields of participation defined by a community” (p. 36). Because they defined peripheral participation as “being located in the social world” (p. 36), Lave and Wenger proclaimed that peripheral participants are gaining access to knowledge, but don’t necessarily follow a linear path to reach a “single core or centre” (p. 36-37) in a community of practice.

The nature of peripherality becomes more flexible when interpreted through the lens of the online community with Wenger, et al. (2009) suggesting peripheral participants may not aspire to reach the centre of the community, but instead “carry the community’s learning to other communities” (p. 9).

The networking inherent in social media proves beneficial for connecting communities of practice through the fluidity of the participants, with Wenger, et al. (2009) acknowledging that “[t]his rapidly evolving mix of voices, interactions, resources and links allows communities to form and domains to be identified without well-defined or stable boundaries” (p. 196). The periphery in SNSs may be vast and unquantifiable, unlike the periphery in a discussion forum, for example.
Thompson (2010), in her research on self-employed workers, addressed peripheral positioning as a choice that allowed participants the flexibility to determine their own most beneficial ways of working and learning (p. 370).

The concept of peripherality in technology-mediated spaces is complex because boundaries are limited only by the affordances of privacy settings. Given the “networking mindset” (Wenger, et al., 2009, p. 51) of SNSs, privacy can be a limitation, while remaining public could, quite literally, include anyone with Internet access.

2.4.3 Legitimacy

Lave and Wenger’s (1991) term, legitimate peripheral participation, begs the question, what determines legitimacy for a participant involved in a community of practice? In their original text, Lave and Wenger interrogated the notion of legitimate peripherality, calling it “a complex notion implicated in social structures involving relations of power” (p. 36). Later in the text they suggested that “[h]egemony over resources for learning and alienation from full participation are inherent in the shaping of the legitimacy and peripherality of participation in its historical realizations” (p. 42). Wenger (1998) addressed this issue by suggesting that all participation implies some measure of peripherality (p. 165), drawing on the distinction between peripherality and marginality to illustrate his point. Wenger suggested peripherality is an enabling position for a participant to essentially remain on the outside to learn about the community in order to become a more engaged member (p. 166). The various power relationships within the community of practice push a marginalized participant to the periphery, problematically positioning them as an outsider (p. 166-167).

Handley, Sturdy, Fincham and Clark (2006) pointed out that that the potential for tension and conflict exists because, during their lifetime, individuals participate not within one community (or collectivity or network) but within several – each with different practices and identity structures (p. 647).

Arguably, individual positions in each of these communities will also vary, and it is this situatedness that influences the relative learning in these spaces.

With web technologies, it is more difficult to define boundaries (Wenger, et al., 2009, p. 196) because of their lack of spatiality and temporality, and an invisible audience can collapse into a
pool of members that range from novices to peers to experts. Consequently, it becomes harder to recognize the expert in a community of practice and to negotiate the power relations that inevitably exist. As Thompson (2010) stated, informal online learning creates a more complex situated space where “[T]he form that legitimate participation takes is inescapably tied to the shifting configurations of people, ideas, and objects, amplified by web-technologies” (p. 371). Arnold and Paulus (2010) went so far as to suggest that in non-traditional learning spaces, “the role and privileges of leaders in communities outside educational settings are generally more contestable, leaders are more easily replaced” (p. 137). Although the notion of LPP helps to explain the role of the peripheral participant in a community of practice, the virtual space complicates the idea of legitimacy.

2.5 Defining the legitimate peripheral participant

To operationalize legitimate peripheral participation in the context of my study of Twitter use in education, I must first reflect on the introduction of new technologies, particularly SNSs, and how they have affected the evolution of the community of practice. Lave and Wenger (1991) initially interpreted the LPP role in a CoP as “the process by which newcomers become part of a CoP” (p. 29) through apprenticeship-type learning from ‘expert’ members. Wenger’s (1998) understanding of LPP was that individuals take various positions, peripheral and participatory, within a variety of communities (p. 158), and the notions of expertism and belonging are fluid. More recently, Wenger et al. (2009) extended the CoP concept to include SNSs, noting how peripheral participants adapt to a new community before “jumping in” (p. 9) and possibly remain on the periphery to “carry the community’s learning to other communities” (p. 9). By acknowledging the publicness of the spaces, which are by definition “opening their boundaries limitlessly” (p. 11), Wenger, et al. implied that an unquantifiable number of peripheral players could potentially be on the site. Reflecting on Lave and Wenger’s (1991) testament that “there may very well be no such thing as an ‘illegitimate peripheral participant’” (p. 35), and considering the limitless possibilities for participation in the emerging context of the public, networked space, defining the LPP becomes a complex task.

The community of practice in the context of my study is #Humberpr. My research found that a variety of players actively engaged with the hashtag, including students, faculty, alumni and industry practitioners. The community extended to others, who were identifiable members of
either the broader Humber or other college community, and to unknowns, who were unidentified Twitter account holders with vague or no profile information. However, given that #Humberpr is a public, networked technology-mediated space, it challenges traditional notions of community, and there exists a limitless range of potential peripheral participants on the site.

Determining the legitimacy of peripheral participants in an SNS is the more challenging task. According to Lave and Wenger (1991) “learning is an integral part of generative social practice in the lived-in world”, and Wenger, et al. (2009) asserted that technology-initiated communities are social entities (p. 191); consequently, peripheral participants in an SNS should occupy a legitimate position in the space. Wenger (1998) introduced the notion that actual communities of practice shared three dimensions of practice, which were reframed for technology-enabled spaces by Wenger, et al. (2009): community, domain and practice. I propose that #Humberpr possesses these dimensions, making it a legitimate virtual community of practice. I also suggest that the peripherally-participating Humber PR students, who are the focus of my research study, are legitimate peripheral participants with the potential to develop trust with community members, share a domain of PR interest, and engage in a variety of resource-sharing activities. With respect to the latter point, while peripheral participants may remain on the outskirts of the virtual CoP and refrain from leaving visible traces, they may share resources in other online and offline spaces.

In the context of my study involving Twitter-enabled learning, the legitimate peripheral participants are the Humber College PR students with moderate, light and no engagement on #Humberpr, given that they meet the criteria established by Lave and Wenger (1991) and Wenger (1998) for engaging on a CoP.

The question that emerges with respect to situated learning in a public, networked technology-mediated space is whether all of the infinite peripheral participants with access to the site are also legitimate players. While this broader question is beyond the scope of my current study, defining legitimate peripheral participation within social networking sites inspires future research.

2.6 Chapter Conclusion

In studying the role of participants and peripheral participants in situated learning within an online community of practice, it has become more challenging to recognize the characteristics of
novices and experts. In fact, it has become more compelling to develop the literacies that identify potential mentoring relationships within the space to ensure that learning takes place.

The allure of the situated learning theory as a framework for my work with peripheral participants in Twitter-enabled learning is threefold:

1. Situated learning theory originated from the premise of internship/apprenticeship learning and evolved into the notion of learning in situations that offer connections to stakeholders beyond the student/teacher dyad. Twitter-enabled learning offers such a space, where context is collapsed and the hierarchy among stakeholders within a community of practice may be fluid.

2. Situated learning theory, as it has evolved into the digital space, establishes that Twitter can be a community of practice through the support of a communal hashtag.

3. Situated learning theory established that the peripheral participant does not require remediation into a participatory role toward the centre of a community of practice, but holds a legitimate position as a peripheral member of an online community. The notion of peripheral participant remediation or de-lurking will be addressed further in Chapter 3.

Based on these interpretations of situated learning theory, I believe the theory supports the notion that a peripheral participant is a legitimate learner in a Twitter-enabled environment. My study contributes to the digital CoP discourse by overcoming the challenges associated with identifying and connecting with the peripheral participants of an SNS and by legitimizing these learners in a higher education context.

The subsequent chapter will investigate current research into the role of the peripheral participant in online communities.
Chapter 3
An Examination of Current Studies in Peripheral Participation

3 Introduction

The nature of participatory culture encourages engagement through low barriers of entry, support for content creation, and informal mentorship to participants (Jenkins et al., 2009), and this engagement results in two-way communication. However, only a minority of online users are active participants and, in the context of applied PR learning that valorizes and expects social networking skills, a surprising number of students are reticent participants. The principal question of this research study is to address whether peripheral participants represent an alternative type of engaged learner.

The study of peripheral participation in online spaces, particularly social networking sites, is under-researched because it is a relatively new area of inquiry, and the subjects are challenging to identify. Completing a literature review specifically on peripheral engagement on SNSs proved too restrictive and would have failed to capture the rich information gained in studies of peripherality across the broader context of online communities. I used the following criteria for selecting current studies in peripheral online participation:

- The studies were conducted after 2006. Given that SNSs, which emerged in the mid-2000s with the launch of Facebook in 200416 and Twitter in 200617, are the focus of my thesis, I decided to exempt studies predating SNS.
- The studies used an empirical research approach.
- The studies were intentionally focused on peripherality versus the more general exploration of participation in online communication where peripherality may be addressed as an afterthought.

While an additional criterion for the literature review may have been studies that focused on SNS, the dearth of research in the specific area of peripheral participation in SNSs forced me to

16 Information accessed on August 4, 2016 on newsroom.fb.com/company-info/
17 Information accessed on August 4, 2016 on about.twitter.com/company/press/milestones
expand my literature search to include studies that included a variety of online communities, including websites (Sun, et al., 2014), discussion forums (Dennen, 2008; Soroka & Rafaeli, 2006; Yeow, et al., 2006), virtual interest communities (Lai & Chen, 2014), social networking sites (Arnold & Paulus, 2010; Crawford, 2009; Rau, et al., 2008), LiveJournal (Merry & Simon, 2011), inquiry-based online learning environments (Edelmann, 2013; Lee, et al., 2006), blogging communities (Dennen, 2009, 2014), and professional development online communities (Cranefield, et al., 2015; Walker, et al., 2010).

Preece, et al. (2004) and Nonnecke et al. (2006) conducted seminal studies on peripheral participation in online communities and I was interested both in their work and in studies that incorporated their work in peripheral participation. All of the studies included in this thesis’ literature review cite the work of either Preece, et al. (2004), Nonnecke, et al. (2004) or Nonnecke, et al. (2006) and, in two cases (Crawford, 2009; Arnold & Paulus, 2010), cited Nonnecke et al.’s previous work.

A comprehensive literature review of empirical studies in user participation in online communities was conducted by Sanna Malinen (2015) and provided foundational research for my own exploration of online peripheral participation studies.

It is my aim in this chapter to justify my decision for using the term peripheral participant to describe the silent majority of users in online communities, despite the fact that most of the studies in the literature review used the term ‘lurker’ in either their title or their abstract, and then throughout their research paper. I will expand on this point further in the chapter.

Following is an overview of current research in the area of peripheral participation in online spaces across a number of categories of inquiry. Within this chapter, I examine the terms that define peripheral participation, both positive and negative, as well as the types of online communities where peripheral participation is possible. I report on possible reasons for peripheral participation. I address the debate about remediating the peripheral participant to full engagement, an act that has been termed de-lurking, which was discussed in a number of studies in peripheral participation in online communities. I conclude the chapter by proposing that peripheral participants are legitimate members of online communities.
3.1 Defining the Peripheral Participant

The study of peripheral participants in online communities, and particularly SNSs, is relatively new, emerging only in the early part of the 21st century (Cranefield, Yoong & Huff, 2015; Crawford, 2009; Merry & Simon, 2012). The notion of a peripheral participant is inherent in social media discourse because of the public nature of the technology and its associated challenges, which boyd (2008b) identified as the affordances of context collapse, searchability of content and replicability of content. The invisibility of the subjects in online spaces accounts for the dearth of research in this area. Soroka and Rafaeli (2006) suggested that peripheral participant research is “interesting and challenging” (para. 3) because it is difficult to identify peripheral participants who are not active and “don’t leave visible traces” (para.3; Malinen, 2015, p. 232). According to Lee, et al. (2006), “it is difficult to capture and comprehend lurking behaviours in isolation with their tacit essences” (p. 404), and Merry and Simon (2012) shared that “in an already most-invisible sample, there is an unknown number of silent members” (p. 245). The invisibility of online peripheral participants is particularly problematic in social networking sites. Whereas online forums may have lists of registered members, there is no such tracking in social networking.

Defining the actions or inactions of the participants is more elusive. According to Malinen (2015), “[o]n the whole, no specific definition is offered for participation in the reviewed studies. An active-passive dichotomy based on the visibility of activity seems to be the most common way of conceptualizing participation” (p. 231). Soroka and Rafaeli (2006) offer a definition of the peripheral participant as those who “visit an Internet site and read messages by other people without posting a message of their own” (para. 6).

Sun, et al. (2014) described peripheral participants as follows, gathering a variety of identifiers used in previous studies:

- the members who never post in an online community;
- the users who posted messages only once in a long while;
- the members who made no contribution to the community during a three-month period;
- the users who post three or fewer messages from the beginning or users who never posted messages in the last four months (p. 112).

Peripheral participants are often called “lurkers” (Preece, et al., 2004, p. 202). Of the 17 studies included in my literature review, 15 used the term lurker in either their title or abstract and then
throughout their research paper. Lurkers, “considered to be second class members of online communities” (Preece, et al., 2004, p. 203), are identified by fellow members of online communities by pejorative terms such as “free-riders” (Soroka & Rafaeli, 2006, para. 12), “freeloaders” (Dennen, 2008, p. 1626), “shirkers” (Walker, et al., 2010, para. 2) and “community voyeurs” (Dennen, 2008, p. 1626). Some of the negativity surrounding peripheral participants traces back to “people feeling uncomfortable about being observed in an unbeknownst manner” (Dennen, 2008, p. 1625) by what is, in many online communities, an invisible audience.

Crawford (2009) pointed out that “lurkers have always constituted the large majority of individuals in most online spaces” (p. 527). Although lurking rates are highly variable (Preece, et al., 2004, p. 202), peripheral participants typically make up the highest proportion of participants (Walker, et al., 2010, para. 2), with many researchers reporting that peripheral participants constitute as much as 90 per cent of the online community (Crawford, 2009, p. 527; Lee, et al., 2006, p. 404; Neilsen, 2006; Preece, et al., 2004, p. 202; Walker, et al., 2010, para. 8). These figures persist even in recent peripheral participant studies (Lai & Chen, 2014; Sun, Rau, Ma, 2014).

Soroka and Rafaeli (2006) shared that it is “somewhat disappointing to discover lurking in computer forums, as these ostensibly promise high interactivity” (para. 2). To promote interactivity, programmers architected commercial platforms such as Facebook, YouTube, LinkedIn and Twitter to “code relationships between people, things and ideas into algorithms” and then “utilize their data to influence traffic and monetize engineered stream of information” (van Dijck, 2013, p. 12). The success of the business model requires high levels of participation. Crawford positioned this “privileging of voice” (2009, p. 527) as evidence of a democratic culture. Socializing, sharing and connecting are attractive activities that bait users into participating despite the fact that SNSs compromise privacy through the public nature of the tool and elusiveness of the privacy settings. These same affordances also discourage many from fully engaging, and those discouraged users choose instead to be an audience for the activity of others. However, some may view peripheral participants or lurkers as a challenge to the democratic ideal (van Dijck, p. 4; Crawford, p. 527), and this might explain the negativity inherent in references to less-than-full participation and the fact that these individuals have been under-researched.
Not all references to this invisible audience are negative. Positive or neutral references include the silent audience (Soroka & Rafaeli, 2006, para. 6; Walker, et al., 2010, para. 6); the silent majority (Lee, et al., 2006, p. 404); the peripheral participant (Lee, et al., 2006, p. 404; Dennen, 2008; Walker, et al., 2010, para. 5); browser (Walker, et al., 2010, para. 5); read-only participant or vicarious learner (Nonnecke, Preece, Andrews, & Voutour, 2004, p. 1; Rau, Gao, & Ding, 2008, p. 2760; Walker, et al., 2010, para. 5); and, non-public participants (Nonnecke, Andrews, & Preece, 2006, p. 1). As Crawford (2009) stated,

> While these terms attempt to remove the stigma from lurking, they continue to define this majority group by what they are not: not public, not at the centre. As terms, they fail to offer a sense of what is being done, and why it is important to online participation (p. 527).

My view of peripheral participants through the more positive lens as the silent majority has led to my goal of positioning peripheral participants as having a legitimate place in online communities and adopting Lave and Wenger’s (1991) situated learning theory as a theoretical framework.

### 3.2 Online Communities for Peripheral Participation

Increasingly, educators are exploring ways to incorporate the use of SNSs for building community and collaboration (Arnold & Paulus, 2010), and “maintaining a strong network of contacts and potential employment opportunities” (Crawford, 2009, p. 532). Studies of peripheral participation have taken place within these online communities; however, researchers have only vaguely defined these communities, which may include online discussion board communities, websites, virtual interest communities, and various social networking sites.

Malinen (2015) raised the notion that online communities are challenging to define, pointing out that a number of scholars have questioned whether communities can exist online (p. 229). Other scholars support the concept of the virtual community. Sun, et al. (2014) offered a list of factors that contribute to a robust online community: a strong group identity, ease of platform use, a pro-sharing norm that raises community awareness of the value of online contributions, reciprocity in posting, and a strong reputation built on the backs of skilled and knowledgeable experts (p. 114).

Malinen (2015) pointed out that the nature of online communities is changing with the introduction of social networking sites and their various affordances, including real-time sharing and mobility (p. 236), as well as data persistence and scalability (boyd, 2008b). Social
networking sites differ from other online communities by being more directly tied to individuals’ social networks, and, as a result, individuals are more aware of their specific audiences, likely made up of their social circles:

There, the desire for self-disclosure towards a specific group of people, the fears of being misunderstood or disguised by those people, and the confidence that affective feedback can be received from them will influence people’s posting behaviour more on SNS than in other online forums (Rau, et al., 2008, p. 2768).

Also, the motivation for posting in a social networking site differs from that of other online communities in that the primary reason for using a social networking site is not necessarily information gathering (although, arguably, Twitter may be an exception)\(^\text{18}\). According to Rau, et al., “[s]ocio-emotional supports, friendship and intimate interactions are sought out in SNS” (p. 2758), and are likely to influence posting behaviours (p. 2758).

Twitter is an even more complex space because its utility ranges across “one’s working life, family and social life and political life. Disparities emerge between what users are technically able to do and the limits of their schedules, desires and bodies” (Crawford, 2009, p. 526). Recognizing the complexity of engagement in public online spaces, degrees of participation need to be negotiated based on each individual’s needs and situation (Dennen, 2008, p. 1628).

Cranefield, et al. (2015) proposed that lurking is now known to be a fundamentally contextual activity, a participant may lurk in one community setting while actively posting in another…there is little research that considers how lurkers engage in cross-community participation and/or how they interact with others via online back-channels such as email (p. 216).

This suggests that in order to track peripheral participation within SNSs, and particularly within Twitter, one enters a space where few researchers have yet ventured.

### 3.3 Reasons for Peripheral Participation

To gain insight into the peripheral participant experience, studies have examined the motivations behind online lurking. In the early 2000s, Nonnecke, et al. (2004) and Preece, et al. (2004)

\(^{18}\) Twitter was introduced earlier in this paper and it was noted in Twitter’s own blog post that “40% of Twitter users simply use Twitter as a curated news feed of updates that reflect their passions” (Leetaru, 2015).
conducted now often-cited studies on peripheral participants in online communities. Nonnecke, et al. produced a table (p. 4) of reasons why peripheral participants do not post, captured from survey responses of a sample of 219 discussion group members. The main reason peripheral participants didn’t participate (53.9%) was because they felt they gained sufficient information by reading the contributions of others (p. 4). The second most important reason (29.7%) was that they were still learning from the group, and third (28.3%) was that they were shy about posting (p. 4). Additional reasons included the following: having nothing to offer (22.8%), there was no requirement to post (21.5%), and they wanted to remain anonymous (15.1%) (p. 4). A further reason suggested by other academics was that peripheral participants were concerned about the poor quality of messages from other group members (Cranefield, et al., 2015; Lai & Chen, 2014; Malinen, 2015; Sun, et al., 2014). Lai and Chen expanded on this point, adding that peripheral participants are concerned that others will contradict their opinions or that they may receive criticism or negative judgment from others (p. 7). Cranefield, et al., suggested that the “lack of interesting people or friends on the site and non-interesting content were named as the most important reasons for reduced participation” (p. 234). Peripheral participants also claim to be learning about the community norms, which they see as an essential step to becoming part of a community (Lee, et al., 2006, p. 404; Nonnecke, et al., 2006, p. 8; Sun, et al., 2014, p. 114). In reference to the latter point, peripheral participation was seen as a “temporary and adaptive strategy” (Nonnecke, et al., 2006, p.13).

Like Nonnecke et. al. (2004), Dennen (2009) and Malinen (2015) addressed pseudonymity and anonymity as influencers of participation, with both agreeing that the “use of pseudonyms are preferred to total anonymity” (Malinen, p. 234), particularly in the context of online community development (Dennen, 2009, p. 35). Similarly, complete anonymity is rarely a desired position in social networking. Participants may be driven to the periphery because of the requirement of SNSs for online identity disclosure. Malinen suggested that another motivation for peripheral participation relates to habit: “[h]abit plays a stronger role especially in tasks that require less cognitive effort; therefore habit is linked to light-weight content production, such as ratings and messages, and particularly to content consumption” (p. 233). If the habit is peripheral participation, this may be challenging to break.

Educators must acknowledge the complexity of SNSs, which not only afford interpersonal networking but are very public spaces of persistent content. Although students may participate in
an SNS when required in an academic context, the motivation for such participation often emanates from the students’ desires to impress their instructors by contributing online posts (Dennen, 2008, p. 1630) or their need to fulfill course posting requirements (Dennen, 2008, p. 1630; Walker, et al., 2010, para. 37). On the other hand, students who refrain from overt online engagement, even in an academic setting, exhibit what Dennen described as pedagogical lurking - spending time reading versus posting. Dennen suggested that these students gain greater benefits than students who simply post with no self-reflection. Lee, et al. (2006) concurred, stating “lurkers may achieve levels of learning similar to those of posting students and appear to demonstrate effective learning” (p. 405). Teaching students to have an authentic online presence, even if that means a peripheral presence, is a form of digital literacy. It is also evidence that engaged learning can be invisible.

My study aims to examine the barriers to participating in a SNS, particularly in the context of Twitter use in PR education.

3.4 Remediation of Peripheral Participants

The goal of much of the research into participation in online communities has focused on the active participant. Studies that explore the peripheral participant’s experience often focus on remediation strategies to encourage peripheral users toward active and visible engagement. In her literature review of participation in online communities, Malinen (2015) found that “converting lurkers into active participants has been seen as a critical goal in creating vital online communities…” (p. 232).

Almost half of the studies included in my literature review of peripheral online participation addressed the issue of remediating the peripheral participant to become a poster (Lai & Chen, 2014; Nonnecke, et al., 2006; Preece, et al., 2004; Sun, et al., 2014; Walker, et al., 2010), with several employing the term de-lurking to describe this phenomenon (Lee, et al., 2006; Soroka & Rafaeli, 2006; Sun, et al., 2014; Yeow, et al., 2006). Walker, et al. acknowledge that peripheral participants represent the largest percentage of participants in online communities and rationalized conversion of peripheral participants to become active contributors as a means to ensure the survival of the online community (para 2). A variety of remediation strategies were cited across the literature, including incentivizing peripheral participants with financial or other rewards (Sun, et al., 2014) or with participation grades in academic settings (Walker, et al.,
2010). Remediating the user’s online interface was suggested (Sun, et al., 2014; Preece, et al., 2004) as the technology itself could be a barrier to engagement. A number of studies (Preece, et al., Lai & Chen, Nonnecke, et al., Sun, et al.) challenged community managers or moderators to improve their engagement with peripheral users to increase participation. The community manager role is not obvious in social networking sites and may be attributed to a community member or, in the case of an academic community, to faculty or an industry practitioner. Although a significant number of recent studies appealed for remediation to bring the peripheral participant to active participation, it was acknowledged that silence or peripherality remains a reality among users of online spaces. As a result, there is a call to enhance online community experiences (Preece, 2004, p. 203) to be “pleasant and interesting to be in even for silent participants” (Soroka & Rafaeli, para. 67).

Nonnecke, et al. (2006) noted that “lurking is not a deviant behaviour that needs correction” (p.19) and that encouraging de-lurking or, participation, need not be the end goal of peripheral participant research. The following section addresses those studies that legitimize the peripheral participant’s role in online communities.

3.5 Legitimization of Peripheral Participants

Recent studies acknowledge the potentially beneficial role of peripheral participants in online communities, while resisting the temptation to remediate the participants from the periphery. Lee et al. (2006), Yeow, et al. (2006) and Dennen (2008) are among the earliest of the scholars in my literature review to validate the role of the peripheral participant in online communities. In fact, each explicitly cited Lave and Wenger’s (1991) notion of the legitimate peripheral participant in their studies. Dennen called upon educators to “understand actions of all students, whether or not they are learning. Those who do not post messages may still be legitimate peripheral participants, and learning through their observations of others interactions” (p. 1626). In her later work researching an academic blogging community, Dennen (2014) further explored

In the following chapter (4), the literature review on Twitter in education will also address the issue of remediation focusing on studies that validate peripheral participation versus trying to necessarily motivate them into active engagement.
the role of both participants and peripheral participants. Dennen found that community newcomers were actually expected to observe and learn community norms before engaging (p. 357). Lee, et al. (2006) confirmed that peripheral participants log into accounts and track the contributions of others.

In more recent studies, Cranefield, et al. (2015) also supported the legitimacy of peripheral participants, citing Lave and Wenger (1991). Cranefield et al. suggest that the measure of participation needn’t be solely through visible online traces of engagement (p. 235) and that alternative online experiences are also legitimate methods of learning. Cranefield et al. argued that lurking is a complex behavior, citing Dennen (2008, p. 1627), who suggested that “pure lurking exists at one end of the participation continuum acknowledging that many online users move between reading and posting content.”

Arnold and Paulus (2010), Merry and Simon (2012) and Edelmann (2013) also validate the role of the peripheral participant in online communities, although they didn’t invoke Lave and Wenger’s theory in their respective studies. According to Edelmann, “lurking is the most popular online behavior, and given that lurkers may actually spend many hours lurking, they are well informed, familiar and empathize with others; even if they never visibly post or reply direction” (p. 646).

Preece, et al. (2004), Soroka and Rafaeli (2006) and Sun, et al. (2014) offered conditional support for the peripheral participant in an online community, suggesting that peripheral behavior can be tolerated within a large, active community but is more problematic when the community is smaller with limited interactions. Soroka and Rafaeli stress an alternative perspective in favour of selective peripheral participation, suggesting, “if the community is well developed and is full of participating users, any additional ‘noise’ can be destructive rather than constructive” (para. 7). Soroka and Rafaeli value the peripheral participant’s role of listening and observing the interaction of others.

Crawford (2009) framed the peripheral online experience as that of active listening, suggesting that “researching listening practices in relation to online media...[re-evaluates] how agency and subjectivity are expressed and developed through listening as much as through voice” (p. 533). Edelmann (2013) and Cranefield, et al. (2015) echo Crawford’s view that active listening offers a
more engaged perspective on the peripheral experience, further validating the peripheral participant role in an online community.

Some of the studies offered suggestions for improving the peripheral participant’s online experiences. Although some of Nonnecke, et al.’s (2006) suggestions, such as new member mentorship to nurture participation and enforce net etiquette (p. 18), may seem like a call to convert peripheral participants into becoming full participants, the researchers also suggested that supporting peripheral participants is a way of “improving satisfaction in online community spaces … [including] people’s information seeking and browsing needs without forcing people to publicly participate” (p. 18). Additional suggestions for improving the peripheral participants experience include developing “searchable archives, [providing] meaningful names for messages and threads, and [offering support to] identify quality participants whose contributions are considered by the community as appropriate and timely” (Nonnecke, et al., 2006, p. 18). Orienting new members to the group culture (Sun, et al., 2014, p. 120) and introducing community managers or moderators to facilitate two-way dialogue (Cranefield, et al., 2015, p. 235; Lai & Chen, 2014, p. 19) may also improve the overall online experience.

The latter two approaches may be less applicable in SNSs because they are public spaces without moderators or community managers; however, educators who engage students in SNS activities act as moderators and community managers, and they must strive to engage with and provide guidance to their students.

Edelmann cited studies that “reveal how the activities [peripheral participants] like to engage in may have benefits for the group, the community, and, in much wider terms, democracy and society” (p. 647). Rather than being subversive, peripheral participants find legitimacy within the online spaces they occupy.

3.6 Chapter Conclusion

Gaining greater understanding of the peripheral participant experience has been an acknowledged next step in online education research with the goal of improving students’ online learning experiences (Dennen, 2008, p. 1632; Walker, et al., 2010, para. 14; Yeow, Johnson, & Faraj, 2006, p. 14). Studying a “specific subset of communities [to] capture detailed user-specific data and activities in these communities, such that inactive membership might be included in our
lurking measure” (Yeow, et al., 2006, p. 14), is one approach that reflects my own investigation of PR students congregating around a hashtag-initiated PR community.

Moving forward, my thesis has adopted ‘peripheral participant’ as the term to describe ‘less than full’ engagement in social media. A peripheral participant will not have a regular or consistent online presence, meaning that they will rarely - if ever - share their identity and voice through posts, comments or other online content. Although it is not an entirely new term to describe non- or limited online engagement in an academic discourse, I see it as having particular relevance because of my application in this study of Lave and Wenger’s situated learning theory, where they deconstructed the legitimacy of peripheral participation. Furthermore, the implication of peripheral participation is less binary than ‘non-participation’, allowing a more nuanced understanding of the alternative online experience and is less pejorative than the term lurker.

My study aims to legitimize the role of the peripheral participant in online communities of practice by evolving beyond remediation strategies and accepting that visible online evidence is not the only measure of engagement (Arnold & Paulus, 2010; Cranefield, et al., 2015; Edelmann, 2013). Peripheral participants are legitimate and engaged learners in online communities, and they require teaching strategies that address their unique needs.

The next chapter addresses Twitter use in education research with a focus on studies that acknowledge the possibility for peripheral participation and that may have identified and tracked peripheral participants on a social networking site.

20 Implementing the term ‘peripheral participant’, rather than non-participant, throughout my study emerged from a conversation with Dr. Clare Brett, Associate Professor & Associate Chair, Graduate Studies, Department of Curriculum, Teaching and Learning, OISE, University of Toronto, April 2014.
Chapter 4
An Examination of Current Studies of Twitter in Education

4 Introduction

Twitter was launched relatively recently, in 2006, which explains why academic investigation of Twitter’s value in education is fairly thin, a point frequently stated in the Twitter-related educational literature (Junco, et al., 2010; Kassens-Noor, 2012; Lomicka & Lord, 2012; Ross, et al., 2011; Veletsianos, 2011). Gao, et al. (2012) compiled emerging research into the use of Twitter as an educational tool, with studies ranging from 2008 to 2011. Gao et al.’s criteria was that the research focused on microblogging in educational settings and were empirical studies, evaluating the role of microblogging in learning outcomes (p. 784). Most of the studies included in Gao, et al. acknowledged that the study of Twitter in an educational context was in its infancy. Gao, et al.’s paper formed the foundation for my own research, where I cross-referenced bibliographies from the Gao et al. studies and investigated articles most frequently, and recently, cited.

I restricted my research into the use of Twitter in education to empirical studies that specifically addressed Twitter, rather than social media sites in general or alternate microblogging platforms. The rationale for this restriction was that Twitter is the most popular microblogging site and one of the most popular social networking sites overall. Also, some of Twitter’s affordances are unique to the tool, making it more relevant to my research. These affordances included the fact that Twitter has a wide range of users, is not restricted to an academic discipline or area of study, and is a public site, accessible by all with Internet access. Most significantly, I used Twitter in my own classroom in the Humber PR social media course.

An additional consideration for selecting relevant studies was that they incorporated the use of Twitter in a higher education context. The rationale was that post-secondary students, faculty and PR practitioners are the stakeholders most likely to engage with Twitter in a manner that extends beyond the classroom and into professional practice. Engagement with professionals is a relevant aspect of Twitter use, which explains the focus of my research to better understand how Twitter is a mentorship tool for PR students. Furthermore, my research explores the impact peripheral participation has on the preparation of PR students for their professional practice.

I have organized the following analysis of the literature according to my study’s three key research questions.

4.1 RQ #1: What are the PR Students’ Perceptions of Twitter Use in PR Education?

Because of my interest in the use of Twitter in social media instruction within an applied PR degree and my focus on its role as a space of situated learning, I turned first to the literature for the interpretation of Twitter as a prospective community of practice.

Perceiving Twitter as a community of learning is an essential step in establishing Twitter as a place where situated learning, specifically discipline-specific mentorship, can take place. The literature is relatively consistent in its endorsement that Twitter is able to build a community of practice in higher education. Referencing Twitter’s affordances as a two-way, collaborative, networking tool, almost all studies explicitly stated that Twitter encouraged informal learning through engagement between students and faculty both within and beyond the classroom.

A number of studies explicitly referenced and frequently used a hashtag as the virtual manifestation of community (Costa, et al., 2008; Domizi, 2013; Ebner, et al., 2010; Elavsky, et al., 2011; Junco, et al., 2010; Lomicka & Lord, 2012; Lowe & Laffey, 2011; Rinaldo, et al., 2011; Ross, et al., 2011; Veletsianos, 2011; Wright, 2010). Conventionally used to aggregate tweets with a common topic or theme, Costa, et al. specified that the hashtag played a valuable
role in establishing community in the summer school course they studied, by “allow[ing] individuals to automatically co-construct a resourceful site where the active participation of a micro-network on a given topic is aggregated” (p. 2). Lowe and Laffey, in their study of Twitter use in a marketing course, pointed out that Twitter allows “two-way interaction…without social intrusion through the use of hashtags” (p. 185). The discrete, yet effective, hashtag is a community-shaping tool to facilitate engagement, yet it can also lead to complications.

According to Ross, et al., “an unofficial backchannel does not guarantee active participation,” (p. 223) because if the hashtag is not adequately promoted across the community of users, “inconsistencies” occur when additional hashtags are introduced, splintering the community’s discourse (p. 223). Ideally, an effectively established hashtag is a powerful Twitter tool for community building.

Twitter’s strong networking capability allows for its role in community building as illustrated in Pauschenwein and Sfiri’s (2009) study, where they tracked the online Twitter participation of 31 educators in a series of online courses. They found that “…microblogging environments can nourish participants’ needs for relatedness, personal growth and transcendence and suggest the creation of strong social bonds within groups of participants in e-learning settings” (p. 24). Veletsianos (2011) used a qualitative approach to study scholars’ networking practices on Twitter, selecting participants who were avid Twitter users with extensive networks of followers (more than 2,000 followers per participant). The study reported that the participants used Twitter networks “to make classroom activities and information available to others and to provide opportunities for students to interact with individuals outside of the classroom” (p. 343). Activities included sharing student work, connecting individuals across networks, providing student recommendations, sharing scholarly work, and connecting students with a professional community (p. 346). Identified as “complex and multifaceted” (p. 345), the networking activities targeted multiple audiences (p. 345), emphasizing the community of practice enabled by Twitter.

The Twitter-in-education literature focused primarily on relationships between students and faculty and often highlighted Twitter’s collaborative function. Kassens-Noor’s (2012) study set out to discuss “Twitter as an active, informal outside of class, peer to peer interaction tool that aids the in-class learning process” (p. 12). The study identified Twitter’s advantage of “foster[ing] the combined knowledge creation of a group better than individuals’ diaries and discussion because Twitter facilitates sharing of ideas beyond the classroom …that allows
readily available access at random times to continue such discussion” (p. 19). Lomicka and Lord (2012) echoed the value of peer-to-peer engagement on Twitter, stating that, in their study of U.S. and French-language learners, “Twitter did help the students in the U.S. to establish a close community amongst themselves. They were very well connected both in and out of class…” (p. 57). Wright’s (2010) study of a small community of eight student teachers who tweeted during their practicum found that, despite the size of their group, Twitter allowed them regular contact, which “reduced isolation and supported a sense of community” (p. 263).

The literature regularly stressed faculty’s role in encouraging online engagement. Dunlap and Lowenthal (2009b) highlighted that “contact between students and faculty in and outside of class is critical for student engagement because it influences student motivation and involvement” (p. 130). In their study on the use of Twitter in language learning, Lomicka and Lord (2012) found that the majority (84%) of participants agreed “interacting with the professor increased their motivation” (p. 54). Junco, et al.’s (2010) study showed a positive correlation between Twitter use and student engagement, acknowledging the fact that faculty played a more active role in student interaction as a result of being on Twitter, which may have been a factor in the findings (p. 129).

Current research on Twitter in education has focused on the institutional environment, which has incorporated Twitter as a supplementary tool to reinforce existing student-teacher and student-student relationships. My research inspiration comes from Twitter’s inherent publicness and its related networking capabilities, and how these affordances create a situated learning space for students. My focus is on how Twitter can foster online mentorship with multiple audiences, particularly discipline-specific professionals. In attempting to establish whether Twitter, as a community of practice, provides a situated learning opportunity with affordances to network beyond the stakeholders in the classroom, I separated out those studies that limit the community of practice solely to the classroom or to a temporary, closed group by potentially enacting privacy settings, or setting other limitations for access (Domizi, 2013; Ebner et al., 2010; Junco, et al., 2010; Kassens-Noor, 2012; Lomicka & Lord, 2012; Pauschenwein & Sfiri, 2009; Wright, 2010). Rather than labeling these studies as ‘private’, in an effort to position them in opposition to the publicness afforded by Twitter, I categorized these studies’ research protocols as ‘closed’.
A number of these studies identified classes or seminars of students that were intended to interact on a peer-to-peer or peer-to-faculty basis (Domizi, 2013; Junco, et al., 2010; Lomicka & Lord, 2012; Pauschenwein & Sfiri, 2009). There was no reference in the research protocol to engagement with stakeholders external to the classroom or course environment. However, there was also no mention of explicit efforts to limit external access to the tool through privacy settings, for example. In their study, Ebner et al. (2010) overtly stated that the goal of the research was to “create a microblogging learning environment with a minimum of extrinsic input or coercion” (p. 97), in an effort to gauge the potential for informal learning beyond the classroom (p. 92). Wright (2010) clearly identified using a “closed Twitter group [where] each participant followed all the others and tweeted to the nominated hashtag” (p. 261). Wright added that, upon concluding the research, the Twitter account was closed (p. 261). This was a confusing statement because each participant would have had a Twitter account and used a common hashtag. Nevertheless, Wright’s study clearly falls under the ‘closed’ category of protocols.

Kassens-Noor’s (2012) study of student online engagement used two groups of students in an urban planning course, with one group using Twitter and another keeping personal diaries. Kassens-Noor specifically stipulated, as a criterion of her research protocol, that “Twitter group members were not allowed to discuss their tweets outside the online forum” and that “the students were informed that the instructor would not interfere or add to the knowledge application and creation exercise” (p. 14). Because of my focus on situated learning with a mentorship component, these studies were not directly relevant to my work.

The following studies were labeled as ‘open’, in that their research protocols acknowledged the public nature of Twitter, and the potential for external stakeholder engagement with participants. Costa, et al. (2008) used Twitter “as a backchannel for communication in a Summer School program for PhD students” (p. 4) and studied Twitter’s effectiveness in supporting collaboration among participants and in developing an online presence for individual participants (p. 4). The study harnessed Twitter’s affordance as a networking tool in an effort to encourage online engagement, but study results focused on Twitter’s usefulness for real-time benefits.

Ross, et al. (2011) tracked four well-established hashtags associated with three academic conferences, using both quantitative and qualitative research. The conference tweets were categorized by identifying prominent users and the frequency of posts and reposts (p. 218), while a smaller study focused on individuals’ attitudes toward using Twitter as a backchannel (p. 219).
in an attempt to study Twitter usage and conventions. The public use of social media tools
offered the researchers unique access to content produced by a variety of external stakeholders
across space and time, but the study offered no indication of investigating any mentor-type
relations that may have existed among the stakeholders.

Grosseck and Holotescu (2012) studied scholars’ use of social media both as an in-class tool and
for the purpose of disseminating their own work. An online questionnaire reached participants
using a variety of social media platforms (p. 168). Findings of the study indicate that scholars
used social media for finding academic content, sharing research results, networking with peers
(p. 171) and “establishing relationships and conversations among teachers, students,
professionals, and researchers from different institutions” (p. 172). Nevertheless, the research did
not focus on these relationships.

Although neither Elavsky et al. (2011) nor Lowe and Laffey (2011) directly addressed the
possibility of engaging with external stakeholders outside of the classroom, both acknowledged
that their incorporation of Twitter into classroom activities benefitted the students by building
their online literacy skills. According to Elavsky, et al. “while the novelty factor certainly
stimulated interest initially, students soon began to perceive their developing Twitter fluency as a
skill-set with real-world implications for their personal and professional development” (p. 221).
Lowe and Laffey echoed these sentiments, reporting that participants in their study found that
one of the learning outcomes Twitter contributed to was “career skills in the use of new
technology” (p. 187). By studying marketing students, another finding was that Twitter “added
value to the student learning experience by bringing real-world examples into the classroom in a
timely fashion” (p. 188). Yet the study did not mention investigating the role of marketing
professionals in engaging students in their learning.

Despite Twitter’s networking and collaborative affordances and its role in building communities,
these studies focused on the interactions among the primary stakeholders within the classroom or
conference setting, and although there was the prospect of engaging with external stakeholders,
these studies did not explore these interactions.

Within the literature on Twitter in education, the following studies addressed interaction with
stakeholders outside of the classroom. Rinaldo, et al. (2011) investigated the role of Twitter in
teaching a marketing course, by surveying students on their perspectives on Twitter use in the
class and for career preparation (p. 196), pointing out the relevance of social media in the practice, as well as the teaching, of marketing. An apparent highlight of the course, which emerged from the research, was the online engagement with marketing practitioners that resulted after the professor posted comments related to specific companies. “These surprising consequences became valuable instructional examples of how marketing professionals use social media to monitor customer reactions” (p. 198). The fact that this was a ‘surprise’ is noteworthy, as the researchers had evidently not planned this level of situatedness in the learning. Arguably, they did not extensively or purposefully pursue external engagement in the research and this engagement might bear further probing.

Dunlap and Lowenthal’s (2009b) study addressed the use of Twitter in a communication technology course. They solicited qualitative student feedback regarding their experiences using Twitter in the course. Using Twitter was associated with adding value to the course communication and content development and with facilitating engagement with practicing professionals in the form of feedback on a blog. One student cited Twitter interaction with IT professionals who shared links to resources and contacts for research (p. 131). Dunlap and Lowenthal identified that the informal, free-flowing, just-in-time communication (p. 133) afforded by Twitter benefitted students through the “enculturation into the professional community of practice” (p. 132). These two studies addressed the interaction with external stakeholders, who are practicing practitioners in marketing or IT, but that was not the focus of the research. Although the studies acknowledged some engagement in terms of feedback and resource sharing, they did not specifically address the role of mentorship in the context of situated learning.

Veletsianos (2011) investigated the nature of academics’ use of Twitter for both teaching and research (p. 336), finding that they used the tool for both personal and professional purposes across “multiple audiences” (p. 345). Veletsianos addressed that academics shared not only their own work, but also the work of their students, “…indicat[ing] that participants capitalize on the affordances of the technology to bring together distributed expertise and introduce learners to individuals who are knowledgeable about a topic of study” (p. 345). Veletsianos identified the scholar’s new role as “an active network participant who connects students with his/her professional community” (p. 346). This connection between students and the professional community for participation and conversation demonstrated the possibility of Twitter as a
platform for situated learning. Veletsianos referenced Lave and Wenger’s (1991) work on situated learning, identifying that “this perspective views learning as the process of becoming a participant in the socio-cultural practice of scholarship through social interaction, development of shared (or non-shared) practices, and activities within social–cultural environments” (p. 337).

More recently, Hewett (2013) studied Twitter use in journalism education where, much like my own research, he explored students’ perceptions and use of Twitter. Hewett suggested that students need to be socialized into the journalism profession, which was previously “facilitated through work placement, teaching by past/current practitioners, [or] journalists as visiting speakers”. With the increased use of Twitter in journalism, Hewett found that engaging with journalists on Twitter can serve a similar function (p. 337-8). Hewett tracked student tweets for both frequency and content, and asked the students to complete an online survey. Hewett found that students “placed a high value on following journalists on Twitter” (p. 343) and they reported making industry contacts. Hewett highlighted the need for journalism students to not only learn to use Twitter as a professional tool, but as an educational tool for both teachers and learners.

Gagnon (2014) studied physical therapy students’ use of Twitter in a required professionalism course. The course featured a designated hashtag, as well as a more public tag, to encourage students to discuss the course with each other, and to “engage…in Twitter conversations with other health care professionals and/or consumers outside of the course” (p. 27). The study investigated Twitter engagement as well as student perceptions of Twitter use in their education. Most relevant to my study is Gagnon’s methodology, which allowed for the researchers to track the hashtags and identify external stakeholders. Gagnon found that health care providers, as well as faculty and students outside of the course, engaged on the site. The study results showed that students engaged effectively to complete their required Twitter assignments, and “students reported an overall increase in academic and professional social media use at the end of the course and at six months after the course ended” (p. 30). Gagnon reported that students found Twitter an effective resource for physical therapy-related content through their Twitter activities (p. 30).

Both Hewett’s (2013) and Gagnon’s (2014) studies addressed Twitter’s value as a community of practice for their respective academic disciplines and paved the way for my study’s exploration of external stakeholder engagement.
In response to Research Question #1, I could argue, using existing research, that Twitter has the potential to offer a platform for situated learning within a community of practice. The research gap my study fills is a greater understanding of the specific role Twitter plays in facilitating informal mentorship within a situated learning space. Public relations students, as a function of their imminent roles as communications professionals, would benefit from real-world online engagement with practicing professionals. By studying the degree of engagement, or lack of engagement, in an online space, I capture the nature of the relationship between PR students and their mentors. There exists a dearth of information within the current research regarding student engagement with external stakeholders, often seen as a ‘surprising’ by-product of other research. While more recent work tackles the mentorship role in an online community of practice, a deeper understanding of this role would contribute to Twitter-in-education discourse.

4.2 RQ #2: What are Peripherally-Participating PR Students’ Experiences Using Twitter in PR Education?

Before debating the value of the peripheral participant in an online space, it is necessary to define participation. According to the Oxford Canadian Dictionary, to participate means “to share or take part” (Barber, Fitzgerald, Howell, Pontisso, 2006). However, participation in an online space is more nuanced with several potential layers of participation. To participate in an online social media platform may mean an individual has simply created an account. Or it may mean that the individual is using their account to passively observe online posts or tweets by other users or friends they follow. Or participation may refer to the individual’s active engagement within the social media platform through contributions of their own posts or tweets.

A review of current Twitter-in-education literature suggests that the majority of studies valorize the definition of participation that expects students to exhibit an active engagement with the social media tool.

Based on the definition of participation as active engagement, I separated out those studies that did not provide an opportunity for some version of peripheral participation. Although peripheral participation is potentially non-engagement, in the case of this research, peripheral participation included study participants who have created a Twitter account and are passively observing the online activity of others. In some, but not all cases, I categorized studies that did not allow for the possibility of peripheral participation as having a mandatory participation protocol.
I used mandatory participation to describe research protocols that required study participants to engage on Twitter as a required function of their course work. Of the studies included in the literature review, all mandatory participants responded to the expectation by completing the requisite number of tweets, for example. As a result of the mandatory participation requirements, these studies did not account for the role of peripheral participants and were, therefore, not necessarily a good gauge of participation levels. After all, as Lomicka and Lord (2012) stated: “If Twitter had not been required from the students…it is difficult to say how many students would have actually used it for academic purposes” (p. 58). By making Twitter use mandatory for the students, it was difficult to assess how authentically they were engaged. Ebner, et al. (2010) found that “[t]here was no evidence of more sophisticated engagement with the medium…students appeared to be playing the game rather than using the tool for their own purpose” (p. 97). Junco, et al. (2010) noted an increase in Twitter activity when assignments to post content were due (p.124).

An alternative perspective comes from Junco and Heibergert (2012), whose study of Twitter use in education found that student engagement increased when Twitter was required for a course and if faculty committed to regularly engage on the platform. The study compared results between different post-secondary courses, where faculty mandated one section to use Twitter, and gave the other section the option to use Twitter. Findings from the group that voluntarily used Twitter and had limited faculty interaction did not indicate the same increase in engagement. Junco and Heibergert also found that how instructors used Twitter influenced engagement, listing “engage[ment] with students by answering questions, encouraging discussions and providing support…as important factors” (p. 11).

Further supporting the notion that faculty should teach Twitter in the class, Prestridge (2014) conducted a qualitative study of students’ use of Twitter as a voluntary learning tool, with the intention of creating a learning community with each other and their faculty. Although her study did not focus on peripheral participants, nor did it connect students to external information sources, Prestridge analyzed Twitter content to determine the nature of the community interactions. This analysis contributed to the Twitter-in-education discourse by addressing influences on learning. Prestridge found a lack of learner-learner interaction on Twitter, supported by the fact that “at no time during the 13-week course did a student answer a question tweeted by another student” (p. 107). Instead, Prestridge determined that “[t]he major type of
interaction between participants in this context was found to be learner-instructor interaction, whereby a student would initiate dialogue by tweeting a question and the lecturer would respond” (p. 107). Furthermore, Prestridge found students did not recognize that the tweets during the lectures provided an account of the main ideas plus a discourse about the content. This represents an emergent phase of understanding of the functionality of Twitter and a lack of understanding of Twitter as a learning tool (p. 110).

Among her conclusions, Prestridge suggested adding an assessment component to the course to encourage greater student engagement (p. 112).

In their study, Bledsoe, Harmeyer and Wu (2014) focused on the mandated use of hashtags in collaborative learning among graduate students in an online course. Findings suggested that the hashtag was a potentially positive non-traditional learning method which acted as a social connector and aided in engagement among the various study groups. Some groups criticized the absence of face-to-face interaction and felt that the hashtag “did not adequately reflect valid human engagement” (p. 80). Bledsoe, et al. offered recommendations to improve the use of Twitter as a learning tool, which included the need for faculty to educate students on the effective use of hashtags in learning, developing student literacies to navigate and filter the “staggering amount of information” (p. 81) available online, and to avoid inappropriate comments. The study focused on the need to remediate engagement to increase student participation. Although not focused on peripheral participation, the relevance of each of these studies to my thesis is the view that if faculty can teach Twitter use, student engagement may increase.

I categorized studies that offered students the option to not participate as having a voluntary participation protocol. These studies, generally, looked at the use of Twitter in education from the perspective of the participants and the benefits associated with participation.

Grosseck and Holotescu (2012) and Veletsianos (2011) studied participants who were already engaged with Twitter. Grosseck and Holotescu conducted a study of Romanian academic stakeholders’ use of social media. They sent a questionnaire to faculty, administrators and graduate students, probing how faculty members used social media in teaching, research, and professional development. Grosseck and Holotescu cited Nielsen’s 90:9:1 engagement rule (p. 168), which holds that 90% of users are passive lurkers, and asked if “Romanian educational
actors follow this rule” (p. 169). Their assessment of social media use showed their participants engaged at a higher rate, with 31% of respondents creating online content. However, the researchers also conceded that they had conducted the study among academics already engaging with social media, a group more likely predisposed to content creation. Ross et al. (2011) analyzed actual tweets posted during an academic conference, so peripheral participants were disregarded because it would have been impossible to identify prospective conference attendees and then isolate participants. Both Pauschenwein and Sfiri (2009), and Dunlap and Lowenthal’s (2009b) studies investigated students within their courses whom faculty invited, but did not require, to join them on Twitter, encouraging them to anonymize their online presence. With a focus on investigating the benefits of participation, they made no reference to studying the peripheral participants who did exist.

The following studies were seen to address the existence of peripheral participants because they investigated the value of Twitter use in an educational context, and they made affordances in their research protocols to account for peripheral participants.

Lowe and Laffey (2011) conducted a study in a marketing course where students volunteered to follow course tweets. Importantly, it was the expectation for students to follow versus engage. The study design enabled the researchers to isolate peripheral followers through a qualitative follow up on students’ thoughts about Twitter use in an educational context. Although 65% of the students voluntarily followed the course tweets, “interactivity among students was limited and few tweeted back” (p. 187). In fact, one of the students commented “it’s kind of normal a lecturer tweeting to you but you would be crossing a line tweeting back” (Lowe & Laffey, 2011, p. 186). Barriers to use, garnered from Lowe and Laffey’s initial qualitative focus group, were the following: failing to establish Twitter’s relevance to the course; popularity as a social versus educational networking tool; the additional work associated with learning and using a new tool; and “the reluctance to tweet back,” (p. 187). Lowe and Laffey also found that because most students chose to identify themselves online, the lack of anonymity on Twitter might have acted as a barrier to participation (p. 187). They conducted a quantitative survey using the Technology Acceptance Model tool, which “ascertains key factors influencing technology usage” (p. 188). The results suggested “that non-adopters need to be convinced about Twitter’s usefulness in future courses rather than educated about how to use Twitter” (p. 188). Lowe and Laffey suggested that future use of Twitter in the classroom might include “greater communication with
Rinaldo, et al. (2011) conducted a series of three studies using Twitter with their marketing students, where the researchers “required [students] to set up an account on Twitter and then ‘follow’ the professor” (p. 196). The goal of the research was to measure student involvement with Twitter for the purpose of enhancing course learning and career preparation (p. 196). The researchers conducted a self-reported survey on Twitter use and perception among student participants and coded the results based on high and low Twitter use. They also conducted semi-structured focus groups. The findings indicated “students who said they used Twitter indicated that use aided a high level of involvement in the course, [including] overall satisfaction with the course, career preparation and traditional educational goals” (p. 199). According to Rinaldo, et. al., among the reasons low-level users or peripheral participants cited for contributing to their non- or limited participation on Twitter were the following: lack of Twitter literacy (p. 201); lack of mobile access to Twitter (p. 202); Twitter was only a supplemental course tool (p. 202); and course-related Twitter use was not a factor in their course grade (p. 202). Rinaldo et al.’s study, which “revealed clear distinctions between those students who used Twitter and those who did not” (p. 201), was based on engagement with faculty-generated tweets, and relied on self-reported data to assess usage levels and perceived value of engagement. Rinaldo, et al. concluded that “students need to engage to reap the benefits of this learning model” (p. 201), stressing that those students who engaged on Twitter benefitted from the technology (p. 201), and that further research was needed to find ways to encourage peripheral participants to become more involved with the tool (p. 201).

In a more recent study, Lin, et al. (2013) conducted a qualitative examination of university-level classroom Twitter use. Although not overtly discussing peripherality, part of the protocol was to track tweets from among the class to determine how students used the tool for learning, with particular attention to its collaborative potential. Lin et al. categorized students as non-tweeters, users with less than 10 tweets during the tracking period, and the remaining users. The results of Lin, et al.’s (2013) study showed that the “students who used Twitter tended to be most interested in it for information sharing…[f]ew tweets were answered even when requests were
made for a response…collaboration did not occur when usage was left to the students” (p. 43). Nevertheless, one student found that Twitter allowed for a more personal experience with peers and faculty. A significant observation in the study was that active participants called for mandated assignments to encourage non- or light users to participate, “making it a more engaging and fun experience” (p. 43). Lin, et al. made a list of faculty recommendations to increase engagement, with the main point being that the faculty role is to “scaffold” (p. 43) the student learning. Despite the fact that Lin, et al.’s study did not focus on the peripheral participants, their findings offered some insight into the effect non-Twitter engagement has on the classroom learning experience.

Lin, et al. (2013), Lowe and Laffey (2011), and Rinaldo et al. (2011) share the belief that a variety of barriers are standing in the way of peripheral participants becoming active participants on Twitter. The perspective shared by these studies does not overtly acknowledge the legitimacy of the peripheral positioning in a community of practice as identified by Lave and Wenger (1991) and, rather, seeks to remediate the peripheral participant.

The following studies embraced protocols that were able to identify the peripheral participants in the population. Costa, et al. (2008) introduced the use of Twitter as a backchannel tool at a Summer School for PhD students involved in research groups in the area of professional learning and training (p. 4). To aggregate content during the Summer School, the researchers introduced a hashtag. The study analyzed all tweets generated during the Summer School and also conducted a survey asking for student feedback. The survey probed whether attendees had a Twitter account and, if not, what reasons they had for not signing up during Summer School. Findings from Costa, et al.’s, survey indicated that of the 66 participants in the Summer School sessions, 10 signed up for Twitter during the school, six had an existing account, and 50 chose to read Twitter messages posted by other attendees (p. 7). “Some respondents … alluded to the fact they decided to adopt a more passive approach as they preferred to take part in the microblogging activity as observers and not engage with it” (p. 7). Costa, et al. concluded that “microblogging does not present us with a ubiquitous learning strategy” (p. 8), perhaps conceding that peripheral participants are alternative learners with observation considered a legitimate learning method.

Elavsky, et al. (2011) asked the 300 students in their college communications course to create a Twitter account and submit their Twitter handle to the course instructor. The purpose of the
study was to review the class posts to “explore how micro-blogging could uniquely facilitate the production of a more integrated and engaging learning space” (p. 221). Elavsky, et al., however, admitted to not accounting for those who “might have posted to the class Twitter feed without registering their ID, by using a second ID or were not registered in the class at all (as the class feed was ultimately a public forum” (p. 221). Elavsky, et al.’s findings suggested that based on the 225 unique users in the class, 74 per cent either never tweeted or posted only one or two tweets (p. 222). Elavsky et.al. state

[the Twitter feed itself fails as a dataset to account for the ‘lurkers’ who, through their in-class or office hour input, clearly were aware of the Twitter trail as an orienting formation by which they developed their thinking about course ideas, despite fact that they were not actively contributing to it (p. 225).

While Elavsky et al. did not intentionally study peripheral participants, their study results suggest that the majority of unique users in their class were engaged only peripherally in the Twitter feed.

Reed (2013) conducted a study on students’ perceptions of the use of Twitter in informal higher education learning, with a focus on the development of personal learning environments (PLE). The voluntary online survey revealed that students responded positively to the use of Twitter in education, with specific reference to the speed and ease of communication in a public forum (p. 14). Based on the positive student feedback to the use of Twitter in education, Reed recommended remediating all students’ digital literacy skills in an effort to increase Twitter engagement for informal learning. Although the study points toward remediation to increase engagement, Reed acknowledged the existence of peripheral participants by tracking online Twitter activity. The study found that more students accessed the tutor-posted links than there were active Twitter users (p.15), which the study reported as “reinforce[ing] the notion that students can be inactive in the Twitter environment, but can ‘lurk’ and still benefit from social influences on the Web)” (p.15). Reed’s findings support the notion that online lurking can be beneficial to learning, particularly if it is a voluntary activity in a PLE, therefore legitimizing the role of a peripheral participant. Nevertheless, the study recommends training students on the use of the tools to increase active engagement, and asks whether formalizing the use of social networking tools may cause students to disengage.
More recently, Soluk and Buddle (2015) conducted a study of Twitter effects on learning in a field biology course at a Canadian university, using group-based research projects as the field of study. Similar to Lin, et al. (2013), the study did not focus on peripheral participants. But, through the research protocol, it emerged that there was a Twitter hierarchy among group members, with “one group member who was often responsible for the majority of tweets and other group members’ involvement ranged from non-participation to active involvement with Twitter” (p. 7). Those not involved in tweeting “indicated that they participated through idea sharing and research” (p.7).

Soluk and Buddle (2015) acknowledged that “there were different levels of Twitter use” (p. 7), but found that the group format addressed the variability of participation without penalizing peripheral Twitter users. The authors rationalized that the additional “benefit of the group approach was to minimize security concerns with the public tool, by developing a group-based Twitter handle” (p. 8).

The study contributes to the discourse around Twitter influence on learning by proposing an innovative approach that valorized the role of the peripheral participant, by recognizing their ambient contributions to a group-learning environment. However, the group-based approach, where participants employed aliases and group handles, tempers the value of situated learning in the context of mentorship and networking.


The gap in the existing literature is the need for further evidence to address the legitimacy of the peripheral participant within an online situated learning space, as defined in Lave and Wenger’s (1991) situated learning theory. Exploring the role of the legitimate peripheral participant in an online space may be challenging because of their potential ‘invisibility’, but a number of studies have used protocols that could identify peripheral participants, thereby gaining insight into their role(s) in an online learning context. However, a number of the studies focused on remediating peripheral participants towards full participation, and not exploring the legitimacy of the peripheral positioning.
4.3 RQ#3: In What Ways Does the Use of Twitter Influence the Learning of Peripherally-Participating PR Students?

Defined by its founders as an information-sharing tool, Twitter’s value is in the news and information that can be accessed when a Twitter account holder builds and follows a robust network of other Twitter accounts. I propose that if Twitter is an information-sharing platform, participation through active tweeting is not the only measure of engagement. It is possible that ‘following’ information sharers makes Twitter a valuable educational tool. Research Question #3 probes the influence Twitter can have on the PR learning of peripherally-participating students.

To address Research Question #3, this literature review draws on the studies that acknowledge peripheral participants in Twitter use in education, as discussed earlier in the paper under Research Question #2 and on several additional studies that reflect on Twitter’s influence on learning, but do not necessarily address peripheral participants. The influences include instructor credibility, peers, the transition from social to academic use, and the demographic effect.

4.3.1 Remediation in academic Twitter use

Lowe and Laffey (2011) and Rinaldo, et al.’s (2011) study results stressed that the barriers that existed for peripheral participants prevented them from enjoying the benefits of the technology. Rinaldo, et al. clearly stated that peripheral participants needed encouragement to use the technology (p. 201) and Lowe and Laffey stated that it is necessary to convince peripheral participants of Twitter’s usefulness (p. 188), suggesting that peripheral participants gained no value from following tweets. By focusing on remediating participants to become fully-engaged in a Twitter-enabled space, these studies imply that full engagement is a requirement for learning.

4.3.2 Observation in academic Twitter use

Costa, et al. (2008) acknowledged that some of the respondents to their survey shared that they took a passive approach to their Twitter use, observing rather than engaging with the tool (p. 7). From this, the authors’ concluded that active engagement on Twitter was not a ubiquitous learning strategy (p. 8) and that the observational approach was also a legitimate learning approach.
In Elavsky, et al.’s (2011) study, the authors speculated that despite the fact that they did not account for the lurkers’ behaviour, the results confirmed that students may develop their own thinking in a course by observing how others share course ideas, without ever engaging directly on Twitter themselves (p. 225). Although Elavsky et al. do not directly address Lave and Wenger’s (1991) notion of legitimate peripheral participation, the spirit of the concept persists in this study by acknowledging the legitimacy of the observational role.

Ebner, et al.’s (2010) study did not directly address Research Questions #1 and #2 because I identified it as using a closed research protocol with no integration of external stakeholders. The paper bears consideration, however, in responding to Research Question #3. Ebner et al.’s study examines the role of microblogging in education by tracking the posts of university students for a period of six weeks. Ebner mandated students to contribute to the microblogging platform (not specified as Twitter), and categorized the posts by a number of criteria. Although Ebner et al. made no direct mention of the role of peripheral participants, they concluded that informal learning was taking place among the study participants because of the constant flow of information taking place. Described as “murmuring in the background” (p. 98), Ebner, et al. described the engagement between the students and teachers in the study as “living in a continuous partial presence with different roles” (p. 98), and contributing to informal learning. Ebner et al. explain that

\[i\]t is not the transfer of information or status messages that are crucial factors, but rather the opportunity to be a part of someone else’s process by reading, commenting, discussing, or simply enhancing it. Microblogging can help users to be part of a murmuring community that is working on a specific problem without any restrictions of time or place (p. 98).

Although Ebner, et al. do not directly relate the concept of ‘murmuring in the background’ to Lave and Wenger’s notion of legitimate peripheral participation, they do reference Wenger’s (1998) work regarding communities of practice in their paper.

4.3.3 Influence of Instructor Credibility on Twitter Use in Education

A more recently evolved area of Twitter-in-education research explored the effect of educational Twitter posts on students’ perceptions of instructor credibility and the impact on their learning. Johnson (2011) conducted a study of Twitter use in education, focusing on the peer to faculty interaction, probing for students’ perceptions of instructor credibility based on the distinctions
between social and academic tweets. Johnson found that a significant difference existed between the research groups that saw only social tweets from the instructor versus scholarly tweets, “revealing that personal information can increase a teachers’ perceived credibility” (p. 31). The value of the finding was that the increase in online credibility might spill over into the classroom with “increased student motivation, a greater interest in the material presented in the classroom, and a greater willingness to learn from the instructor” (p. 31). DeGroot, et al. (2015) investigated further, with conflicting findings, where their quantitative results found “the instructor’s profile that featured posts about education and professional resources was perceived to be the most credible” (p. 13). Qualitative results in DeGroot, et al.’s study were oppositional, with some students supporting instructors’ use of Twitter, suggesting that “it is easier to see them as a human being rather than just someone who gives us information” (p. 14), while others felt that the “student/teacher relationship should be left inside of school” (p. 14). Evans (2014) measured the experience and attitudes of business and management students through a survey with findings more consistent with Johnson’s work. Evans found “that the use of scholarly tweets has no impact on students’ perceptions of their relationship with their tutor” (p. 913). Evans suggested “tutors whose aim is to improve credibility may therefore need to focus on social tweets” (p. 913). Evans also found Twitter use increased overall student engagement, but that engagement was not necessarily academic. “Students who used Twitter more were more likely to indicate that they engaged in university-associated activities including organizing their social lives, sharing personal information and posting their thoughts” (p. 913). Although all three studies used closed protocols, and did not focus on peripherality, they contribute to the current thesis by illuminating faculty’s role in online engagement as a key area of influence on Twitter learning and offline engagement both within and outside of the classroom.

4.3.4 Influence of peers in academic Twitter use

A recent study by Ferguson and Wheat (2015) focused on online peer mentoring using a hashtag to build an international community of participants. Although the study did not address the issue of peripheral participation, it is relevant to this literature review in its findings regarding the experiences of early career researchers’ engagement and peer-mentoring on a Twitter hashtag, #ECRchat. The public nature of the community and the resulting mentorship activities led to support and knowledge sharing, and even “trading tips and tricks…to succeed in an aspect of academic working life” (p. 9). However, participants were also aware that they were performing
their professional identities in a public space, which created some barriers to participation, although they did not address the topic of peripheral participation. The findings suggested that participants experienced a “fear of misinterpretation, misrepresentation, confrontation and intellectual property violation.” In addition, findings suggested that hiring committees might perceive social media participation as “risky” (p. 10). The study found that participants took some of their mentoring chats outside of the public hashtag forum. Although the study does not directly address the Twitter use in education focus of this thesis, the power dynamics and resulting challenges experienced through mentorship in a public forum were relevant to my study.

4.3.5 Influence of transitioning from social to academic Twitter use

Although not focused on the concept of peripheral participation directly, Knight and Kay’s (2016) recent study compared academics’ and students’ use of Twitter in an educational context, with data acquired through a survey at a post-secondary institution in the U.K. Although the study confirmed that the main priority of Twitter use was passive information seeking for both groups, the study also found differences in usage patterns. Students were more passive in their use of social media than academics (p. 148), and when they did interact on Twitter it was principally for social activities related to people with whom they had pre-existing relationships. When connecting with a wider community on Twitter, students engaged as readers, followers or as retweeters (p. 148). Academics used Twitter more actively for sharing information, organizing events and networking with scholars across a wider community (p. 148). The study found that students had limited engagement with Twitter for academic purposes, specifically defined as engaging with a tutor or in addressing course-related activities (p. 148). Knight and Kay suggested that the low engagement rate with Twitter for academic purposes might be related to the public nature of the tool, or because academics did not use Twitter within their teaching sessions. Knight and Kay offered the following explanation: “Without the encouragement from their tutors to engage in this activity during teaching sessions, particularly if tutors typically discourage usage of SNS within contact hours, students would be unlikely to be motivated to engage in such behavior” (p. 150). Academics confined their use of Twitter in an academic context to advertising university activities, advertising their own research activities and promoting departmental activities. No academics reported using Twitter in the context of teaching, which Knight and Kay suggested would be a disconnect between student expectations
of Twitter use and faculty’s actual Twitter use. Although Knight and Kaye’s study did not address peripheral participation specifically, and they based the findings on self-reported data from the students and faculty, the study’s findings related directly to Research Question #3, addressing aspects of Twitter use that might influence learning in an academic setting.

4.3.6 Influence of demographics on academic Twitter use

My study’s focus on peripheral participants is essentially a study of the ‘other’ participants on SNSs, those who remain invisible and voiceless. Despite the fact that these individuals represent the majority of SNS account holders, they remain an under-researched group amid a participatory culture discourse. The investigation of the silent audience may reveal that they are either an enabled group, or a marginalized one (Wenger, 1998, p. 166), forced to the periphery for a variety of reasons. An exploration of peripheral participant demographics contributes to the Twitter in education discourse, particularly with respect to addressing Research Question #3, which probes for Twitter’s influence on the learning of peripherally-participating PR students.

While current empirical studies on Twitter use in education invoke methodologies that gather a variety of demographic information, few studies focus on the demographic data in their research. Of the 29 studies included in the literature review, a total of 17 gathered demographic information about their study sample (Costa, et al., 2008; DeGroot, et al., 2015; Domizi, 2013; Ebner, et al., 2010; Evans, 2014; Gagnon, 2014; Grosseck & Holotescu, 2012; Johnson, 2011; Junco, et al., 2010; Junco & Heiberger, 2012; Kassens-Noor, 2012; Knight & Kaye, 2016; Lomicka & Lord, 2012; Reed, 2013; Rinaldo, et al., 2011; Veletsianos, 2011; Wright, 2010).

The principal area of inquiry was age (DeGroot, et al., 2015; Domizi, 2013; Junco & Heiberger, 2012; Kassens-Noor, 2012; Knight & Kaye, 2016; Reed, 2013; Rinaldo, et al., 2011). These studies all provided age ranges and mean averages.

The second most common area of demographic inquiry was gender (Costa, et al., 2008; Domizi, 2013; Evans, 2014; Gagnon, 2014; Johnson, 2011; Lomicka & Lord, 2012; Reed, 2013; Rinaldo, et al., 2011; Wright, 2010). While studies reported on a female/male categorization, which totaled 100% of their study sample, two studies only reported on the female percentage (DeGroot, et al., 2015; Evans, 2014). Johnson (2011) reported female/male statistics which amounted to less than 100% of the study sample, but offered no explanation for the shortfall. In
is unclear if Johnson’s research instrument offered an alternative to the male/female option. Overall, throughout the Twitter in education studies included in this thesis, gender was represented as a binary (F/M) option.

The third most common area of inquiry was class rank, distinguishing students’ year and level of study (DeGroot, et al., 2015; Domizi, 2013; Gagnon, 2014; Junco & Heibergert, 2012; Kassens-Noor, 2012; Knight & Kaye, 2016).

Race/ethnicity was the fourth most common areas of demographic inquiry (DeGroot, et al., 2015; Gagnon, 2014; Junco, et al., 2010; Junco & Heibergert, 2012). Categories for race and ethnicity varied among the four studies that tracked this information, and included Caucasian, African American, Latino, Asian, Native American (Junco & Heibergert, 2012). DeGroot, et al.’s (2015) study included more specific categories such as multiracial/other and American Indian/Alaskan native.

Other areas of demographic inquiry were level of parental education (Junco, et al., 2010; Junco & Heibergert, 2012); stage and area of academic career (Costa et al., 2008; Johnson, 2011), GPA (Kassens-Noor, 2012) and preferred computer device used (Reed, 2013).

The demographic information was only referenced in the findings of four studies. Reed (2013) investigated the differences between age groups in time spent on Twitter. Knight and Kaye (2016) compared undergraduate and post-graduate students, and staff’s usage of Twitter in academic contexts. In their two studies Johnson (2011) and Costa, et al. (2008) found no significant impact of age, gender or education background in their study so that these demographic factors were not accounted for in their findings.

While the current literature on Twitter use in education rarely focuses on diversity issues, studies on the diversity of Twitter use do exist. For example, Hargittai & Litt (2011) conducted a study of first-year students at a U.S. university campus, which was selected for the “diverse composition of its student body” (p. 829). Demographic categories of study included gender, age, race/ethnicity, and parents’ highest level of education. Hargittai and Litt’s study addresses demographic diversity among Twitter users and their topics of interest. The study does not address the use of Twitter in education or the experience of peripheral participants.
There is an obvious gap in the Twitter in education research related to demographic diversity of Twitter users, and the relationship between demographics and peripheral participants.

4.3.7 Section Summary

This section of the literature review explored ways in which Twitter use influences learning among peripheral participants, both positively and negatively. Studies that focused on remediating the peripheral user and those recognizing the challenges of transitioning from social to academic Twitter use, illustrated the potential barriers for online participation. Studies that explored the observational role of the peripheral participant, and the influence of instructor credibility and peer relationships saw the positive influence of Twitter on learning. The influence of demographics on the peripheral participant’s use of Twitter is yet to be determined. Overall, the current literature demonstrates that, in the context of Twitter use in education, the peripheral participant is not a ubiquitously valued or legitimized member of the online community.

4.4 Chapter Conclusion

The gap in the current literature is a focused look at peripheral participants’ use of Twitter for situated PR learning. Current research acknowledges the value of learning through observation (Elavsky, et al., 2011) and by murmuring in the background (Ebner, et al., 2010), and recognizes that faculty (DeGroot, et al., 2015; Evans, 2015; Johnson, 2011; Knight & Kay, 2016) and external stakeholders (Ferguson & Wheat, 2015) influence the Twitter-enabled learning experience. More research is needed to better understand how these and additional influences such as participant demographics, impact peripherally-participating students’ engagement with Twitter as a situated learning space for mentorship.

In addition to further investigation into the three research questions outlined in the literature review, there exists a need for scholarship into the use of Twitter in specific academic disciplines. A number of academics studying the use of social media in education (Gagnon, 2014; Gao, et al., 2012; Hewett, 2013; Junco, et al., 2010; Kassens-Noor, 2012; Kennedy, et al.,
2010; Veletsianos, 2011) have stated the need to investigate the use of SNS in specific academic disciplines. Although there has been research in the fields of marketing, medicine, IT, language learning, journalism, science, project and sports management, many of these studies are not necessarily empirical. Dunlap and Lowenthal (2009b) mentioned the use of Twitter in public relations, but they were referencing a blog post by a PR practitioner (p. 131). Jacquemin, et al. (2014) conducted a study of Twitter use in a university biology course, and in one of their concluding statements surmised, “marketing and communications students and faculty may more readily include social media into coursework relative to biology students and faculty because of its more prominent role” (p. 25). Most studies involved a generic student population. For this reason, exploring the use of Twitter within specific disciplines of study illuminates unique opportunities and challenges associated with the tool. This would also equip educators with an effective pedagogical approach to target the needs of peripheral participants with relevant content and experiential learning opportunities that span both online and offline spaces.

My research addresses the current gaps in peripheral online participation research and in academic discipline specialization with respect to Twitter use in situated learning. And, while most studies explore active participation on Twitter as a mandated classroom learning tool, my study focuses on Twitter’s role in building a community of practice to facilitate situated learning in the PR field. #Humberpr is an informal, voluntary learning space that develops PR students’ professional skills through online mentorship and modelling.

The following methodology chapter outlines the various phases of study and how they addressed each research question to better understand the peripherally-participating PR students’ experiences with Twitter in education.
Chapter 5
Methodology

5 Introduction

Interrogating Twitter’s role as an online situated learning space for public relations students, with a focus on the peripheral participant, is significant for educators, employers and students alike. Intentionally positioning Twitter as a community of practice that connects PR students with peers, faculty and external stakeholders in mentorship roles has added a new dimension to PR education. The lack of research exploring peripherality within the broader context of SNSs, due to their “complex socio-technical contexts” (Debatin, et al., 2009, p. 102; Tufecki, 2008, p. 33), adds to the significance of this research. In addition, selecting a study population of public relations students from one community college responds to the call for research in discipline-specific Twitter use. The hashtag, #Humberpr, is a key component of the research study, offering the opportunity for situated learning to take place by being a potential space of engagement between PR students, faculty, alumni and industry practitioners, and by being a traceable means of identifying participants and their usage frequencies. The use of #Humberpr is particularly important in the context of students whose non-existent or limited presence in the space aids in identifying them as peripheral participants. By differentiating between Twitter participants and peripheral participants, it is an attempt to “elaborate, enhance, deepen and broaden” (Greene, 2007, p. 101) our understanding of the role Twitter plays in an educational environment, particularly one that is primarily situated within a ‘public’ PR context.

The study draws on elements from Lowe and Laffey’s (2011) study that evaluated the learning benefits and barriers of using Twitter in the marketing classroom. In their study, Lowe and Laffey initially used semi-structured exploratory interviews to inform their survey, which they administered to their marketing students. The first 47 questions of the survey assessed the degree to which Twitter enhanced learning outcomes in a marketing course, and Lowe and Laffey administered the survey only to students who were actively following the course Twitter feed. Of the initial 47 survey questions, the researchers drew 34 from a study by Kaplan (as cited in Lowe & Laffey, 2011, p. 187) and developed the remaining 12 questions themselves. The second part of the survey, the remaining 39 questions, followed the TAM (technology acceptance model). Fred Davis developed TAM in 1989 as a “model for predicting users’ intentions to accept new
technology”. TAM’s predictions are based on two key factors: perceived usefulness of the technology and perceived ease of use (Lowe et al., 2013, p. 10-11). Lowe and Laffey (2011) administered the TAM survey to followers and non-followers alike in a study of Twitter use in marketing education (p. 9). Additional analysis of the TAM findings from this research were detailed in a subsequent study by Lowe, Ward, Winzar, Laffey and Collier (2013). In total, 65 per cent of marketing students followed the marketing course Twitter feed, but Lowe and Laffey (2011) found limited interaction among students, including few student-generated tweets (p. 187). Overall, their findings suggested that although Twitter was not a core part of the course, the students found it to be a valuable teaching tool that provided real-world examples in a timely way. According to Lowe and Laffey, “Twitter’s main benefit is that it cuts through clutter and gains attention with short ‘bursts’ of information that followers can independently investigate” (p. 188). Their research also found that those students who were not engaged with Twitter needed to be convinced of its value rather than being taught how to use it in future courses (p. 188).

Further, Lowe and Laffey (2011) suggested a number of directions for future research, including the call “to better understand barriers to the use of social media such as Twitter by more comprehensively examining non-users and their reasons for non-use” (p.189), and it was this call that served as inspiration for my study.

Although an influence on my study, there are a number of differences between my study and Lowe and Laffey’s (2011). First, my study relates to public relations versus Lowe and Laffey’s marketing focus. Second, my study explores the role of the peripheral participant in Twitter education whereas Lowe and Laffey’s dominant interest was on active participants, particularly in the first part of the study. Lowe and Laffey’s approach suggests an interest in remediating non-users into active users of Twitter, as evidenced by their interview protocol in the first phase of their research, asking a specific set of interview questions related to the benefits of Twitter use to active followers and a second set of questions related to Twitter impediments targeted at non-followers. My study of peripherality avoids a binary categorization of players, recognizing the possible spectrum of Twitter engagement levels and the legitimacy of the peripheral participant. Most significantly, Lowe and Laffey, in both their 2011 paper and in the subsequent 2013 paper based on the same research, employed predictive modelling to determine future use of Twitter in education, which took a different direction from my study. Given the differences between the
two research objectives, the adoption of elements of the Lowe and Laffey’s study acknowledged work currently done in this area, and built upon an effective methodological tool, rather than engage in a direct comparison with their work.

The mixed-methods approach in this study used five distinct phases to delve into the experiences and perceptions of peripheral participants who are exposed to the use of Twitter in their PR education.

Tracking #Humberpr for a semester captured students’ participation on Twitter, and I compared that participation to actual PR students registered in the program, to identify peripheral participants. The subsequent survey of the PR student population explored more specific self-reported experiences and perceptions of Twitter use in an educational context. Deeper exploration into peripheral participants’ Twitter experiences in PR education took place through a focus group and one-on-one interviews. The final phase captured actual Twitter use from among the interviewees.

The following methodology chapter includes an overview of the methodology; a description of the study participants; an overview of the data collection tools including rationale and procedures for each; the proposed approach for data analysis; and logistics.

5.1 Research Methodology

The principal goal of the research study was to explore PR students’ experiences with Twitter, focusing on the peripheral users, in order to develop a stronger institutional understanding of the role of social networking tools in college education.

The objective of the study is to explore the role of the peripheral participant in an online educational space, where I have identified a dearth of research.

I identified the purpose of the research study to be complementarity, which “seeks broader, deeper and more comprehensive social understandings by using methods that tap into different facets or dimensions of the same complex phenomenon” (Greene, 2007, p. 101). A survey focused on the PR students’ perceptions of Twitter use in education, while the subsequent focus group and interviews explored the peripheral participants’ experiences with Twitter in PR education.
The research questions were the following:

RQ#1: What are the PR students’ perceptions of Twitter use in PR education?

RQ#2: What are peripherally-participating PR students’ experiences in using Twitter in PR education?

RQ#3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?

The mixed methods research study followed a sequential explanatory design. I collected and analyzed the quantitative data - the survey - ahead of the qualitative data, which included a focus group and interviews. A dependency exists between the quantitative and qualitative data sources within the methodology. As a result, I analyzed the survey data collected in the initial phase of the study and used the findings to develop the interview questions in the subsequent interview phase. Researchers often give priority to the quantitative phase of the research in a sequential explanatory design (Cresswell, Plano Clark, Gutmann, & Hanson, 2003, p. 178), but this study valued the balance between quantitative and qualitative phases, despite the sample size for the quantitative phase being significantly larger than the qualitative phase. It is important to note that the quantitative tool, the survey, incorporated a qualitative element, with two open-ended questions (#2 and #8), resulting in a partial mixing of methodologies occurring at the data collection stage. Integration of all survey data has taken place in the Discussion Chapter.

The sampling for both the quantitative phase (survey) and the qualitative phase (focus group and interviews) was non-random, which is described as the most common sampling scheme in mixed methods research (Onwuegbuzie and Collin, 2007, p. 284). Both research phases drew purposive samples from the population of Humber College PR students. As the researcher, I exempted students who had not yet completed the requisite social media course (first-year diploma students). The selected sampling design was sequential with a nested sample extracted for the qualitative phase of the study (p. 292). The focus group members and interviewees were nested, in that they were a subset of participants from the original pool of qualified Humber PR students.
It was not a requirement that the participants in the qualitative phase necessarily participated in the quantitative (survey) phase.\textsuperscript{21}

An overview of my study’s participants, data collection and data analysis methods is organized by research question in Table 1. I have integrated the focus group and interviews in the discussion chapter of this paper.

**Table 1 - Overview of Participants, Data Collection and Data Analysis**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Participants</th>
<th>Data Source</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the PR students’ perceptions of Twitter use in PR education?</td>
<td>Humber PR students (N=421)</td>
<td>Survey</td>
<td>T-test, PCA (principal component analysis)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Descriptive statistics associated with factor loadings in PCA</td>
</tr>
<tr>
<td>2. What are peripherally participating PR students’ experiences in using Twitter in PR education?</td>
<td>Humber PR students • A non-random purposive sample of 6-8 students for focus group • A non-random purposive sample of 10-12 students for interviews</td>
<td>Focus group/interviews #Humberpr tracking (to categorize Peripheral participants) Tracking individual Twitter accounts (to compare actual vs. self-reported activity levels)</td>
<td>Theme coding; narratives Identifying interview participants’ actual #Humberpr use Identifying interview participants’ actual Twitter use</td>
</tr>
<tr>
<td>3. In what ways does Humber PR</td>
<td>Focus</td>
<td>Theme coding;</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{21}A total of four of the six focus group participants and five of the 12 interviewees completed the survey.
<table>
<thead>
<tr>
<th>the use of Twitter influence the learning of peripherally-participating PR students?</th>
<th>students</th>
<th>group/interviews</th>
<th>narratives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A non-random purposive sample of 6-8 students for focus group</td>
<td>• A non-random purposive sample of 10-12 students for interviews</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2 Study Participants

The research was conducted in the fall of 2014 at Humber College, a community college located in Toronto. Today, the college enrolls 27,000 full-time students in over 160 diverse full-time programs. The research study targeted the entire population of students in Humber College’s public relations programs: post-graduate certificate, diploma and degree. The post-graduate certificate was a two-semester program with an intake of 77 students in the fall semester and an additional 80 (approximately) in the winter semester (however, the winter intake was not included in the study population due to the timing of the research in Fall 2014); the diploma program was a six-semester program with a fall intake of 240 students (approximately 80 students in each of three years) although, as a result of attrition, the program had 184 students; and the degree, which was a four-year (eight-semester) program, had a fall intake of 320 students (approximately 80 students in each of four years) although, as a result of attrition, it had 240 students. In total, the population of Humber PR students included in the study in the fall of 2014 was 501 students (N=501).

All students are required to complete a social media course in their first semester of their respective programs, second semester for the diploma students, meaning that all (with the exception of the first semester diploma students, totalling 80 students), would have been exposed to Twitter in at least one course. To ensure sample homogeneity, therefore, the research sample was reduced by 80 students. The working sample size will be n=421.

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22 Information was obtained from www.humber.ca in July 2015.

23 When the survey was administered in the fall semester the first-year PR diploma students had not completed the required social media course. They were scheduled to take the course in the winter semester 2015. As a result, they did not have a comparable level of social media experience to the other PR students being surveyed.
5.2.1 Survey Sample

The paper-based survey was administered to a purposive sample of 421 PR students during class time the week of November 3, 2014, through a procedure that respected all ethical considerations for such research (details are described in the following data collection section).

5.2.2 Focus Group/Interviews

The second phase of the study was qualitative, using a purposive sampling technique to generate participants for the focus group and one-on-one interviews, which were intended to gather narratives from a group of PR students regarding Twitter use in education. I recruited students via a group email, and they had the choice to join the research group. I have provided more details in the data collection procedures in Section 5.3 of this thesis.

Academic literature suggests that the optimum size of a focus group is a minimum of six members (Krueger, 1995, p. 529; Mansell, Bennett, Northway, Mead & Moseley, 2004, p. 82; Onwuegbuzie, Dickinson, Leech & Zoran, 2009, p. 3). There is a range suggested for the maximum membership, from 8 (Krueger, 1995, p. 529), to 10 (Mansell, et. al, 2004, p. 82) to 12 (Onwuegbuzie, et al., 2009, p. 3) although agreement exists within the literature that participants within groups that exceed the maximums become uncomfortable sharing their thoughts (Onwuegbuzie, et al., 2009, p. 3).

Academic literature does not stipulate sample sizes for interviews. Instead, the literature urges researchers conducting interviews to interview until they reach a point of theoretical saturation, when “you know that you have a picture of what is going on and can generate an appropriate explanation for it. This point is reached when your data begin to stop telling you anything new about the social process under scrutiny” (Mason, 2002, p. 134-135). The challenge for researchers is recognizing and then demonstrating the point of saturation, and, moreover, successfully recruiting interview participants until a saturation point can be reached. A reasonable perspective that captured the experience in this study is that

Real saturation never occurs because each new respondent has something unique to contribute to the study…it is usually the researcher who becomes saturated. It is important to collect sufficient data to represent the breadth and depth of the phenomenon without becoming overwhelmed (Rudestam & Newton, 2015, p.125).
Rudestam and Newton offered a range of between five and 30 participants for interviews, but explained that the longer and more detailed the transcript the fewer participants are required (p. 125). Koerber and McMichael (2008) echoed the focus on quality content over quantity, and their guidelines for establishing qualitative sample sizes continued, including “ensuring diversity in representation, relative to the purpose of the research [and to] be mindful of resources, which can include time, funding or research assistant resources” (p. 468). Numerous studies have addressed representation in qualitative research, suggesting that small qualitative samples cannot adequately represent the views of specific categories of a study population. Mason (2002) warned, “[d]o not accidentally fall into a representational logic, if you are actually attempting to adopt a strategic or illustrative approach…you should not assume that, because you select one category of a particular type, this can somehow represent all categories of this type” (p. 135). In this study, I screened interview participants for their level of #Humberpr participation with the intention that I included primarily peripherally-categorized participants in the interviews. My study did not attempt to delineate interviewees into more specific categories of peripheral use to suggest they, as individuals, were somehow representative of these categories. Instead, I identified those interviewees who did not engage on #Humberpr, or engaged only modestly, as peripheral participants, in general.

The focus group and interview participants in this study represented a nested sample, effectively a subset of participants recruited from the sample of 421 Humber PR students that met the research criteria (ie. Humber PR students registered in Fall 2014 who completed the introductory social media course). Initially, the intended target for the focus group and interviews were participants who had completed the survey, because, at the time of survey completion, they had received the information letter that included focus group and interview information together with survey information. I asked them in the letter to provide their written consent to participate in any of the three research phases. Once email recruitment was underway, securing an adequate number of focus group and interview participants who had also completed the survey proved challenging. The research protocol was amended (through the respective ethics boards at both Humber College and the University of Toronto), allowing non-surveyed students to participate in the focus group or interview research, and providing their written consent at that time. The amendment to the recruitment process could be justified on the grounds that I was analyzing the survey data in aggregate, so I could not track individual interviewee data back to their respective
survey responses. Also, all focus group and interview participants, whether I had surveyed them or not, belonged to the same population of PR students, and I afforded them an opportunity to share their voice in the research.

The tracking of #Humberpr was the first phase of the study, occurring prior to the survey in the fall semester. Tracking of the interviewees’ Twitter accounts was the final phase of the study, conducted after I completed the interviews.

5.3 Data Collection

The following section addresses the rationale and procedures for each of the five phases of the research protocol.

5.3.1 Tracking #Humberpr

5.3.1.1 Rationale

To distinguish active users of #Humberpr from peripheral users, it was important not to rely on self-reported data, but to track actual online behaviour. Junco (2013) pointed out “research in other areas of human behaviour has found that there are significant differences between self-reported and actual behaviours (p. 626). In his Facebook study, Junco’s results ”reveal that self-report measures of Facebook use can approximate but are not accurate measures of actual use” (p. 631). Junco’s study found similar patterns of use with other technologies, including Twitter, email and search engines (p. 629). Therefore, tracking #Humberpr served two purposes: to report on actual Twitter use, and to identify and categorize peripheral and active participants. I tracked the #Humberpr to identify users that tagged their tweets with this hashtag for a period of 13 weeks during the Fall 2014 semester.

Established in 2009, the hashtag has become a hub for PR student engagement both internally, within the program, and externally, with industry (and other) practitioners. A hashtag is a means of aggregating the discourse around a topic -- for example, Humber College’s PR program discourse. Tracking a hashtag is an efficient means of assessing online engagement of a finite group, such as a class or academic program. Students either include the hashtag on their posts or they do not, allowing me, as the researcher, to denote active and peripheral participation among the Humber PR student sample. Identifying degrees of participation on #Humberpr among the
Humber PR student sample was to shed light on the interpretations of the survey and interview results. Tracking the hashtag was also more efficient than tracking all the tweets of each individual student in the sample, and this was significant because it was a situated learning space for PR students, making it a space that could contribute to their learning.

5.3.1.2 Procedure

The tracking was conducted between September 7 and December 2, 2014, for a period of just over 13 weeks. The study included students from three different PR programs: certificate (15-week semester); diploma (15-week semester); and BPR (13-week semester). I had chosen this time period because it represented the common weeks during the fall semester when all of the PR students were enrolled in a program, given that the degree program totaled 13 weeks of instruction, and the diploma and certificate program totaled 15 weeks. The fall semester was also the timeframe when some of the PR students (BPR Year 1 and Certificate) in the study’s population would have been enrolled in a social media course. The remaining BPR students (Years 2 to 4) and the Diploma students would have already completed their social media course in earlier semesters. The only students that had not completed the social media course, Diploma Year 1, were not included in the study.

Because Twitter posts are part of the public domain, unless the account holder selected the privacy setting allowing only approved followers to access their tweets, consent was not a requirement for tracking. I selected the online service Twitonomy to track #Humberpr. The premium-level of service was employed for a fee of $20 a month. I conducted tracking on an ongoing basis, and I manually printed screen captures on a weekly basis.

The Twitonomy service calculates search analytics on data retrieved in real time using Twitter’s search service that returns usually up to 3,000 of the tweets posted in the last six to nine days (representing a volume of three to five billion tweets). Twitter will not return any tweets beyond that time limit (S. Deschamps, personal communication, Oct. 24, 2014).

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24 Information provided in an email sent by a member of the Twitonomy team, explaining the data retrieval process on the Twitter search service (S. Deschamps, personal communication, Oct. 24, 2014).
This limitation on the Twitter archive explains the reason for the five-day gap in data collection, between October 10 to 14, 2014, when I did not print the #Humberpr tweets.

Upon completion of the Twitter tracking after December 2, 2014, a research assistant categorized all of the tweets by unique user. The users were categorized by stakeholder groups, which included students, alumni, faculty, industry, other (including students, faculty and administration from outside of the Humber PR program); and unknown. By cross-referencing Twitter profiles with the PR students’ class list from each program, I developed a separate list identifying only the PR students engaged on #Humberpr during the study period. In the event that an identity was unclear - for example, a Twitter account may only use the first and middle name rather than the last name, or an account used a creative name – I consulted the Twitter profile for reference to Humber College and/or PR student status. In some instances, I consulted PR faculty for assistance in confirming identity.

I tracked Humber PR students’ engagement on #Humberpr by capturing the number of times each unique PR student tagged their tweet with #Humberpr during the tracking period. After I completed the tracking, I used the median of four tweets to categorize the PR student population into four categories:

- non-users (0 tweets)
- light users (1-4 tweets)
- moderate/heavy users (five+ tweets)

After data analysis, I incorporated an additional category, delineating moderate use as five to 49 tweets; heavy use was categorized as 50+ tweets over the 13-week tracking period. I defined peripheral participants as anyone categorized as non-, light or moderate users. The data violated assumptions of normality with the range of Twitter frequencies from 1 to 228, and a mean of 13.4 tweets, so I used the median. I also tracked the total number of unique days each active PR student tweeted, in an effort to establish frequency of use. The categorization of non-, light and moderate users, also known as peripheral participants, informed the sampling criteria for the subsequent focus groups and interviews.
5.3.2 Survey

5.3.2.1 Rationale - Overall

The survey (Appendix 1) was the primary research tool to address Research Question #1 - exploring PR students’ perceptions of Twitter use in PR. The purpose of the 84-question, four-phase survey was to solicit self-reported data from the PR student population capturing the following:

- Perceptions of Twitter use in PR education
- Experiences with Twitter in PR education
- Twitter’s usefulness and ease of use
- Demographic data

I selected the paper-based approach because I expected response rates to be higher than for an electronic survey which students could do anywhere at anytime.

The survey partly replicated the study conducted by Lowe and Laffey (2011), which focused on marketing students’ Twitter use and which I included in the literature review earlier in this paper. Lowe and Laffey’s survey used a five-point Likert scale to examine participants’ Twitter experiences and a seven-point Likert scale in a TAM (technology affordance model)-style survey to measure participants’ perceptions of Twitter as a learning tool. Dr. Ben Lowe, Kent Business School, University of Kent, Canterbury, UK, granted permission to use the survey questions via email correspondence (B. Lowe, personal communication, May 14, 2014). The intent was to increase reliability of this study by using an adapted version of a validated survey instrument, and Lowe and Laffey’s survey had a high Cronbach’s alpha (\(\alpha = 0.981\)).

**Sequencing.** I intended the survey to inform the focus group and interview questions, unlike the Lowe and Laffey (2011) study that used preliminary interviews to inform the survey design. The survey was a way to investigate research into the perceptions of Twitter in education and built on the Lowe and Laffey structure. I also intended the role of the current survey instrument to develop a parsimonious research tool for future studies of Twitter in education, and whereas this study focuses on PR students, I intended for future researchers to use the more compressed survey across alternative academic disciplines.
Timing. Given the duration of the study participants’ semester, administering the survey during this time (week 10 of the semester) was less intrusive than requesting valuable class time closer to the end of the semester. Also, the rationale for conducting the survey in November was to give students the opportunity to engage with Twitter, as program participants frequently reference #Humberpr throughout the program, and Twitter is a component of the social media course offered in the first semester of study for certificate and degree students.

Study Design. In terms of design, 81 of the 84 questions of the survey are closed, with 69 questions using a five-point Likert scale and 10 questions a seven-point Likert scale, ranging from strongly agree to strongly disagree, including a neutral option. The design is somewhat consistent with the Lowe and Laffey (2011) study, which had a total of 86 research questions, all closed. Like the original survey, I considered participant fatigue, resulting in an attractive layout with graphic shading of alternate questions for easier reading, and the absence of numbering in the administered survey. Including numbers in an 80-plus-question survey may have discouraged participation. Importantly, I included numbers after administration of the survey for ease of analysis and discussion of the survey questions. The rationale for retaining the neutral option in both the five-point and seven-point Likert scales was that it is superior to having a ‘don’t know’ selection (given that this is challenging when coding data on SPSS), and neutral has a potential meaning to participants. Without the neutral option, research questions could potentially have gone unanswered. Diverging from the Lowe and Laffey research study is the use of three open-ended questions, two in the first phase of the study and one in the demographic questions. I considered it important to offer open-ended questions that generate the participants’ own responses when probing for social networking account usage and when participants choose not to post. One of the final five demographic questions was open, asking participants their year of birth, with the remaining four demographic questions offering a selection of responses.

5.3.2.2 Rationale – Each of Four Phases of Survey

The following is an overview of each of the four survey sections, including the rationale for the selected questions and where they varied from Lowe and Laffey’s (2011) original study.

Phase 1. The focus of the first phase of this survey was to capture the perceptions PR students had of Twitter use in their education, which addressed Research Question #1 for the overall study: What are the PR students’ perceptions of Twitter use in PR education?
A total of 43 questions comprised Phase 1 of the survey and although the subsequent two phases of the survey drew on the work of Lowe and Laffey (2011), I had developed the questions in this first survey phase specifically for this study. Phase 1 of the survey captured the perceptions of peripherally-participating socially-networked PR students on awareness of and frequency of Twitter use, the use of #Humberpr, Twitter as a tool for networking and engaging with external stakeholders, Twitter as a virtual community of practice, and Twitter’s role in situated learning. With this intention in mind, I developed the questions summarized in Table 2 below.

**Table 2 - Alignment of questions with research intention in Phase 1 of survey**

<table>
<thead>
<tr>
<th>Research intention</th>
<th>Corresponding research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of Twitter use</td>
<td>1, 2, 3, 4, 5, 8, 9, 11, 14, 15, 16, 19, 20, 21, 22, 26, 29, 31, 32, 33</td>
</tr>
<tr>
<td>Barriers to participation</td>
<td>6, 7, 10, 12, 13, 17, 18, 23, 24, 25, 27</td>
</tr>
<tr>
<td>Perceptions of #Humberpr use</td>
<td>30, 34, 35, 36, 37</td>
</tr>
<tr>
<td>Perceptions of privacy and terms of use</td>
<td>38-43</td>
</tr>
<tr>
<td>Specify other social networking sites used</td>
<td>2 (Open-ended question)</td>
</tr>
<tr>
<td>When I choose not to post on Twitter, it’s because….</td>
<td>28 (Open-ended question)</td>
</tr>
</tbody>
</table>

Perceptions of Twitter use were captured in the following questions: 1, 2, 3, 4, 5, 8, 9, 11, 14, 15, 16, 19, 20, 21, 22, 26, 29, 31, 32, 33. The rationale for these questions was to understand PR students’ self-reported understanding of their own engagement with social networking sites (#1, 2), and Twitter specifically. Online engagement was deconstructed into actions such as posting (#3, 28), reading (#4, 21, 31) and re-tweeting (#5, 9) and frequency of use was queried by asking survey participants to respond through Likert scale choices ranging from strongly agree to strongly disagree to the notion of ‘regular’ use. The level of self-perceived engagement was probed through questions about frequency of retweets (#5, 9); the role of followers (#11, #19); effort in using Twitter (#14, 15, 16, 20, 26); reasons for posting (#8, 33); and the role of peer engagement (#22, 29, 32).
Barriers to participation were probed through Questions 6, 7, 10, 12, 13, 17, 18, 23, 24, 25, 27 and were developed from Nonnecke, et al.’s (2004) study into lurking behaviours. The questions emerged from a chart identifying reasons why lurkers do not post (p. 13), and included a preference for reading, shyness, the wish to remain anonymous and the lack of time to post.

I captured perceptions of #Humberpr use in the following questions: 30, 34, 35, 36 and 37. Because tracking a hashtag is a relatively new area of study, I had to develop the questions from my own classroom experience using #Humberpr in the program and my classroom. I asked survey participants to respond not only on their usage of the hashtag, but also on prospective reasons for use, including connecting with classmates and PR industry professionals, and learning about PR.

Perceptions of privacy and terms of use were probed in Questions 38 to 43, to understand the degree of media literacy among participants. I developed the questions from my own awareness of privacy issues associated with teaching social media.

Two of the survey questions, #2 and #28, were open-ended. The first asked respondents to specify to which other social networking sites they subscribed, in addition to the six prompted sites: Facebook, Twitter, Instagram, LinkedIn, YouTube and Tumblr. The question probed for additional popular or useful applications to understand the PR students’ use of social networking sites for future teaching purposes.

The second question asked respondents to complete the sentence, “When I choose not to post on Twitter, it’s because…” Although a number of survey questions were already probing for barriers to participation, drawn from the work of Nonnecke, et al. (2004) and Preece, et al. (2004), it is important to note that these barriers relate to a variety of online communities but did not include social networking sites, as Nonnecke et al.’s and Preece et al.’s studies pre-date the existence of social networking. Asking students to self-report through their own narrative might have revealed barriers unique to social networking sites. Alternatively, they might have confirmed the data provided through the closed survey questions.

Phase 2. The focus of the second section of the survey was on student experiences with Twitter in PR education. Of the 26 questions in this section, I borrowed 19 from Lowe and Laffey’s (2011) study, with some modifications. I replaced Lowe and Laffey’s marketing references with
public relations references. Also, I replaced Lowe and Laffey’s references to the marketing ‘course’ with the public relations ‘program’. In a couple of instances, where Lowe and Laffey’s statement is: ‘using Twitter has enhanced my awareness of marketing’, my study rephrased the question to parse out the notions of ‘use’ more specifically into reading, posting and retweeting. The purpose of deconstructing the notion of ‘use’ into more specific actions was to understand the distinctions between active online engagement and the subtle, peripheral participation that is more challenging to track, such as the receptive act of reading. An example of how I worded the resulting questions is, “posting on Twitter has enhanced my awareness of PR”. The remaining seven questions (#47, 53, 65-69) were unique to this study, focusing on the relationship with external stakeholders and networking opportunities that Twitter affords, thereby connecting to the experiential or situated learning afforded in the PR program.

**Phase 3.** This section of the survey related to the Technology Acceptance Model and was introduced by Fred Davis and borrowed by Lowe and Laffey (2011). The TAM survey, a set of 10 questions probing a technology's usefulness and the perceived ease of using it, was relevant as a means of comparing my survey results to this broader discourse and increasing the reliability of my survey through previously validated questions. It is worth noting, however, that the intention of my study was simply to use the TAM questions to supplement the range of survey questions regarding perceptions of Twitter use, rather than to use them as a predictive modeling tool to infer the likelihood of future educational use of Twitter. Predicting future Twitter use was beyond the scope of my research study.

**Phase 4.** Looking for possible causes for peripheral, or even marginalized, participation, the survey probed for participants' demographic information, including cultural diversity. As a screen for this, my project included a several demographic questions related to age, gender, program registration and membership in various groups such as disabled, aboriginal, visible minority/racialized, and LGBTQ. Humber's HR department was consulted to capture the categories they had used in other surveys. Categories were determined based on students who are typically underserved, under-represented or considered at risk (C. Johnson, personal
Although Humber’s HR department had broken down the visible minorities into an extensive list of subcategories, I decided to leave the visible minority question as an open-ended, self-reported question, based on a suggestion by one of the survey test-drivers.

### 5.3.2.3 Procedure

Prior to conducting data collection, three non-Humber PR students were asked to ‘test-drive’ the survey. Each completed the survey in 10 minutes or less, which had been the intended length. Two of the three found that the questions, particularly in part 1, could have been grouped by topic for clarity. One student commented on the wording of the demographic section, recommending that additional options for ‘other’ include: ‘decline to answer’ and ‘no’.

In order to gain permission to conduct the in-class survey with Humber’s PR students, I emailed the Dean and Associate Dean of the School of Media Studies and Information Technology. Upon receiving approval, I contacted the PR program coordinators for the BPR, certificate and diploma programs in person and via email to gain support for the administration of the survey in their respective programs. I made participants aware of the research project through an email sent directly to each Humber PR student by the program coordinators.

The research assistant administered a confidential, paper-based survey in 14 PR classes between November 3 and 10, in an effort to reach each of the 421 Humber PR students in the sample.

Together with the survey, the research assistant distributed an information letter (Appendix 2) outlining details of the research study, including the subsequent focus group and interviews. I asked all survey participants to complete a consent letter (Appendix 3), which would serve as consent for the subsequent research phases. The research assistant coded the consent letter with the survey responses through a system that ensured participant confidentiality, as only the research assistant had access to the codes. We captured the identity of survey participants in order to tie focus group and interview responses to the surveys. However, as the project evolved, I decided that we would report survey responses in aggregate. I used survey participant identity

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25 Based on email correspondence with Corrine Johnson, Director, Strategic Planning and Institutional Analysis, Humber College.
to verify participant consent, and to ensure that non-survey participants engaged in subsequent stages of the research could be identified as such and could provide consent at that time.

All participant communication stipulated that the survey was confidential and unrelated to the course work or grades of the various PR courses, to decrease the perception of coercion. In addition, I advised participants that for ethical considerations, I would not be administering the surveys, nor would I have access to the identifying codes. As a faculty member in the BPR program, I could not have contact with the BPR participants. I addressed these details in the research ethics board applications for both the University of Toronto and Humber College.

5.3.3 Interviews

5.3.3.1 Rationale

While the first phase of methodology dealt with the quantitative survey approach used to assess Humber PR students’ perceptions and experiences of Twitter use in education, the second phase of the research was qualitative, focusing on two specific research methods – focus groups and interviews. The purpose of the qualitative methodology was to gain information about peripheral student experiences using Twitter in education and ways in which Twitter influences the learning of peripherally-participating students.

A primary reason for implementing qualitative interviewing was that, epistemologically, direct interactions with research participants may generate “legitimate and meaningful...data” (Mason, 2002, p. 64). The process of identifying a population and then researching a sample of that population positions the research subjects as legitimate players in the study, as is the case in my study, where Humber PR students were best able to address the research questions regarding their perceptions and experiences with Twitter in PR education. Mason also suggests that “the data you may want may not feasibly be available in any other form, so that asking people for their accounts, talking and listening to them…is the only way to generate the kind of data you want” (p. 66). Although the study used a survey to capture broad perceptions and experiences of the study sample, insights from individuals’ circumstances, as well as the opportunity to probe key topics, themes and areas of interest could best be gained through a social interaction afforded by qualitative interviewing, offering “depth, nuance, complexity and roundedness of data” (p. 65). Focus groups and interviews might have generated insights that extended beyond the surface
perceptions and experiences a participant might have shared in a survey, leading to the depth and nuance suggested by Mason. An additional advantage of using qualitative interviewing, according to Mason, is that interviewees have more freedom and control in interviews than in the more structured survey format of a quantitative method (p. 66). This was important when probing for peripheral social media use among Humber PR students, as I probed for their individual experiences of Twitter use in education, as well as ways that Twitter influenced their learning. These activities were less apparent where online engagement was limited or non-existent.

In the current research study, I combined two qualitative research methods to better address the research questions. “Although focus groups and individual interviews are independent data collection methods, their combination can be advantageous to researchers as complementary views of the phenomenon may be generated“ (Lowe & Laffey, 2011, p. 230). Specifically, one rationale for mixing two qualitative methods may be to “strive toward data completeness and/or confirmation (p. 230). The sequence of my study was to conduct the focus group for the purpose of exploring themes, insights and areas of interest among the participants, followed by a deeper probe in these topics through the individual’s personal experiences as participants articulated in the interviews (Gay & Airasian, 2003, p. 212; Lambert and Loiselle, 2008, p. 230).

The value of the focus group, as a specific type of interview format, is in its social orientation. According to Onwuegbuzie, et al. (2009), social interaction may encourage participants to experience a sense of belonging, which may lead to increased information sharing and the “possibility for more spontaneous responses” (p. 2). Mason (2002) concurs, suggesting that the social environment of a focus group may enable the interviewer to “follow up [the participants’] specific responses along lines which you could not have anticipated in advance, in a highly organic way” (p. 64). It was imperative that we, as interviewers, allowed study subjects the freedom to articulate their experiences and impressions without trying to suggest they were deficient in their Twitter use and needed remediation - particularly since the focus of the study was on the role of the peripheral user. Remaining open-minded to their possibly spontaneous responses was to give a voice to the usually untraceable peripheral participant and contribute to the richness of the study.
The analysis of the focus group data required different consideration from that of the one-on-one interviews. Focus groups may be an aggregated unit of content contributing to the overall study; however, “only presenting and interpreting the emergent themes provides no information about the degree of consensus and dissent, resulting in dissenters effectively being censored or marginalized and preventing the delineation of the voice of negative cases or outliers…that can increase the richness of the data” (Onwuegbuzie, et al., 2009, p. 5). Onwuegbuzie, et al. point out the value of isolating the contribution of individual focus group members, in order to capture data that can reflect tension within the group. This was particularly important in my study because the six additional voices of the focus group members were a significant contribution to the overall data collection.

I used the data analysis approach called micro-interlocutor analysis for the focus group. Micro-interlocutor analysis is “a new way of analyzing focus group data…which incorporates and analyzes information from the focus group by delineating which participants respond to each question, the order of responses and the nature of the responses” (Onwuegbuzie, et al., 2009, p. 3). By de-aggregating the focus group data and “treating each focus group member as a unique and important study participant” (p. 9), the focus group contributes richer data. This was particularly relevant to this study as there was significant interaction among participants, with both consensus and dissent, on a variety of topics. Capturing the nature of the focus group participant interaction was fundamental, particularly noting who was influencing the discussion (Mansell, et al., 2004, p. 84).

The one-on-one interview format provided a level of privacy not possible in a focus group, in an attempt to gain detailed narratives about participants’ perceived relationship with Twitter and #Humberpr including the following: the barriers to participation; perception of learning among participants and peripheral participants; perceptions of their relationship with external stakeholders in terms of networking opportunities and career development; and, the role of Twitter in building a community of practice.

The micro-interlocutor approach to the focus group data produced narrative equal in richness to the interview data, enhancing the qualitative research through the six additional voices, suggesting that the weighting of the two qualitative research approaches was in equal balance.
5.3.3.2 Procedure

The following outlines the procedure for the focus group and interviews.

**Focus Group.** Recruitment took place in mid-January, when the program coordinators from each of the three Humber PR programs were asked to send an REB-approved recruitment email (Appendix 4) to each Humber PR student in their respective programs. One focus group was conducted on Friday, January 30 at the Humber College Lakeshore campus with six participants. I verified that participants were registered in one of the three PR programs. The original research plan had indicated that two focus groups would be conducted, however, after the recruitment process for focus group participants generated only one participant for the Monday focus group, I decided to cancel the Monday session. The number of students recruited dictated the resulting sample size.

The research assistant (RA) facilitated the focus group and ran it for approximately one and a half hours. Refreshments were provided and each participant received a $10 dining card. The RA used a semi-structured approach with five key questions used as prompts for the discussion (Appendix 5). The format for the focus group followed a standard protocol with an introduction; warm up; general question; specific questions; wrap-up/summary; and close. When conducting the focus group, the RA provided participants who had not completed a survey with an information sheet and requested that they sign a letter of consent.

The group discussion was digitally recorded and a multi-directional microphone was employed to ensure all participants were captured on the recording. Once the focus group was completed, the RA produced detailed transcriptions, which identified the unique speakers in the session, but did not reveal identities. The focus of the data analysis was on the content, although notes were taken to reflect frequency of unique speakers, as well as on the nature of the responses following the micro-interlocutor approach.

**Interviews.** I recruited for interview participants in early February, using purposive sampling. A total of 12 interviewees were scheduled – seven with the RA and five with me as the principal investigator (divided on the basis that I could not interview BPR students). Interviews lasted an average of 30 to 40 minutes and were scheduled at mutually convenient times and held on the Humber College Lakeshore campus. Interviews were semi-structured with five key questions
(Appendix 6), and we digitally recorded the interviews using an external microphone. The RA and I, aiming for detailed and thick descriptions, transcribed our respective interview narratives.

5.3.4 Tracking Twitter Accounts

5.3.4.1 Rationale

The purpose of the Twitter account tracking, conducted after the interviewing, was to determine if the actual level of Twitter engagement among participants was consistent with the self-reported interview data.

5.3.4.2 Procedures

After securing Twitter addresses from each of the interviewees, the RA viewed each account online to confirm the following: the date the account was opened; total number of tweets; total number of followers; total number of people followed; and, date of last tweet. For the purpose of data reporting, and in order to maintain confidentiality, the RA replaced the Twitter handles with the participants’ coded identities.

5.4 Data Analysis

This section addresses the analytical approach of each phase of the research study. Reporting of the results occurs in the Findings chapter. The impact of the results on the research questions is reflected in the Discussion chapter. To understand how each of these research phases has addressed the research questions, see Table 1.

5.4.1 Tracking #Humberpr

After tracking #Humberpr for a period of 13 weeks, the data was analyzed using the following three approaches:

5.4.1.1 Stakeholders

Identifying the total unique users on the space, and categorizing them by stakeholder group to inform the study of the variety of stakeholders on #Humberpr, establishing the site as a situated learning space with the potential to provide mentorship to PR students.
5.4.1.2 Unique Humber PR Students

I needed to identify the number of unique Humber PR student users on the site, so I used frequency counts to compare the users with the total number of Humber PR students registered across all programs at the time of the study.

5.4.1.3 Frequency of Use

The RA created a histogram of Humber PR student users of #Humberpr to illustrate the total number of tweets by unique Humber PR student users, and thus visually represent the concept of ‘peripherality’. The results demonstrated the degree of peripheral and active use on the site, with frequency categorized based on the median number of tweets, with 1-4 tweets over the course of the tracking period considered light use; 5 to 49 tweets were considered moderate; and 50+ tweets demonstrated heavy use. In my study, peripherality was understood to be non-, light or moderate use of #Humberpr among Humber PR students.

5.4.2 Survey

5.4.2.1 Cronbach’s Alpha (α)

We calculated Cronbach’s alpha to measure the internal consistency in the overall survey tool. According to Koerber and McMichael (2008), generally acceptable values for Cronbach’s alpha are considered to be an alpha of 0.7 or higher (p. 16) and Field (2009) suggests it should be between 0.7 and 0.8 (p. 675).

5.4.2.2 T-test

We calculated a t-test based on the survey data to determine the statistical significance of the research tool.

5.4.2.3 Response Rate

We calculated the survey response rate based on the total survey sample and on the basis of the students’ attendance in the classes at the time we administered the survey.

5.4.2.4 Principal Component Analysis (PCA)

We conducted a principal component analysis (PCA) on the survey to streamline the data and to uncover any latent variables (components) that may help explain the data. A PCA is similar to a
factor analysis in that both statistical methods are tasked with “reducing data to a smaller set of factors, …achieving parsimony by explaining the maximum amount of common variance in a correlation matrix using the smallest number of explanatory constructs” (Field, 2009, p. 629). The two methods differ in how they estimate the maximum variance, with the PCA “concerned only with establishing which linear components exist within the data, and how a particular variable might contribute to that component” (p. 638). The principal components or latent variables emerging from the PCA provided directionality to the data (p. 628), which I identified on the basis of the themes of the various components and how they aligned with the theory and literature review addressed in my paper.

We determined the principal components after data collection by analyzing the following:

- emerging components with minimum Eigenvalues of 1
- a Scree plot
- the amount of variance explained by each component.

We calculated Cronbach’s alpha separately for each component to increase reliability of the survey by demonstrating consistency in responses.

5.4.2.5 Descriptive Statistics

We used descriptive statistics to summarize the variables loaded onto each of the components identified in the PCA. The descriptive statistics associated with each survey variable illustrated the most frequent responses and possible trends in the data.

5.4.2.6 Demographics

The final five survey questions addressed participants’ demographic information. We ran measures of central tendency on age, age by program, and gender, which we reported within the survey sample description. We ran a separate t-test on respondents seeking any of the groups identified as ‘other’ (disabled, aboriginal, visible minority, LGBTQ), to determine any difference between those students who identified as ‘minority’ in their survey responses versus the ‘non-minority’ students.
5.4.2.7 Open-ended Survey Questions

Question #2, *I have an account on the following social networking sites*, asked respondents to specify if they used any sites other than those provided. We created a chart of all social media tools, including the self-reported ‘other’ option, using measures of central tendency. We analyzed, coded and reported responses to Question #28, *When I choose not to post on Twitter, it’s because______,* using descriptive statistics in a table citing the top terms/reasons. We illustrated these top terms using a word cloud (eg. Wordle).

5.4.3 Focus Group

The RA first coded the transcripts from the focus group according to individual contributions, using the micro-interlocutor approach addressed in the section Interviews – Rationale. The RA then completed a frequency count to confirm participation levels. We then coded the content using the five key interview questions as part of the initial framework. Within the narrative responses to each question, we coded the individual responses for both consent and dissent.

Additional coding considered the key components that emerged from the PCA in the previous section of the study, ensuring we captured these related narratives. We also coded additional themes, issues and/or topics. Key findings may have impacted the subsequent interview protocol.

5.4.4 Interviews

We first coded the content of the interview transcripts using the five key interview questions. Additional coding considered the key components that emerged from the PCA in the previous section of the study, to ensure these related narratives were captured. We coded similarities and differences between the individual narratives, and we also coded and summarized additional themes, issues and/or topics. We used constant comparison analysis to code the data – first by chunking data into coded units, then grouping the codes into categories, and, finally, developing themes that described these categories (Onwuegbuzie, et al., 2009, p. 5-6). This method “requires continual revision, modification and amendment until all new units can be placed into an appropriate category and the inclusion of additional units into a category provides no new information” (Rudestam & Newton, 2015, p. 217). According to Mansell et al. (2004), this analytical approach may be useful in capturing differences between narratives that may be explored further (p. 85).
5.4.5 Twitter Account Tracking

We tracked the Twitter accounts of the interviewees to determine actual online Twitter activity. We charted the account information, capturing the following: date account was opened; total number of tweets; total number of followers; total number of people followed; and, date of last tweet.

5.5 Survey Logistics

5.5.1 Construct Validity

We strengthened the validity of the survey design through replication of an existing survey tool developed by Lowe and Laffey (2011). Lowe and Laffey validated their survey using a t-test with 80% statistical significance. Although my study differed from Lowe and Laffey’s work, the survey instrument used by Lowe and Laffey investigated an area of benefit to my project and aided in validating my research tool. We also conducted a t-test on my study to support validity.

5.5.2 Content Validity

We increased validity through the pre-testing of the survey instrument. We pre-tested the final version of the survey for this research study with three participants to ensure clarity of questions, content consistency and timing. Any of these factors could have become barriers for survey completion if we had left them unaddressed.

5.5.3 Reliability

Consistency in the research results, which is considered reliability, could be measured through internal consistency calculations, using Cronbach’s alpha. In their study, Lowe and Laffey (2011) ensured strong reliability (α=.981) by building questions into their survey that specifically tested for reliability. For example, in one statement they said, “Using Twitter for this class enhanced my ability to see how theory linked to practice.” A statement further along in the survey said, “Using Twitter did not help me to realize practical applications of marketing theory.” This approach of checking consistency in contrary responses, allowed for the measurement of reliability. My study used the basic structure of the Lowe and Laffey (2011) survey, and retained a version of the reliability statements.
5.6 Interview Logistics

The mixed method design of my research positioned the quantitative instrument – the survey – first in the sequence of research activities addressing Research Question #1 regarding PR students’ perceptions of Twitter in education. The results informed the questions of the subsequent research instruments. The interviews (focus group and one-on-one) addressed Research Questions #2 and #3, and we probed notions of peripherality and experiences in Twitter use in education primarily through the interview data. Whereas quantitative data can be assessed as valid and reliable through standardized tools including t-tests and Cronbach’s alpha (Mason, 2002, p. 187), qualitative data must prove accuracy and credibility of methods and research practices in different ways (p. 187). Lincoln and Guba offered alternative qualitative terms for the quantitative equivalents of reliability and validity, recommending credibility, transferability, dependability, and confirmability (cited in Rudestam & Newton, 2015, p. 131; Onwuegbuzie & Collins, 2007, p. 299). The following section addresses the qualitative logistics of this research accordingly.

5.6.1 Credibility of the Study Sample

The purposive study sample targeted Humber PR students who had completed the social media course requirement, as detailed in the sampling procedure earlier. The scope of the research, as indicated in both the title and the research questions, focused on the Humber PR student communities and required that recruitment of interview participants be limited to this community. We emailed all students to recruit participants in the research study. By amending the sampling criteria to disentangle survey participation as a requirement for interview participation, we invited all Humber PR students who met the basic criteria to participate in the interview phase. We improved accuracy by using the student lists generated by the program coordinators from each of the respective PR programs.

5.6.2 Credibility of the Focus Group

We pre-tested the five semi-structured interview questions through a focus group which we held prior to the interview sessions. The six-member focus group responded to the initially drafted interview questions, and through transcript analysis, helped inform me of the key topics, themes and issues that might have arisen in the subsequent interviews. By generating a discussion among
focus group participants, I was able to probe new concepts and areas of interest. In doing so, the subsequent interviews could more thoroughly address the primary areas of interest for this study.

5.6.3 Credibility of Actual Twitter Use

We verified credibility of the self-reported interview content by looking at two actual measures of Twitter behaviour - tracking interviewee presence on #Humberpr and requesting interviewees’ Twitter addresses to gauge online activity. We could compare interview participants’ online performance with their interview responses for evidence of consistency.

5.6.4 Credibility of the Micro Interlocutor Analysis

This is a qualitative analysis methodology which contributed to the robustness of focus group data by de-aggregating focus group participation. This approach supplements the content analysis with assessments of frequency, tone, and consent and dissent among participants. Credibility is strengthened through this analytical approach by acknowledging the contribution of individual participants who may otherwise be silent; shy; differ in opinion, attitude or knowledge; or are less articulate (Onwuegbuzie, et al., 2009, p. 7).

5.6.5 Epistemological Privilege

As a PR instructor for the past 14 years, as well as the social media instructor for the past seven years, I believed that I had an appreciation for the topic of this study, as well as experience in observing students’ engagement with social media. In addition, the students in the study sample were among the generation of young people labeled digital natives, offering them insight into the social use of Twitter. Also, all students included in the study had completed one social media course (at a minimum), positioning them as privileged on the topic of their perceptions of social media use in PR education. My privileged position as the principal investigator and the students’ positioning in the discipline of PR may have strengthened the credibility of the study, by maintaining topical focus.

26 (Mason, 2002, p.192-193)
5.6.6 Transferability

A number of academics studying Twitter in education have identified the need for research in discipline-specific Twitter use (Gao, et al., 2012; Junco, et al., 2010; Kassens-Noor, 2012; Kennedy, et al., 2010; Lowe and Laffey 2011; Veletsianos, 2011), and that was strong motivation to conduct this study. While discipline-specific, in that this study provides an in-depth analysis of how the PR learning environment uses Twitter, the study also contributes to the overall discourse regarding the need for discipline-specific Twitter use, offering evidence of transferable findings.

5.6.7 Dependability of Interviewers

To maintain consistency within the interview process itself, only two interviewers participated, including one research assistant and myself. As the principal investigator, I was not permitted to complete all of the interviews due to ethical considerations involving the power dynamic between myself and the BPR students, since I taught within the BPR program. The RA and I cooperatively scripted the interviews, practiced the interview delivery, and ensured procedural consistency.

5.6.8 Dependability of the Interview Recordings

We strengthened the accuracy of the interview transcripts by using digital recordings of the interviews. The high fidelity nature of digitally recorded interviews (Rudestam & Newton, 2015, p. 130) increases dependability of the data. The recorded interviews precluded the need for interview subjects to review the transcriptions. Dependability of interview data can potentially be strengthened by offering participants the opportunity to review the transcribed interview for accuracy (p. 155). However, the methodology for my study did not include interviewee reviews because of the potential limitations of such an approach, including “the risk that participants remember what they wish they had said or what they think they said, rather than necessarily validating the status of the data” (Mansell, et al., 2004, p. 85). In addition, the nature of the study was low-risk and we had assured all participants of the confidentiality of their data, as outlined in the research ethics board approvals, further reducing the need for individual interviewee reviews.
5.6.9 Dependability of the Transcript Coding Process

I completed all of the transcript coding for all interviews to ensure consistent data analysis using the constant comparison approach. This approach effectively categorizes all data units and reveals differences from among the interviews, leading to further exploration.

5.6.10 Confirmability

The confirmability or objectivity in the study can be strengthened by acknowledging the levels of bias that existed across the various players in the qualitative research study, including the study sample, the RA, and myself, and addressing ways to mitigate the effect of the bias.

There is a bias inherent in the interview process, which is essentially a form of social interaction, particularly when the interviews are semi-structured affording participants flexibility, unanticipated results and an organic process (Mason, 2002, p. 65). The focus group and interview participants in my study were self-identified. These students may have been willing to engage in the research because of the social interaction and shared comfort level with the semi-structured interview process.

A measure of objectivity was present in terms of the research facilitators, since neither the RA nor I was familiar with the participants. Because of the issues associated with conflict of interest between myself and the BPR students in the study sample, the RA conducted the focus group, which limited bias since there was no pre-existing relationship. In terms of the interviews, as the principal investigator, I only interviewed students from the certificate and diploma programs, with whom I had no familiarity. The RA was from a different program at the college, with no familiarity with the students.

5.7 Chapter Conclusion

My five-phase mixed-methods study explored peripherally-participating PR students’ experiences on Twitter for their PR learning. One of the significant aspects of the methodology included tracking actual engagement on #Humberpr to categorize PR students for the subsequent research. The role of the survey was to address students’ perceptions of Twitter, while the focus groups and interviews were intended to gain a deeper understanding of the peripheral experience
on #Humberpr. Actual interviewees’ Twitter activity was captured to authenticate self-reported engagement levels.

A variety of approaches validate my study, most importantly through its foundation on Lowe and Laffey’s (2011) pre-existing survey instrument. Also, the Humber PR students represented a credible and consistent study sample that contributed to the discourse around academic discipline specialization. My epistemological privilege as a PR instructor, observing PR students’ actual online activity and classroom behavior, also adds to the credibility of the study.

Overall, the methodological approach provided a sound framework for the ensuing study.

The following Chapter 6 details both the quantitative and qualitative research findings, while Chapter 7 analyzes their significance in current literature and within the framework of situated learning theory. Chapter 8 discusses the practical implications for PR education, limitations of the research and recommendations for future research.
Chapter 6
Research Findings

6 Introduction

The findings chapter reports on the quantitative and qualitative data of the five-phase mixed methods study, highlighting key data that contributed to answering the three research questions:

RQ#1: What are the PR students’ perceptions of Twitter use in PR education?

RQ#2: What are peripherally-participating PR students’ experiences in using Twitter in PR education?

RQ#3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?

This chapter includes a description of the study sample, and it has four parts: Part 1 addresses Research Question #1, regarding PR students’ perceptions of Twitter use in PR education, by initially establishing the reliability and validity of the survey tool, reporting on Cronbach’s alpha and a t-test, respectively. I reported the results from the principal component analysis on the survey, together with a descriptive statistical analysis correlated with each component. I addressed the two open-ended survey questions, Q2 and Q28, through frequency counts. In addition, I reported results from the investigation into the demographic effect on the survey responses.

Parts 2 through 4 address Research Questions #2 and #3 related to peripherally-participating PR students’ experiences with Twitter and the influence of Twitter on their PR learning. Part 2 reports on the #Humberpr tracking data that identifies the peripheral participants with respect to this study. The data also helps to identify the key stakeholders engaged on the hashtag, for the purpose of establishing that the hashtag is an online community of practice. Part 2 also reports on the actual online Twitter activity of the interview participants, for the purpose of differentiating activity on Twitter versus #Humberpr, which is a contributing data source to the establishment of the peripheral participant discourse.
Parts 3 and 4 are deeper explorations into peripheral participants’ Twitter experiences and influences in PR education, and they report key data from the focus group and one-on-one interview transcripts, respectively.

6.1 Description of the Study Sample

I provided an overview of the demographic information of the study sample in Table 3. The average age of respondents was 23.5 years. Almost 80% of participants were female, which is consistent with the overall PR program female/male ratios, which are between 75 to 80% female and 20-25% male (see Table 4). The majority (61%) of the study respondents self-reported as non-minority and 27% self-identified as disabled, aboriginal, visible minority or LGBTQ. Almost 12% did not address the question. The majority of the survey participants were from the Bachelor of PR program at 49.5% of the survey sample. Although the majority representation is consistent with the relative size of the BPR program, which represents 57% of all Humber PR students, there was slight under-representation of the degree group in the overall survey participation. Certificate students were slightly over-represented in the survey participation at 24.2%, while they make up 18.3% of the overall Humber PR students. Diploma students (years 2 and 3) represent 24.7% of the overall Humber student population, which was consistent with their survey participation at 23.1%.

Table 3 - Description of the study sample

<table>
<thead>
<tr>
<th>Demographic Information on the Humber PR Student Study Sample *</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=421</td>
</tr>
<tr>
<td>Based on the survey respondents: n=281</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Gender</td>
</tr>
</tbody>
</table>

27 Based on the Humber College Fall 2014 intake of 501 PR students across all three PR programs.
<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>220</td>
<td>78.3</td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
<td>17.8</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Decline to disclose</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Blank answer</td>
<td>11</td>
<td>3.9</td>
</tr>
</tbody>
</table>

**Group membership**

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disabled</td>
<td>4</td>
<td>1.4%</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>Visible minority/racialized group</td>
<td>50</td>
<td>17.8</td>
</tr>
<tr>
<td>LGBTQ</td>
<td>20</td>
<td>7.1</td>
</tr>
<tr>
<td>Decline to answer</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>No</td>
<td>172</td>
<td>61.2</td>
</tr>
<tr>
<td>No answer</td>
<td>24</td>
<td>8.5</td>
</tr>
</tbody>
</table>

**Program**

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>68</td>
<td>24.2</td>
</tr>
<tr>
<td>BPR</td>
<td>139</td>
<td>49.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>65</td>
<td>23.1</td>
</tr>
<tr>
<td>Blank</td>
<td>9</td>
<td>3.2</td>
</tr>
</tbody>
</table>
### Table 4 - Humber PR Program Demographics

<table>
<thead>
<tr>
<th>Humber PR Program</th>
<th>Female</th>
<th>Male</th>
<th>Unanswered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-graduate certificate program</td>
<td>87%</td>
<td>13%</td>
<td>0%</td>
</tr>
<tr>
<td>Diploma</td>
<td>84%</td>
<td>15%</td>
<td>1%</td>
</tr>
<tr>
<td>BPR Year 1</td>
<td>74.5%</td>
<td>25.5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

28 Program demographic data sourced from KPI Student Satisfaction Report, Winter 2015, Office of Strategic Planning and Institutional Analysis, Humber College
6.3 Part 1: PR Students’ Perceptions of Twitter Use in PR Education

This section addresses Research Question #1, PR students’ perceptions of Twitter use in PR education. An 84-question survey was conducted in Fall 2014 among a study sample of 421 Humber PR students, resulting in a response rate of 66.7% based on 281 completed surveys. The response rate is 94.9% when based on the 296 students in attendance on the days the survey as administered to 14 PR classes across the three program areas.

6.3.1 T-test

A series of one-sample t-tests (Appendix 7) were conducted to evaluate whether the responses on each survey question significantly deviated from the neutral response option, and to evaluate whether PR students tended to agree or disagree with each statement. I used a test value of 3 (neutral) for questions 1-69, using a 5-point Likert scale, and a test value of 4 (neutral) for questions 70-79, using a 7-point Likert scale.

I built the current survey upon the effective methodological tool from the Lowe and Laffey (2011) study, and the survey replicated the validity of the Lowe and Laffey survey design.

6.3.2 Cronbach’s Alpha

Calculated to measure the internal consistency in the overall survey tool, the resulting Cronbach’s alpha was $\alpha=.887$. Generally acceptable values for Cronbach’s alpha are between $\alpha=0.7$ and $\alpha=0.8$ (Field, p. 675). Although the Lowe and Laffey (2011) survey had a Cronbach’s alpha of $\alpha=0.981$, the current survey maintains the reliability of the survey tool.

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29 It may be worthwhile to note that all research tools, including the survey, focus group and interviews, drew from the same study sample. However, not all focus group and interview participants completed a survey. ParticipantID numbers from 1-281 indicated survey participation, and potentially focus group or interview participation, while codes from 282-283 indicated focus group participation only, and codes from 284-290 indicated interview participation only. Focus group and interview participants are identified in further detail in the subsequent sections of the Findings chapter.
The comparisons to Lowe and Laffey’s survey are limited to the t-test and Cronbach’s alpha, which served to demonstrate that the current research tool maintained the reliability and validity of the original survey. The subsequent research findings diverge from the Lowe and Laffey study, which conducted predictive modeling to determine future use of Twitter in education. The following data focuses on PR students’ perceptions of Twitter use in education.

6.3.3 Principal Component Analysis

Research Question #1 was addressed by conducting a principal component analysis on the 77 survey questions, which generated four principal components addressing a cumulative percentage variance of 46.1%. Table 5 highlights the variances for the four principal components.

Table 5 - Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Cronbach's α</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>21.336</td>
<td>27.709</td>
</tr>
<tr>
<td>2</td>
<td>7.781</td>
<td>10.105</td>
</tr>
<tr>
<td>3</td>
<td>3.716</td>
<td>4.826</td>
</tr>
<tr>
<td>4</td>
<td>2.648</td>
<td>3.439</td>
</tr>
</tbody>
</table>

Four components were selected on the basis of criteria outlined in Field’s (2009) text, where he cites three possible criteria for deciding on the principal components. Kaiser (as cited in Field, 2009, p.640) advocated using all components with Eigenvalues above 1, and Jolliffe (as cited in Field, 2009, p.640) advocated for a “less strict” (p. 640) criterion, suggesting using all components with Eigenvalues above 0.7. When applying either of these two criteria, my study
was left with many components that were loading the same variables. It was determined that the third approach by Cattell (as cited in Field, 2009, p.639) would be used. Cattell advocates for the use of a scree plot (see Figure 1) that plots a graph of each Eigenvalue (y axis) against the factor with which it is associated (p. 639). The selected components should have higher eigenvalues, which are depicted as those plot points that appear at or prior to the point of inflexion curve in the graph (p. 639). The result was a plot identifying four unique components. Cronbach’s alpha was conducted for each component, demonstrating strong reliability with Cronbach’s alpha scores well above the minimum acceptable ranges.

**Figure 1 - Scree Plot of Eigenvalues**

6.3.3.1 Principal components explained

In the following section, the four principal components will be assessed through both the factor loadings and the frequency counts associated with the survey questions loading onto each component, in an effort to provide directionality to the research. The factors will be interpreted through the variables with factor loadings greater than 0.6, a figure cited by both Evans (2014, p. 909) and Field (2009, p. 647).
**Usefulness of Twitter.** A total of 30 variables loaded onto Component 1, for a total variance explained of 27.7%. Based on the variables with loadings higher than 0.6, the key theme of Component 1 addresses the usefulness of Twitter in PR learning (Appendix 8). An analysis of the frequency counts associated with each variable assists in explaining the theme of this component. The variables with the highest cumulative frequency of strongly agree and agree suggest that Twitter contributed to PR learning, including providing access to PR practitioners and networking opportunities. A total of 82.8% of survey respondents agreed or strongly agreed that “if future courses were to use Twitter as a learning tool, I predict I would use it”; a total of 78.1% of respondents agreed or strongly agreed that “using Twitter makes PR practitioners more accessible”; and, a total of 77.4% of respondents agreed or strongly agreed that “using Twitter will be useful for my PR learning.” A total of 71.2% of respondents agreed or strongly agreed “using Twitter develops career-related skills, such as networking.”

**Engagement with Twitter.** A total of 22 variables loaded onto Component 2, explaining a total variance of 10.1%, and a total cumulative variance of 37.8%. Based on the variables with loadings higher than 0.6, the key theme of Component 2 addresses Twitter engagement through reading, posting, retweeting and increasing followers (Appendix 9). An analysis of the frequency counts associated with the highest cumulative frequency of strongly agree and agree suggest that engagement with Twitter was an enjoyable experience (63.4%) and that the respondents felt confident using the tool (68.2%) and considered that they regularly read Twitter content (66.1%).

**Ease of Twitter Use.** A total of 16 variables loaded onto Component 3, explaining a total variance of 4.8%, for a cumulative variance of 42.6%. Based on the variables with loadings higher than 0.6, the key theme of Component 3 addresses the fact that Twitter is easy to use (see Appendix 10). The selection of variables with the highest cumulative frequency of strongly agree and agree suggest that Twitter was easy to use (87%) and that “if future PR courses were to use Twitter as a learning tool, I intend to use it” (82%). Seven of the variables that loaded onto Component 3 questioned respondents about potential barriers to Twitter use and in each case responses were overwhelmingly on the negative end of the Likert scale, with the majority disagreeing or strongly disagreeing with the statements. A total of 89.6% of respondents disagreed or strongly disagreed (3% agreed or strongly agreed) with the statement that “I don’t post on Twitter because I don’t know how to post”. A total of 81.4% disagreed or strongly disagreed (6.4% agreed or strongly agreed) that they don’t post on Twitter because they prefer to
remain anonymous, while 63.7% disagreed or strongly disagreed (16% agreed or strongly agreed) that they are shy about posting on Twitter. These results closely align with those of Nonnecke, et al. (2004). However, a total of 60.9% disagreed or strongly disagreed (18% agreed or strongly agreed) that they had nothing to post on Twitter. Although this also aligns with Nonnecke, et al.’s findings, this point calls for further investigation, as the respondents in my study self-reported that having “nothing to say” was the principal barrier to posting in both the open-ended survey question and in the interview narrative.

**Use of #Humberpr.** A total of six variables loaded onto Component 4, explaining a total variance of 3.4%, for a cumulative variance of 46.15%. Based on the variables with loadings higher than 0.6, the key theme of Component 4 suggests that #Humberpr is followed for the purposes of learning about PR, and connecting with classmates and industry professionals (see Appendix 11). The selection of variables that have the highest cumulative frequency of strongly agree and agree, with approximately 50% of respondents strongly agreeing and agreeing, are the same variables found with the factor loadings. There were the statements that the respondents ‘follow’ #Humberpr for the purpose of: learning about PR (51.2%), connecting with classmates (50.6%) and connecting with PR industry professionals (48.4%). Two variables related to tagging and retweeting posts were not statistically significant.

### 6.3.4 Open-ended Survey Questions

The following two survey questions, Q2 and Q28, were open-ended, and were analyzed using frequency counts. The results are recorded in Table 6.

**Table 6 – Results for Q2**

<table>
<thead>
<tr>
<th>SNS</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>274</td>
<td>97.5</td>
</tr>
</tbody>
</table>

Q2: I have an account on the following social networking sites: *(choose all that apply)*
Facebook; Twitter; Instagram; LinkedIn; YouTube; Tumblr. Other, please specify.

n=281
Almost all of the respondents used Facebook, at 98%, while almost 95% used Twitter, over 90% agreed that they used Instagram, and 80% of all survey respondents agreed that they used LinkedIn.

Responses to survey question #28, *When I choose not to post on Twitter, it’s because___*, are given in Table 7.

**Table 7 - Results of Q28**

<table>
<thead>
<tr>
<th>Response</th>
<th>Reason for not posting</th>
<th>Freq</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nothing to say</td>
<td>53</td>
<td>29.4</td>
<td>29.4</td>
</tr>
</tbody>
</table>

30 Prompting for ‘other’ social networking sites was the open-ended aspect of survey question 2. Pinterest was the only site shared by multiple respondents.
<table>
<thead>
<tr>
<th></th>
<th>Reason</th>
<th>Count</th>
<th>Frequency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Busy/no time</td>
<td>37</td>
<td>20.6</td>
<td>50.0</td>
</tr>
<tr>
<td>3</td>
<td>Don’t care</td>
<td>22</td>
<td>12.2</td>
<td>62.2</td>
</tr>
<tr>
<td>4</td>
<td>Not relevant</td>
<td>15</td>
<td>8.3</td>
<td>70.5</td>
</tr>
<tr>
<td>5</td>
<td>Response unclear</td>
<td>12</td>
<td>6.7</td>
<td>77.2</td>
</tr>
<tr>
<td>6</td>
<td>Prefer other social media</td>
<td>11</td>
<td>6.1</td>
<td>83.3</td>
</tr>
<tr>
<td>7</td>
<td>Want privacy</td>
<td>6</td>
<td>3.3</td>
<td>86.6</td>
</tr>
<tr>
<td>8</td>
<td>Opinion (none or strong)</td>
<td>6</td>
<td>3.3</td>
<td>89.9</td>
</tr>
<tr>
<td>9</td>
<td>Involved in other activities</td>
<td>6</td>
<td>3.3</td>
<td>93.2</td>
</tr>
<tr>
<td>10</td>
<td>Tired/lazy</td>
<td>5</td>
<td>2.8</td>
<td>96.0</td>
</tr>
<tr>
<td>11</td>
<td>Can’t tweet (no account, phone, data)</td>
<td>5</td>
<td>2.8</td>
<td>98.8</td>
</tr>
<tr>
<td>12</td>
<td>Prefer to read tweets</td>
<td>2</td>
<td>1.1</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Of the 281 survey respondents, 180 or 64% generated a response to the open-ended question. The main reason for not posting on Twitter, with a frequency of 29.4%, was that respondents had “nothing to say”, followed by the reason that they are too busy or have no time, with a frequency of 20.6%. Combined, these two categories account for 50% of the reasons respondents might not tweet. While most of the responses are self-explanatory, there are three that warrant further explanation. ‘Response unclear’ meant that I was unable to discern the meaning of the response, which accounted for 6.7% of the overall responses. ‘Opinion’ referred to the respondent’s self-perception that they either had too weak or too strong an opinion to warrant silence on Twitter, accounting for 3.3% of total responses. ‘Can’t tweet’ referred to an access issue, with the respondent lacking either a mobile device, Twitter account or data plan, accounting for 2.8% of total responses. Figure 2 depicts the highest frequency reasons for not posting, in a Wordle image.
6.3.5 Additional Areas of Exploration

6.3.5.1 Demographic Effect on Survey Responses

An independent t-test was conducted to determine if there existed a difference between the means of two groups: those self-reporting minority membership (disabled, aboriginal, visible minority, LGBTQ) and non-minority members, and if the difference was statistically meaningful or simply a chance result (Field, p. 335). I found no significant difference between the means of the two groups across 75 of the 77 survey questions tested. In the case of two variables, questions #36 and #47, I observed a significant difference (Appendix 12).

In survey question #36, I follow #Humberpr to learn about PR, participants who identified as minorities (M=2.96, SE=.161) responded differently than participants who identified as non-minorities (M=3.33, SE=0.97). This difference was significant, t(244)=-2.046, p ≤ 0.05.

In survey question #47, I found #Humberpr a useful way to learn about PR, participants who identified as minorities (M=2.92, SE=.132) responded differently than participants who
identified as non-minorities (M=3.29, SE=0.082). This difference was significant, t(244)=-2.439, p ≤ 0.05.

While the overall findings of the independent t-test, comparing the means of the minority and non-minority survey participants, saw no significant differences in 75, or 97%, of the questions, the concept of both Q36 and Q47 is similar in nature, and within this concept minority and non-minority responses differed.

An analysis of frequency counts for Question #36: I follow #Humberpr to learn about PR found that 55.9% of non-minority respondents strongly agreed or agreed with the statement, 17.1% were neutral and 27.1% strongly disagreed or disagreed. Minority respondents were more balanced in their responses, with 39.5% of respondents strongly agreeing or agreeing with the statement, 17.1% were neutral and 43.4% strongly disagreeing or disagreeing.

An analysis of frequency counts for Question #47: I found #Humberpr a useful way to learn about PR found that 50.6% of non-minority respondents strongly agreed or agreed with the statement, 27.1% were neutral and 22.3% strongly disagreed or disagreed. Minority respondents were, again, more balanced in their responses, with 32.9% of respondents strongly agreeing or agreeing with the statement, 31.6% were neutral and 35.6% strongly disagreeing or disagreeing.

Based on these results, the minority students appeared to express diverse viewpoints, with a similar percentage agreeing and disagreeing with the value of #Humberpr for PR learning, while the non-minority students appear to skew more in favour of agreeing that #Humberpr was a useful way to learn about PR. Further research would be required to probe these differences more deeply.

6.3.5.2 Online Privacy

It is worth noting that the six questions on the survey related to privacy settings (Q38-43), failed to load onto the components, suggesting that the students’ responses didn’t coalesce with the overall themes of the survey. As a subsection of the survey, a review of the frequency counts associated with each of these survey questions were as follows.

A total of 90% of respondents agreed or strongly agreed that they were aware that social media sites save their personal data, and 88% agreed or strongly agreed that they were aware that social
media sites encourage them to share their personal data. A total of 89% agree or strongly agree that they use privacy settings on Facebook. However, 78% of the respondents disagreed or strongly disagreed that they read the terms of service on social media sites, and 62% agreed or were neutral about their awareness of the privacy settings on the social media sites they use. The use of privacy settings on Twitter saw contrasting responses on both ends of the Likert scale.

The descriptive statistics are included in Appendix 7.

6.4 Part 2: Defining Peripheral Participation and Community of Practice

The following section partially addresses Research Questions #2 and #3 related to PR students’ experiences with Twitter and the influence of Twitter on their PR learning, with a focus on #Humberpr as a community of practice and the role of the students who choose a peripheral engagement strategy.

6.4.1 #Humberpr as a PR Learning Space

In an effort to establish Twitter as a learning space for PR education, I identified #Humberpr as a possible place of inquiry, given that it has served as a unifying space for the PR program since 2009. By tracking users of #Humberpr for a period of approximately four months, it was possible to demonstrate the range of stakeholders that contribute to the space, and to support the claim that #Humberpr is a community of PR practice. Table 8 identifies the categories and frequencies of #Humberpr users.

<table>
<thead>
<tr>
<th>Table 8 - Stakeholders on #Humberpr</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=465 (Total unique users tagged with #Humberpr during September 7 to December 2, 2014)</td>
</tr>
<tr>
<td>Stakeholder Group</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>PR students $^{31}$</td>
</tr>
</tbody>
</table>

$^{31}$ PR students included Diploma, Year 1 students, although they were excluded from the research study as they hadn’t yet completed the requisite social media course.
Although over 30% of unique #Humberpr users (unique meaning that their presence was only counted once, regardless of the frequency of their contributions) are PR students, almost 29.1% of the users tracked during the 13-week period were classified as members of the PR industry, with the students and industry representatives accounting for a cumulative total of 60.4% of the stakeholders. Faculty were least represented with 2.6% of unique visitors.

### 6.4.2 Defining Peripheral Participation on #Humberpr

The second component of these research questions is the notion of the peripheral participant. By tracking #Humberpr for the duration of a semester, it was possible to identify current PR students who actively engaged with the hashtag during that period, with a total of 144 unique PR students identified. Of the 501 students comprising the overall Humber PR student population, 114 or 28.7% were light, moderate or active users.

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32 I could not track identity from the Twitter profile. Unknown could be a friend or contact or colleague of a student or a graduate of one of the PR programs that did not identify as a former Humber student in their Twitter profile.

33 Included in this category are students and administrators from other Humber programs, as well as students and administrators from other colleges.
Figure 3 illustrates the frequency of #Humberpr use from among the 114 Humber PR students who tweeted at least once during the tracking period. The range of tweets was one through 228. The median number for the total tweets among active users during the 13-week tracking period is four tweets. Users who tweeted between one and four times were considered light users; users between five and 49 tweets were considered moderate; and the six most active users on the chart tweeted 50 or more times.

The histogram illustrates the concept of peripherality, which Wenger (1998, p.165) defines as less-than-full engagement. Although 71.3% of the Humber PR student population were non-users of #Humberpr, and could be categorized as peripheral, the additional light and moderate users were also included in the peripheral categorization. These light and moderate users, together with the non-users, are examples of the less-than-full engagement articulated by Wenger (1998), and represent 98.8% of the Humber PR student population. By including the voices of all peripheral participants, my study is better able to demonstrate the range of student experiences in using
Twitter in PR education. The most active #Humberpr users, totalling 6 students, are outliers at the far right of the graph, clearly distinct from their peripheral counterparts.

A point worth noting is that although it is possible that students could have multiple accounts, and could potentially be using an account which obscures their identity, the fact that #Humberpr is a learning space makes it unlikely a student would choose to use their obscured identity in this space. Every attempt was made to identify ‘unknown’ participants.

6.4.3 Actual Twitter Use

At the conclusion of the interviews, each participant was asked for their Twitter handle, so as to assess their actual use of the tool. With the exception of the student with the private account, all participants provided permission and actual Twitter use among interviewees is recorded in Table 9.

Table 9 - Actual Twitter use among interviewees

<table>
<thead>
<tr>
<th>Twitter Handle (revised to reflect coded identity)</th>
<th>Date acct opened</th>
<th>Total #tweets</th>
<th>Total # followers</th>
<th>Total # of ppl they follow</th>
<th>Date of last tweet</th>
<th>#Humberpr frequency of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>@046</td>
<td>—</td>
<td>352</td>
<td>353</td>
<td>879</td>
<td>May 21 retweet</td>
<td>Moderate</td>
</tr>
<tr>
<td>@035</td>
<td>March 2009</td>
<td>150</td>
<td>187</td>
<td>262</td>
<td>May 26</td>
<td>Moderate</td>
</tr>
<tr>
<td>@288</td>
<td>Feb 2011</td>
<td>440</td>
<td>258</td>
<td>866</td>
<td>May 26</td>
<td>Moderate</td>
</tr>
<tr>
<td>@290</td>
<td>—</td>
<td>430</td>
<td>43</td>
<td>52</td>
<td>May 26</td>
<td>Light</td>
</tr>
<tr>
<td>@284</td>
<td>Feb 2010</td>
<td>213</td>
<td>58</td>
<td>135</td>
<td>April 6</td>
<td>Non</td>
</tr>
</tbody>
</table>

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34 Information as of May 26, 2015.
By comparing actual Twitter use with actual #Humberpr use, it is clear that there is a difference in how students use tools. Although 94.7% of the study sample self-reported having a Twitter account, and tracking of Twitter use indicates that all, other than the individual with the private account, are publicly active on Twitter, half of the interviewees were non or light #Humberpr users, with the remaining half engaging moderately, and only five of those engaging as heavy users.

The comparison between Twitter and #Humberpr use helps in conceptualizing the notion of the peripheral participant. The Twitter account is the gateway to the hashtag, so a hashtag user must be a Twitter account holder. However, the reverse is not necessarily true, as a Twitter account holder is not necessarily engaged on #Humberpr. In fact, a Twitter account holder is not necessarily engaged on Twitter, either. By reviewing Table 7, there is a wide range of Twitter engagement, with @285 tweeting 34 times since Nov. 2012 and @149 tweeting 5,133 times since Nov. 2011. There is a wide range of Twitter sign-up dates, and numbers of people they follow. Even in their general Twitter use, students exhibit a range of usage frequencies that could be evidence of levels of peripherality versus active or immersed participation.
The value of the hashtag in my study is that it is a traceable and established community of practice, which the 95% of Humber PR students self-reported having access to Twitter, and therefore to #Humberpr. Through the use of the hashtag, with a real-world context with known players in the form of Humber PR students, not only could engagement be measured, but so could online absence, together with the degrees of participation that exist between the two extremes. And that helped to define the peripheral participants.

6.5 Part 3: Focus Group

Initially, the primary function of the focus group was to pilot test the interview questions, ensuring a comprehensive probe of Twitter use among public relations students. It was expected that the focus group would confirm the value of the interview questions and possibly identify additional themes. The intention was that the focus group data would be analyzed and reported in aggregate. However, the richness of the focus group data allowed a deeper contribution to the research, identifying the key themes used to explore the research questions, and sharing the individual voices of the focus group participants.

A total of six students were recruited for the sole focus group conducted on January 2015, at the Humber College Lakeshore campus, for a period of 1.5 hours and facilitated by the research assistant. A total of 11 questions were posed and discussed by the group, which addressed Research Questions #2 and #3. The main areas of questioning included: relationship with social networking sites; motivation to tweet; barriers to participation; role of Twitter in PR education; understanding of the role of #Humberpr; comfort level with #Humberpr; and tweeting and hashtagging outside of PR. The focus group was digitally recorded and transcribed by the research assistant, who coded the transcript by participant.

6.5.1 Participants

Table 10 summarizes the coded identity of the participants and their level of #Humberpr engagement, as well as the degree of engagement within the focus group.

Table 10 - Overview of Focus Group Participants

| N=6 |
All focus group participants were enrolled in the BPR program. No common schedule existed among all three Humber PR programs, and the focus group sessions also needed to accommodate the schedule of the research assistant. Although two focus groups were initially planned, the minimum number of six participants was only achieved for this one group. The focus group is skewed female, with 83% representation, which is consistent with the demographics of the program (see Table 4). Also noteworthy is the fact that two (FG1 and FG6) of the six focus group participants, 33%, were tracked as heavy #Humberpr users, meaning that they posted more than 50 tweets over the 13-week tracking period. The remaining participants were non- or light users, which categorized them as peripheral participants.

Although all six participants engaged with the focus group, FG1, FG4 and FG6 were most heavily involved, while FG5 was least involved. Overall, there appeared to be strong group

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35 Actual usage figures were not included in an effort to maintain confidentiality among interview participants. Note that the non- to light users posted four or fewer times; moderate users posted five to 49 times; and heavy users posted 50 or more times. Only six Humber PR students were classified as heavy users.

36 It is possible that those interviewees classified as non- and light #Humberpr users might have been more active users outside of the tracking period, which might explain why, in the focus groups, they would reference their use of the tool even if they were not tracked as users.
agreement on the discussion topics, however there was dissent on four questions, which will be addressed in the following narrative.

The following section will address each of the themes captured from the focus group interview. The reporting includes: the number of respondents that addressed the theme during the focus group discussion; the variation in responses; the frequency of various perspectives; and relevant narratives captured from the transcripts. The participant number found in Table 1 will reference each focus group participant.

6.5.2 Focus Group Themes

The following topics emerged from the focus group discussion and collectively address Research Question #2, regarding peripherally-participating PR students’ experiences using Twitter in education and Research Question #3, regarding Twitter’s influence on students’ PR learning.

6.5.2.1 Frequency and Ease of Social Networking Use

As a means of establishing a comfortable group dynamic, the first area of inquiry was general – asking about social networking use and perceptions about comfort with the technology.

In terms of social media adoption, four of the respondents declared social media immersion “at a young age” (FG5), or “in middle school” (FG2). FG3 stated that she was “on Twitter when it first came out” and FG1 proclaimed that she has “always loved social media”. FG4 and FG6 were on the opposite end of the social media adoption spectrum. FG4 said, “I wasn’t allowed to use social media until I was in Grade 9, so I haven’t had it for the longest time and I only recently got Twitter a couple of years ago”. FG6 declared that he was “the last one of my group to go on Facebook. I was adamant about that too”. Although there was disparity in how quickly the participants adopted the technology, the group was unanimous in their appreciation of its value, and no technological limitations or challenges were addressed. Every participant referenced the idea of connecting with community as the main focus of Twitter and social media, in general. FG3 said, “It’s just another way for us to connect with each other at all times.” FG6 added, “In our industry, the Twitter mindset is to be contributing to the community”. Although FG3 and FG6 suggest that frequent contributions to Twitter are valued, only two respondents were seen as ‘heavy’ users during the period tracked.
6.5.2.2 Stakeholders Engaged on #Humberpr

Although focus group participants were not directly questioned about their perceptions of their engagement with online stakeholders, most of the respondents raised the issue in the context of managing their personal and professional identities online. In total, the stakeholders identified by focus group participants were primarily professors and prospective employers. Five of the respondents mentioned the role of the prospective employers, and FG2 added professors as reasons to be mindful of their online engagement. FG1 said “(I) don’t post a thing I wouldn’t be comfortable with an employer seeing”, a sentiment echoed by FG2 and FG4. FG2 shared:

    It just kind of made me think about, would I be ok showing this to a boss, or a professor, like that's just what I think about now. I don't have two different accounts. I just think, would it be weird if a boss saw this or if a professor saw this, that’s kind of how I think about every tweet and every Facebook status and picture.

FG2 appreciated the job postings tweeted by employers. “I think that says a lot, like it means that they know Humber PR students are good.” She was also positive about the role of professors. “Like our profs here, it’s really cool to see what they find interesting.” While FG4 shared that she edited her Twitter account by deleting tweets, adding, “…it felt a lot better to do that and I was like, ok, now I feel completely ok with like what I have up so far. To be seen by prospective employers…” FG6 expressed concern about the online gaze of prospective employers, stating

    There [are] people in the community that do watch you, right? I think we need to be aware. Like some blogs that I’ll read and I’m like…but I’m not going to tweet, because I know my future employers are watching…I just always have a second thought before I tweet.

FG5 dissented from the group by suggesting, “what you have on your own personal social media shouldn’t bother your boss, it shouldn’t affect your job…you should have the freedom to express yourself.”

The focus group primarily discussed the role of the prospective employer as a key stakeholder on Twitter and #Humberpr, and as both a power-wielding figure and as a valuable contributor in the situated learning space. Professors were also mentioned in a similar context of holding power positions, but there was also reference to the positive value of their online contributions. The group did not comment specifically on the role of peers on the Twitter experience, which may have been related to the fact the focus group was conducted among PR peers.
6.5.2.3 Reading Versus Posting

Assessing online engagement, focus group participants were asked to comment on their ratio of reading versus posting online. Five participants responded, agreeing that they each read more than they actively tweet, with percentages ranging from 80% reading and 20% tweeting (FG4 and FG5), to 75% reading and 25% posting (FG2 and FG3) to 65% reading and 35% posting, reported by FG6. Reading dominated posting which is consistent with peripheral engagement. It is noteworthy that FG6, who was tracked as having among the highest number of #Humberpr posts, would report a higher posting percentage than others.

6.5.2.4 PR Students’ Twitter Use

The following theme addresses benefits of Twitter use and the ways to make meaning online. All but FG2 stated that one of their primary uses of Twitter was to follow news sources. Other Twitter uses included following celebrities (FG3); entering contests and live tweeting The Bachelor (FG4); gossip sites (FG5); “going after companies I’m not satisfied with”, (FG5); and, “using it to share colleagues’ articles, blogs and any news” (FG6). To sum up how they use their site, FG2 said,

I’m more a fly-on-the-wall kind of type. I read my whole feed and I follow 800 people. I retweet things I find interesting more than I would actually tweet an original message. I don’t think I am particularly interesting so I would feel like any sentence that I would say or any opinion that I would say, someone’s probably already said it.

Although the focus of the research is on Twitter use in education, the majority of Twitter use was not educational. Yet, the focus group participants acknowledge that there were approaches they took to ensure they could make meaning on Twitter, discussing this in the context of the dominant criteria for a post-worthy tweet.

6.5.2.5 Dominant Criteria for a Post-Worthy Tweet

All respondents agreed that meaning is made when the content is relevant to their followers. FG1 shared, “I always think about the people that follow me, I know it’s people from this program. So if I read something about PR or social media, if I share it, I know someone will click it.” On the other hand, FG2 offered an alternative perspective on posting, stating “if it’s something people have heard before, I might be less likely to tweet about it.” FG4 is concerned that her tweets receive a positive reception. “When I have a tweet, like, ready to send, I’m like, ok, is this tweet
going to get any love? If it’s not going to get any love, then there is no point in putting it out there.” FG6 takes the notion of posting further, to the point of actual online engagement, stating “if you mention your friends in the tweet, you can promote their writing, or comment on the writing of someone you are trying to get to notice you…that’s when you get that conversation started.” Achieving engagement and, most importantly, positive engagement was critical, with the results being that connections occurred. Connecting with existing friends, and even making friends online, was the main benefit cited by the respondents. According to FG1, “That’s the idea of social media…you find people and people find you. For a kid, it’s a good way to find like-minded people online since you can’t move away…” FG2 agreed, adding, “I’ve made real-life friends from Twitter,” a comment that received group agreement. FG6 expanded the notion of online community, “It’s a sense that your community may be small, but it’s spread out over different places which can open up a lot of doors.” FG4 suggested an additional benefit related to online relationships, stating that the online community is “[b]etter than real life, you don’t have to have things you don’t enjoy in the Twitterverse…If you unfollow someone on Twitter, no harm done.” Despite the fact that the dominant use of Twitter was social and not necessarily educational, there was a relatively strong sense of how to make meaning on Twitter, which results in the social benefits of community building and networking – crucial elements of situated learning in PR education.

6.5.2.6 Public Nature of Twitter

Acknowledging the publicness of Twitter is critical to studying Twitter use in a situated learning space, particularly when stakeholders include professors and prospective employers, in addition to peers. The resulting power dynamics that emerge in the space may influence online behaviour and are important to investigate. Three focus group respondents commented on the public nature of Twitter and whether it was a deterrent from tweeting. The dominant response was that the tweet content was of primary concern, so as not to offend your Twitter audience or compromise personal safety with excessive disclosure. FG1 shared that “I love sports, so juggling multiple topics is hard with one audience, people have unfollowed me because they don’t care about hockey.” She added that, “Sensitive topics can be taken the wrong way…might discourage me from tweeting.” FG3 shared that

[one thing that would discourage me from posting something is if I didn’t know all the facts…wouldn’t tweet about it right away until I saw more proof or...}
evidence or something about that…I wouldn’t want to put a public message out that I couldn’t back up or be knowledgeable about…I don’t want to offend someone.

FG4’s primary concern was personal safety, sharing, “…I’m just really careful about like, is this too personal to post? That is one of the only things that discourages me from tweeting something like my personal safety, like, um, where I am, kind of thing.” There are aspects of Twitter’s publicness that can be a barrier to online engagement, including the negotiation of multiple audiences, as well as ensuring content is factual and not excessively sensitive or personal.

6.5.2.7 Twitter in PR Education

Establishing the role of Twitter in PR education was investigated to gain a deeper understanding of whether the tool enhanced the learning experience, particularly in the context of a public space and the possibility for situated learning. All participants confirmed that they completed a social media course as part of their PR education, with five respondents crediting the course with developing their business or professional use of the tool and FG5 credited Twitter with enhancing her personal use of the tool. Four of the six participants provided fuller comments. FG1 felt that the course taught her about tweeting on behalf of a company, which included “how to craft a message more so than personally. Pretty natural for how to use it for myself, but for how to use it for companies, it’s quite a bit different in that respect.” FG2 found that the course helped her overall understanding of social media sites and said, “I feel like I am a more responsible social media user, which is good.” FG6 suggested that his use of the tool was professional from his first exposure and commented “we are a little different than the average person…we are in PR, …I think our Twitter use may be very different than other people in our generation or our age group.” While FG5 concurred that the social media course was useful, she focused on her personal use of the tool, saying that “I found that it did actually help me personally, like for my personal accounts.” Overall, the respondents found the social media course to be valuable for developing their social media use, primarily in a business or corporate manner, with respect to their emerging roles in public relations. The value of Twitter in PR education was justified by FG2 and FG4, who explicitly agreed that learning about and knowing Twitter is important for a future PR career, and that there is an industry expectation to achieve this level of skill. FG2 said, “companies just expect you to know how to use Twitter. Twitter is the first and foremost social media platform. It is essential to learn in this program.”
However, defining the experts in the Twitter learning process was a debated topic. FG2, FG4 and FG5 stated that they, or their generation, are tech-savvy, perhaps implying a level of expertise. According to FG5, “the people that are running the Twitter for a lot of companies are older and they are begging for people from our generation because they have no idea of what they are doing”. FG6 shared a dissenting view regarding expertism among PR practitioners and professors, referencing his fourth-year social media professor, who he described as “my 50-year-old instructor [who] knows more than I can ever imagine.” Although there was agreement that Twitter use is a core competency among PR students and the social media course enhanced their understanding of the corporatized Twitter role, there was debate around the notion of expert, with a sense from some participants that their generation was somehow privileged in their social media abilities. It is worthwhile to note that the dissenting view on the issue of expertism was by an active or heavy #Humberpr user, who acknowledges the expertism of his professor.

6.5.2.8 Balance between Personal and Professional Twitter Use

Four of the six participants addressed the topic of merging personal and professional identities on Twitter, and while only one participant, FG2, clearly stated that they don’t have two separate accounts, one for personal and one for professional, the remaining respondents suggested the same. In an effort to maintain one Twitter account for both personal and professional purposes, FG4 mentioned that the social media class prompted her to “go through and look at what I have tweeted for the past couple of years. I think I got rid of 500 tweets.” FG1 specifically said, “there is no difference between professional and personal really for me.” She explained more fully,

Like I am definitely more eccentric, I view it as more as this is my personality and this is me. I think, you do have to decide, it's an important decision, like if I don't get hired for my dream job because I said this, like should I care for me? I'm like no, this is my personality and I don't want to work anywhere where this isn't who I can be. So, I kind of like lay it out on the line and I consider more of like a personality than like an information source or anything like that. So I think, in that case, Twitter can be very personal, like you can use it in different ways.

An intriguing contrast emerged during the course of the focus group, with FG6 commenting that he is “more of an information source, I’m not a personality…” What is particularly interesting about this contrast is that both are heavy #Humberpr users, where one is coming from a more personal and opinionated perspective versus the other’s more factual and information-based
position. This narrative becomes less an interrogation of personal versus professional use of Twitter, and a more nuanced comment about online identity performance.

6.5.2.9 Mandatory Twitter Use in PR Education

Interrogating the participants’ understanding of Twitter as a learning technology was a fundamental aspect of the research, and this was probed through the discussion of mandatory Twitter use. Five of the participants contributed to the discussion around the possibility of mandating and grading Twitter use in PR education, with the discourse ‘hijacked’ by participant FG6, who informed the group of the social media course he just completed in his fourth year of the BPR program, where social media participation was, in fact, mandated and graded. FG1, FG3 and FG4 expressed concern about the practice, with FG1 stating “I hate that” and that the practice “might be a little extreme.” FG3 suggested that although Twitter content is public anyway, she felt “cheated” by the prospect of online monitoring. FG4 agreed with the cheating comment. FG3 added that she “[doesn’t] put that much thought, like, when you tweet something”; with the implication being that her online presence isn’t normally under the same kind of scrutiny as mandated Twitter use. FG2 was indifferent, claiming she “doesn’t have anything on there that I wouldn’t want an employer seeing.” Discussion around this theme revealed the tension between living and learning technology use on Twitter and appeared to uphold Kennedy et al.’s (2008) claim that the transition from a living to a learning use of Twitter would be neither automatic nor guaranteed (p. 119).

6.5.2.10 Barriers to Using Twitter in PR Education

Given that the focus of the research was on the peripheral participant, it was particularly relevant to establish the nature of the barriers that limit Twitter engagement. It was established that the technology itself was not a barrier. FG1 shared that “technology is pretty intuitive” and FG3 and FG4 concurred, sharing the belief that any lack of social media engagement should not be attributed to a technology barrier. Three of the six focus group participants commented on potential barriers to social media use. Time management was raised by FG4 and FG6 as a reason for potentially limited or no social media engagement, with FG6 sharing, “time is precious, so all of us in this industry put our attention onto what’s more important. I just don’t give Facebook as much attention as I do Twitter.” Feeling pressured to produce entertaining content was raised by FG3 and FG4, with FG4 sharing, “it’ll just sit in my drafts forever, and I think that one day this
will be funny.” FG3 echoed the concern about producing relevant or entertaining content stating, “for me, it’s like nobody cares. It’s never been because it’s inappropriate…It’s usually because it’s not interesting.” According to the focus group participants, their Twitter experience is not dictated by technology barriers, but the decision to engage may be impacted by limitations of time as well as concerns about producing relevant content.

6.5.2.11 Managing Online Behaviour

The focus group briefly discussed self-regulation of online content. Two of the focus group members engaged in the discussion, which centered on their acknowledgement that the publicness of Twitter allows for an unintended audience gaze that must be managed. Both agreed that the younger generation appear to have a less cautious, almost reckless, approach to online performance, which the focus group members found problematic. FG6 commented that he is aware of being watched by his online community, including future employers, and is therefore cautious about tweeting, but he sees that younger people don’t share the same approach.

I don’t think we should be scared of social media…new generation coming up, the ‘like’ generation…they were born with a cell phone in their hands, so they are much more savvy than we are…they don’t give a sh*t…Like, they don’t care what they are putting out there….

FG1 responded by saying,

Yeah, I’m not necessarily scared, you know. I am really conscious about it at this point…But when I start working in the industry, I probably won’t care as much. The people that are growing up now, the things that they are posting on social media are the most horrifying things sometimes. They do not get censored. I don’t think they understand that it’s permanent.

The group discussion revealed a tacit understanding of ‘appropriate’ online behaviour, which they see as being challenged by the younger generation. Although the focus group members didn’t raise the issue of surveillance directly, one member did mention that he is aware of being watched. The interview questions didn’t probe this deeply, and few members participated in this line of discussion. It would be worthwhile to interrogate if their enrollment in a PR program increased their awareness of and sensitivities toward the management of online behaviour.
6.5.2.12 Using #Humberpr

Given the disparity in Twitter use versus #Humberpr use among the study sample, it was relevant to specifically probe how the focus group participants used the hashtag. Four of the six participants (FG1, FG3, FG4, FG6) in the group discussed their use of #Humberpr. The belief that #Humberpr connects the Humber PR community together was referenced by all four respondents. FG4 shared, “I think it makes the four years and the different streams you can go in, like, post-grad, degree and everything, it makes everyone like a community.” FG1 said, “once you throw in the hashtag, you are literally putting it [your message] out to the whole Humber community.” FG6 commented that “[o]ther schools might have a hashtag, they don’t really contribute to it, so the community isn’t there. But Humber, it’s like every few minutes.” The role of #Humberpr as a community builder among PR students was valuable for sharing information such as events (FG1 and FG4) and internship opportunities (FG1 and FG6). FG1 said, “I notice a lot of employers will tweet out job postings or internship postings literally doing #Humberpr, and I think that says a lot, like it means that they know Humber PR students are good…” FG3 appreciated #Humberpr for introducing her to the Humber PR community. “…[O]n orientation day [FG6] posted and that’s when I went home and looked at what it was just to kind of get an idea of this community. Like, what I am getting into, what to expect, like it just kind of made me feel a little more welcome.”

Despite the community connections, not all PR students engage with #Humberpr. The barriers to participating on #Humberpr were identified as lack of awareness (FG1, FG4); the lack of space given the 140-character limit on tweets (FG 4); and, the habit of not including the hashtag in tweets (FG4, FG6). FG6 offered, “it’s a habit, too…like a lot of Humber students are tweeting, but they are just not hashtagging it Humberpr…It’s just second nature, so quick sometimes that I think that even if they are intended to hashtag, they just don’t.” Despite the perceived value of the hashtag in building community and sharing resources, use of the hashtag remains relatively low among PR students. There appear to be differences between the barriers to Twitter use in general and those related to #Humberpr. Use of #Humberpr was challenged by a nine-character hashtag on a tool with a 140-character limitation; an overall lack of awareness; and the students’ pre-formed habit not to employ a hashtag in their tweets.
6.5.2.13 Suggestions for Improving Twitter Use in Education

All respondents agreed that it was important to raise awareness of #Humberpr among the PR student community, and that this could be accomplished by integrating the hashtag more overtly into the various PR programs. FG1 offered, “I think it has to be integrated into more than one class…should be touched upon in every class. Getting Humber to embrace it more so when they send out your welcome package…use #Humberpr in the documents.” Both FG1 and FG3 agree that the students do not talk about the hashtag, which keeps awareness low. FG3 suggested that “relationships could have been built much earlier”, if the hashtag was better integrated in the PR materials. The sense from the focus group was that #Humberpr had value as a community builder within the PR program, but that awareness levels were low. The suggestions for integrating the hashtag across all PR programs earlier and more consistently are both possible and practical.

6.5.3 Summary of Focus Group

The focus group data aided in fine-tuning the subsequent interview questions. From the focus group’s 11 questions, revisions were made, resulting in six key areas of questioning (Appendix 6), which were more closely aligned to my study’s research interests. Emergent areas included: personal versus professional use of Twitter; barriers to Twitter use, which may include evidence of marginality or silencing; and, an increased focus on #Humberpr, probing potential power dynamics that may exist among the community’s stakeholders. The overall purpose of the focus group was to ensure that the subsequent interviews would fruitfully address the research questions exploring peripheral-participant engagement with Twitter in education. The added benefit was that the focus group data was robust and, rather than being reported in aggregate, offered six additional voices to the data collection. As a result, the focus group coding was conducted in tandem with the one-on-one interview coding, allowing for a more seamless analysis of the interview data in the following Discussion chapter.

6.6 Part 4: Interviews

The main purpose of the interviews was to probe PR students’ experiences with Twitter in education and their perceptions of how Twitter influenced their PR learning. Specifically, PR students with a peripheral relationship with #Humberpr were identified for the study.
As a recap from the Methodology chapter, a total of 12 one-on-one interviews were conducted between February 26 and March 30, 2015 at the Humber College Lakeshore campus, by the principal investigator (PI) and a research assistant (RA). Each interview was between 30 and 40 minutes in length. I used a total of six main questions to guide the discussion (see Appendix 6). As the interviewers, we digitally recorded and transcribed our respective interviews.

In terms of interview protocol, as the principal researcher, I completed all of the interview coding. To accomplish this I was guided by the key research, the specific interview questions developed from the focus group process, and by commonly-themed threads of data that emerged from among the participants.

6.6.1 Participants

Participants were recruited from all three PR programs: certificate, diploma and degree, and were asked to contact the research assistant to schedule an interview time. Prior to scheduling an interview, the research assistant verified the participant’s frequency of #Humberpr use, the total unique days they posted on #Humberpr versus the total number of tweets they had. Among the prospective PR student participants, the majority were non-, light or moderate users, and therefore classified as peripheral users. Only a few students were more heavily engaged with Twitter and therefore classified as active users. If these students responded to the interview recruitment, they were not included in the interview process given the focus on peripheral use. Table 11 provides a description of the interview participants.

Table 11 - Interview Participants

<table>
<thead>
<tr>
<th>Interview #</th>
<th>ID Code</th>
<th>PR Stream</th>
<th>Gender</th>
<th>#Humberpr frequency of use 37</th>
<th>Interviewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>284</td>
<td>BPR 1</td>
<td>F</td>
<td>Non-user</td>
<td>RA</td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>BPR 3</td>
<td>F</td>
<td>Non-user</td>
<td>RA</td>
</tr>
</tbody>
</table>

37 Actual usage figures were not included in an effort to maintain confidentiality among interview participants.
PR students with no #Humberpr tweets were classified as non-users; frequencies of 1–4 posts on #Humberpr were classified as light users; and frequencies of between 5 and 49 posts were classified as moderate users. Based on the #Humberpr usage levels observed among the interviewees, they are all considered peripheral participants of the tool, rather than heavily engaged or active users who accumulated upwards of 200 tweets during the tracking period. A more detailed explanation on the interpretation of peripheral participation based on the frequency of #Humberpr use can be found earlier in the Methodology chapter. 38 The interview number found in Table 11 will reference each interviewee.

38 It is possible that those interviewees classified as non-, light and moderate #Humberpr users might have been more active users outside of the tracking period, which might explain why, in the interviews, they would reference their use of the tool even if they were not tracked as users.
6.6.2 Interview Themes

The following section will address each of the themes captured from the one-on-one interviews, including: the number of respondents that addressed the theme in their respective interviews; the variation in responses; the frequency of the various perspectives; and relevant narratives captured from the interview transcripts.

Through the interview process, the study probed for a deeper understanding of peripherally-participating PR students’ experiences in using Twitter in their education (Research Question #2) and the ways in which Twitter influences the learning of peripherally-participating PR students (Research Question #3). Specific areas of inquiry included: relationship with social networking sites; what encourages or discourages Twitter use; the role of Twitter in PR education; the role of #Humberpr in PR education; the use of Twitter and hashtags outside of PR; and any additional information regarding the use of Twitter in PR education (Appendix 6).

Through interview transcript analysis, a more refined thematic breakdown emerged, including: frequency of social networking use; ease of Twitter use; balance between reading and posting; balance between personal and professional Twitter use; PR students’ use of Twitter; Twitter in PR education; engaging with #Humberpr; using #Humberpr; stakeholders as influencers on #Humberpr; public nature of Twitter; managing online behaviour; barriers to using Twitter in education; mandatory and grading Twitter use in PR education; and suggestions for improved Twitter use in PR education.

The first two themes are frequency of social networking use and ease of use. These topics were addressed in the interviews as an icebreaker in the conversation and had relevance in establishing that all interview participants were active Twitter users and confident with the technology. This allowed for an important distinction to be made between the use of Twitter in general, and #Humberpr specifically. Although all participants are Twitter users, not all were actively engaged on #Humberpr, as shown in Table 11. In fact, all of the interview participants are non-

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39 The Findings Chapter is organized thematically, rather than by research question. The intention is to address each research question in the Discussion Chapter, drawing on data emerging from all phases of the research study, including the survey, focus groups and interviews.
light or moderate #Humberpr users, and are, for the purposes of this study, identified as peripheral participants.

6.6.2.1 Frequency of Social Networking Use

The 12 interviewees were asked about their social networking use, with a focus on Twitter, Facebook and Instagram. Seven participants (I1, I2, I4, I6, I8, I10, I11) stated that they were frequent or daily users of at least one social networking site, with one participant sharing that he “used social media more in the past than today” (I3); one self-described as an intermittent user (I9); and the remaining three participants (I5, I7, I12) did not overtly state their overall frequency of social networking use. In terms of their Twitter use, all 12 interviewees agreed that they used Twitter, but a total of eight participants (I2, I4, I6, I7, I8, I9, I11, I12) stated that they used Twitter as much or more than Facebook and Instagram, while the remaining four (I1, I3, I5, I8) preferred Facebook. According to I8, “Facebook has always been the mainstay for me, still is. But this year Twitter and Instagram for the first time since I’ve been a student in PR.” I1 found Facebook “more useful”, offering the following explanation:

I use Facebook; I have a HumberPR for my year, like we have a group. I find that in that group it’s more of a focus like people I know in my group, we can ask questions we have about our courses or our work for that day. It’s not so much like general questions like on the #Humberpr, like on Twitter. It’s general questions that’s related to the whole program (I1).

Instagram was not the most preferred social networking site among the participants, but nine of the participants (I1, I2, I4, I5, I6, I7, I8, I10, I12) agreed that they used the tool. To summarize, all interview participants were Twitter users, although Twitter was not necessarily their most favoured or useful tool.

6.6.2.2 Ease of Use

Participants’ were probed to determine their perceived level of difficulty in using social networking sites. Six of the respondents suggested that they were technologically savvy (I3, I12), feeling comfortable with the technology (I6), finding it easy to use (I2), and having the ability to learn (I5). “I’m pretty social media savvy. If there is a new social media site out there, I try to get on it, …Let’s just say that Google + is out there. It’s not being used as much but I know how to use it…good to know to develop skills” (I12). One respondent stated that they are “in love with social media” (I10). Three respondents were less effusive about their technological experiences,
demonstrating that not all social networking sites are created equally, stating that “some of them [social networking sites], I have to work at using” (I4) and that “I’m not a tech-savvy person at all, like I have issues all the time with certain things. That’s why I don’t use Google +, because I don’t get it. But something like Twitter, it’s user friendly, 100%” (I4). Another participant confided “I didn’t know how to use Twitter at first” (I9). Two participants (I3, I7) suggested that people of their generation and younger are generally technologically savvy. Although they did not use the term, the implication was that they are digital natives. According to I7, “I feel like most people my age and coming up behind me have it anyways”. And I3 suggested, “I think everyone who’s born, any millennial, has social media or knows how to use social media by now. If they don’t they are going to learn by the time they are 12”.

Three participants did not address the topic. Overall, Twitter use did not appear to be hindered by technological challenges, suggesting an almost intuitive knowledge of the technology. However, they saw Google Plus as a more challenging tool to navigate. This may demonstrate that social networks are not ubiquitously intuitive, and that an educator using social networking sites may need to account for students’ learning curves.

6.6.2.3 Balance between Reading versus Posting

By establishing the balance between reading versus posting content, it helps to define the peripheral participant as one who is not necessarily disengaged from Twitter use, but who may be engaged by reading, which is a less discernible form of engagement.

A total of nine of the 12 respondents (I2, I3, I4, I5, I6, I7, I8, I10, I11) addressed the balance between reading and posting on Twitter, and all nine agreed that they read more than they tweet or post. Ratios between reading versus posting or tweeting ranged from 70% reading and 30% posting (I2), to 75% reading and 25% posting (I6), with one respondent stating “98% is me reading” (I5). Reasons for reading focused on using Twitter as an information source, by “reading other people’s stuff” (I2) and “use[ing] [Twitter] as another avenue to get information” (I10). One respondent (I11) explained that she is “mostly a reader just trying to gain more knowledge of how to tweet more strategic…to really enhance my tweeting skills.” Another respondent described her Twitter activity as “a lot of retweeting and favouriting. The majority of my content is retweets of things I find interesting and things I want people who follow me to,
like, know about. So definitely a lot of reading…a lot more [reading versus tweeting], that’s fair” (I7).

The ninth respondent referenced her predisposition to reading versus posting, but focused on her Twitter activity prior to starting the PR program at Humber in September. “Yeah, before school I just used Twitter for my own interests, like cooking hashtags, like news, I would just sort of read and find cool websites through Twitter but I never tweeted and I think I tried to tweet and I did it wrong” (I8). The respondent did not address her current Twitter use with respect to reading versus posting.

Three respondents did not address the issue of reading versus posting in their interview responses. The dominance of Twitter engagement through reading may help establish it as an intriguing space to query peripherality as a viable online learning approach.

### 6.6.2.4 Balance between Personal and Professional Twitter Use

Stemming from Kennedy, et al.’s (2008) notion that young people use social media primarily as a living technology for social purposes and that the transition to using social media as a learning technology is not “automatic, nor guaranteed” (p. 119), it seemed appropriate to probe how PR students used social media tools. Comparing the personal and professional/educational uses of Twitter illuminated where on the continuum each student placed themselves, either exclusively using Twitter for personal or professional purposes, or somewhere in between the two. Given that this study focuses on the use of Twitter in PR education, it is presumed that a more professionalized understanding and use of Twitter aids the student not only in a more effective engagement with the tool in school, but also in their prospective workplace.

The respondents’ relationship with Twitter spanned the continuum between personal and professional use. Almost half of the respondents (I3, I5, I6, I7, I11) indicated that they primarily used Twitter for personal use, connecting with friends from both inside and outside of school. Examples include I3, who shared, “I use Twitter if required, but I don’t really see the need. For the most part, when I do post, it’s either within a small circle or I’m commenting on a question that one of my friends posted” (I3), and I5, who shared, “I would say that the communities that I have [on Twitter] would be school, but those are just peers that I am following. Typically, it’s unrelated to the things we are learning” (I5). I6 concurred, declaring that her Twitter use is not
related to her academic experience. “I don’t like to mix the personal and professional on my Twitter…I wouldn’t want someone to follow my name back to my account and creep all my tweets, because they don’t really reflect my education” (I6). I7 offered a ratio of “70% personal and 30% professional”, suggesting that there is a balance to be struck with an online presence. I11 maintained the privacy setting on her account, ensuring that only personal contacts have access to her tweets.

Six respondents described their Twitter journey from a strictly personal relationship to one that establishes a more professionalized online presence. I2 shared,

I started using Twitter just as a personal thing…Then I had to use it for internships and my job. So, it kind of shifted from personal to, like, more. I needed to focus on my…reputation in the future. So it sort of shifted from, like, less personal now and more into PR professional (I2).

I8 shared a similar awareness of professionalizing her online reputation or personal brand, crediting the PR program for her transition. “Just the pressure in this program about your personal brand. So, I’m very conscious of trying to keep that in line and not having anything that someone would say that’s stupid or not professional” (I8). She continued, suggesting Twitter has been a positive experience, “So, I don’t really feel inhibited, I feel like there’s just opportunities if you use it correctly” (I8). I4, I9 and I10 shared a common awareness of Twitter’s potential as a communications tool, each describing her path to adopting more meaningful use. Although they did not overtly declare their revised Twitter use as ‘professional’, they did acknowledge that there was a “right” (I4), “beneficial” (I9), and “appropriate” (I10) way to engage with the tool, which was interpreted, for the purpose of this study, as a shift toward a more sophisticated, perhaps even professional, understanding. Suggesting that she initially used Twitter as a strictly personal tool, I4 shared, “I definitely transitioned because I knew how to use it but not how to use it in the right way. I feel like the first course that we took on Social Digital Media kind of opened up for us, those who used it, how to use it more effectively” (I4). I9 explained that her frequency of Twitter use increased once she appreciated Twitter’s value as a community-building tool.

For the longest time, I think I had three or four tweets and in the last 12 months my use of Twitter has evolved drastically. I started really loving it when Calgary…had the big flood in the summer of 2013, and just how both city officials, police officials, health officials, how they leveraged it, but also how
community members leveraged it…It was very neat how that whole community came together and I started to see the real benefits of Twitter (I9).

She continued the interview by sharing her transition to using Twitter at school. She said, “at Humber [Twitter] was definitely pushed in the first few weeks, #Humberpr…And, if they’re telling me that #Humberpr is useful for these reasons…I’m gonna try it…I’ll do that…dive right in wholeheartedly…so, tweeting a lot more now” (I9). I10 acknowledged that her primary use of Twitter was “for interacting with other people”, but explained that not everything is “Twitter appropriate”, such as “a conversation you just want to have with friends, like a bit more Facebook appropriate” (I10). She advised that her primary use of Twitter was “as another avenue to get information”. Each of these respondents “shifted” (I2), transitioned” (I4), or “evolved” (I9) in their Twitter use from a personal to a more sophisticated, or even professional, engagement with the tool.

Respondent 12 had a slightly different approach, stating that “[t]he Twitter account that I have set up is for personal use and academic. I kind of use it all at once, because what’s the point of having three social media handles and it’s all for you. That’s what I use it for” (I12). She did, however, acknowledge that her Twitter use changed over time from her initial exposure in junior high school.

As time goes on, your friends go on it; celebrities go on it that you want to follow and all that stuff. And I find it more useful now because, oh, I can use this to network with my profs and I can talk to my colleagues on here…So, …from ’08 to now, there’s such a big change in how I use it…(I12).

I12 effectively described the challenges of managing multiple online identities within a space such as Twitter.

I1 was the only interviewee who declared no personal Twitter engagement, stating, “I have utilized Twitter on a professional level…but in my everyday life, I don’t use it at all” (I1).

As interviewees navigate their way from personal to professional use, negotiating multiple audiences and intentions of use, through transitions, evolutions and shifts, it demonstrates that social networking sites are primarily living technologies, and that there are challenges associated with transitioning to an educational or professionalized use of the space, into what Kennedy et al. (2008) referred to as learning technologies. In most cases, students who talked about their
transition from living to learning technologies also referenced learning in their social media
course or at a PR internship or job.

6.6.2.5 PR Students' Uses of Twitter

Probing for common uses of Twitter helps to establish the current role of Twitter in the lives of
young people, highlighting the variety of personal and professional usage intentions. The
following theme categorizes the various ways that Twitter demonstrates usage possibilities that
can lead to learning, both academic and experiential.

Although all respondents used Twitter to some degree, the range of uses varied. Four of the
respondents (I1, I8, I9, I10) stated that they used Twitter during events that included weddings
and conferences, two respondents mentioned using Twitter at concerts (I2, I10), and two
respondents mentioned meeting people from different parts of the world (I2, I3). Ten
respondents (I1, I2, I4, I5, I6, I7, I8, I9, I10, I12) stated that they use Twitter to follow
their interests, which include sports (I7), politics (I4, I9), food (I8), celebrities (I1, I2, I5, I10, I12),
and issues in popular culture (I5, I6, I7). Other uses of Twitter include entering contests (I1, I9,
I10) and connecting with others when TV-binge watching (I1).

My favourite TV shows, like they have hashtags on the bottom. I'm like a huge
TV show fanatic and I used to tweet while I was watching the show because at
certain scenes they have #FavouriteChoice like if the main character is trying to
make a big choice. I was like super invested in each of the characters so; if that
would come up I would do that. (I1)

Tracking current events (I2, I5, I12) and using it in other classes (I8) were two of the academic
uses of Twitter. The motivation for using Twitter tied back to being prepared for class offline.

If whatever is trending worldwide, obviously I look for those. Last week the Oden
birthday, that was trending, about that 13-year-old boy, so I was following
through that, to see what was happening, because I knew that we were going to
talk about that in class. So then it’s good to filter through that because then you
get the news (I12).

Two respondents used Twitter in professional contexts. Although not a Twitter user for personal
purposes, I1 shared that she had experience in event planning. “I would be the ghost person
behind their [client’s] Instagram and Twitter at the time of the event. So I found that very
useful…I was on it all the time, like, if I was in their office or on the premises with them.”  I7
had completed a PR internship, and said “I did handle the social media for the client I was working for…”

One of the most frequently cited benefits associated with Twitter use by the respondents had to do with the ability to initiate and engage in conversation. I2 mentioned that she had completed a PR internship the previous summer, “and I did a lot of social media and I applied what I learned in class, like creating conversation and making it more of a human contact” (I2). Another respondent mentioned that if she wrote an effective tweet, she would initiate engagement among her friends. She shared, “if it’s conversational, it would provoke a response” (I1). I4 agreed that posting relevant content on Twitter would achieve her goal of engaging a discussion on the topic. She shared, “If I’m at a professional event, I would tweet something relevant, hoping to engage some people in the program to talk about what the best practice is…” (I4). In some cases, the conversation that is generated could be transferred offline. One respondent shared that her Twitter engagement landed her some information interviews with PR industry representatives. “I have been able to meet and do some information interviews because of Twitter, so I know professionals are on it, so that’s always at the back of my mind” (I8). Engaging with professors and colleagues was another benefit identified by a respondent. “I find [Twitter] more useful now because…I can use this to network with my profs and I can talk to my colleagues on here (I12).”

Alternatively, I9 found that “any kind of conversation that I have or that I see any of my peers having, it’s with, even if it’s using the #Humberpr handle, it’s to have conversations via Twitter with other people in the post-grad,” which might suggest that neither Twitter nor #Humberpr is consistently encouraging the external networking hoped for in an experiential learning environment.

A significant point raised by a number of interviewees addressed their use of Twitter and #Humberpr for experiential learning opportunities, most particularly internship and career development, and will be addressed in a subsequent section of the Findings chapter.

Common uses of Twitter ranged from following celebrities and entering contests to engaging with key stakeholders, such as peers, faculty, industry practitioners, and prospective employers, through online conversations. Evolving to these more sophisticated situated learning experiences across Twitter prepares students for the PR workplace, where these skills will be required. The downside is that student engagement over Twitter is currently more likely to involve familiar
connections than new networking contacts. The explanation for this could be two-fold. First, students aren’t engaging with stakeholders because they feel they have “nothing to say”, which was addressed as a barrier to engagement and will be addressed in a subsequent section of the Discussion chapter. Second, perhaps faculty and practitioners are shirking their role as models, mentors and social connectors (Remund & Freberg, 2013), which could be rooted in their own reticence toward Twitter use (Seaman & Tinti-Kane, 2013).

6.6.2.6 Teaching Twitter in PR Education

Of the 12 respondents, 10 shared their thoughts on the teaching of Twitter in their respective programs. Seven of the respondents (I2, I4, I5, I6, I7, I8 and I11) shared a positive perspective, declaring that Twitter is a good tool to learn (I5, I6). I2 stated, “I definitely think that it should be learned, like, how to use it properly” (I2). I4 provided what could be viewed as additional detail on the notion of proper Twitter use, by sharing “I think it’s really obvious by the fact that there are so many emerging new media platforms that we do need to grasp an understanding of how to use it, and why we use it and the best ways to use it” (I4). Other respondents shared specific aspects of Twitter use that were taught and some made recommendations on additional areas that could be incorporated into Twitter teaching. I2 shared, “Learning how to analyze your audience and how to write certain things to have a certain effect, I thought that was useful, I like it” (I2). She added learning about analytical tools to the list of areas covered. I11 suggested that she gained value learning about her personal online brand and “tweeting for your own self.” I4 said, “we do take on some clients where we would analyze and we would look and understand what makes their social media work and what makes it not work.” She pointed out the significance of the learning for a PR student, stating, “I feel like I am still discovering the way to identify the tone and personality of a company as opposed to just myself. Because we are going to be using it on behalf of other people, I think that it is important” (I4). Using Twitter for clients was also mentioned by I7, who shared, “The course [social media] was more like how to utilize social media tools to get your clients, like, their company or product out there.” Much of the Twitter-related learning was connected to the students’ prospective role in PR and the application of Twitter to a clients’ needs. With their almost intuitive understanding of the Twitter technology, together with their PR-related training, many of the students believe that they will be entrusted with these social media roles in the workplace.
Interestingly, and relevant to the experiential learning discourse, I9 shared how she heard from an industry guest speaker that the intern or junior role with respect to social media, may be changing.

I believe it was one of our guest speakers made a very insightful comment that it’s starting to change but in the corporate or career world a lot of companies have been hiring summer students and interns to manage their social media accounts. But because this is for a big segment of their audience one of the main points of communication on a frequent basis …that’s a lot of … you’re putting a lot of your reputation in the hands of somebody that you don’t even believe is worth hiring on full time or is that invested in your brand… That really rung true. And I think more and more companies are realizing it because there are a lot of issues happening that we are hearing about in the news, somebody got fired because they had control of the company’s Twitter account, or somebody left, and I don’t know what the password is… (I9)

This insight is perhaps evidence to further support the need for social media education, as more senior PR practitioners reclaim their role as ‘expert’, even in the social media space. By doing so, it emphasizes the need for PR graduates to have a more sophisticated understanding of the tool.

6.6.2.7 Engaging with #Humberpr

Although all students self-reported an awareness of Twitter and some use of the tool, #Humberpr use was not similarly ubiquitous. Of the 12 interviewees, eight stated that they learned about #Humberpr once they arrived at school. Four respondents (I2, I4, I8, I9) were exposed to #Humberpr in class; two gained knowledge of the hashtag from the PR Committee (I5, I6); one learned about it at the program orientation (I7); and one stated “I'm pretty sure it was through somebody from school saying, yeah #Humberpr” (I3). One respondent indicated that they were aware of the hashtag prior to starting the program (I12), while another respondent remained unaware of the hashtag at the time of the interview (I11). Two respondents (I1, I10) didn’t address how they learned about the hashtag in their respective interviews.

6.6.2.8 Using #Humberpr

A total of seven respondents reported using #Humberpr, with all suggesting intermittent or occasional use depending on the relevance of the content. Some benefits of using #Humberpr include gaining PR resources from peers and PR agencies (I2, I4, I7, I8, I9); information about PR-related events (I4, I6, I8); and connecting with alumni and guest speakers (I4, I8, I10). PR resources shared on #Humberpr, by peers, professors and industry people, include tips related to
interviews, networking, and resume writing. I7 added, “…through what I’ve discovered using #Humberpr and finding those [PR] agencies, they tweet a lot about helpful things like tools and tricks of the trade.” I2 shared,

There are some things that sometimes a classmate will tweet and I’ll think it’s cool or someone posted something on Twitter a few weeks ago and it was like ‘cool resume designs’…it was useful because at that time we were doing our resumes and portfolios and I got a lot of ideas from that actually (I2).

Learning about PR events organized by Humber College, but also events held by industry organizations were also a benefit, as described by I6. “I’ve learned about the conferences and the social media conferences from the hashtag, so yeah, it’s useful to read” (I6). I8 adds that this type of sharing “help[s] each other connect to other events” (I8). Respondents also shared the value of connecting with alumni, many of whom are guest speakers in various PR classes, with I8 explaining that she learns how to use the tool (Twitter) by “following Humber grads and kind of seeing how they use it. I’ll use their Twitter profiles as a jumping off point for others, like, LinkedIn” (I8).

The benefits of using #Humberpr appeared substantial, yet I6 confessed, “I think it is useful, I probably should participate in it more, but I don't.”

Another perspective on #Humberpr use was shared by I9 and I10, who agreed with the potential benefits of the hashtag, but found that the reality of engaging with stakeholders didn’t match up. According to I9, “I guess my experience [with #Humberpr] has been more of a bulletin board than a conversation space.” I10 shared the same disappointment.

The way I see it when I’m on there -- it’s more so a post and nothing happens to it. It’s more so, here’s my blurb, that’s all I have to say, enjoy it. Like there’s no…you don’t feel like you’re going to get feedback. I find that like it’s more so like an information-based hashtag (I10).

I10 further explained her point, by offering the following example: Include the following:

You could post to me about these nine resume tips but what if personally actually think that you only like six of them. Or what if you think, oh you should actually try…out of these nine what do you think you should try. Share with everyone else. There’s no, it’s not going anywhere; it goes into the bottom like a black hole (I10).

I10 is eager to engage in conversations that include adding value to the information being shared.
While some respondents valued the role of #Humberpr in their PR education, five of the 12 interviewees stated that they have not engaged with the hashtag. Reasons ranged from relying on alternative social media sites where “Facebook has been more of an influence to me” (I1); to using age as a factor, “I'm old school. I'm a lot older than a lot of the people in the program, so I don't see the need for me to, you know, take pictures of my food and post it” (I3); to admitting to never using #Humberpr, despite its potential benefits, sharing “I’ve never used the Humberpr hashtag. I was actually thinking of using this summer kind of because I’m trying to look for internships and I thought that it would be helpful” (I12). Two of the interviewees were not even aware of the hashtag (I5, I11), with one replying, “It sort of disappeared, I don't even remember people tweeting and using it until this study, until we were asked about it in the survey” (I5).

While almost half of the respondents were not actively engaged with #Humberpr, the remaining participants’ use of the hashtag centered on PR purposes, which may demonstrate that the hashtag carves out more of a professionalized learning space within the larger context of Twitter’s social or living space, and the expectation of this professional online performance remains a challenge for some.

6.6.2.9 Stakeholders Engaged on #Humberpr

Throughout the interviews, eight of the respondents specifically referenced the key stakeholders they encountered, or expected to encounter, on Twitter, and particularly on #Humberpr. The range of stakeholders included their PR student peers, professors, alumni and industry representatives. All eight respondents identified their PR student peers as having a presence on #Humberpr. Seven of the eight respondents identified professors overtly and one implied professor presence by referring to “other people in the PR program” (I4). Six respondents mentioned representatives from the PR industry and/or employers as engaging on the site. Five of the respondents referenced alumni as having a presence on the site.

The respondents’ perspectives on the ratio of representation of these stakeholders varied greatly, as did their attitude toward these ratios.

Two peripheral respondents, both categorized as moderate #Humberpr users, viewed the site as having a range of stakeholders. According to I4,

We spend so much time constricted to interacting with those people in class. So, I feel like because [#Humberpr] opens us up to other people in the PR program and
alumni and people in the industry just through the hashtag…You have a chance to see a broad range of opinions and reach out to those networks and find opportunities you wouldn’t get if you were not using it (I4).

I4 goes on to share, “I’ve had interactions with people who are VPs at companies that I don’t think I would have had an interaction with. They followed me first because they found me on the hashtag” (I4). A second respondent stated that “It’s more of the Humber PR committee that uses it a lot, so that’s how I stay connected” (I7), and agrees with the previous respondent regarding the industry presence, stating that

I’ve had people from agencies that I’ve never had any connections follow me. I had this woman who owns a PR agency in San Diego, like, I’ve never been to San Diego…and she followed me… I think industry people are looking for things, because Humber has such a great reputation for the PR program and their students (I7).

Three peripheral respondents, also categorized as moderate #Humberpr users, were more skeptical in their view of the range of stakeholders on #Humberpr. One respondent shared that “it is right now very clear that there are two demographics to that community – students and instructors. I haven’t seen very many alumni” (I9). However, the respondent did express that some of her classmates understand that “the people they are going to school with are their future career networks” (I9), suggesting that the student peer group has value on the site. The second respondent commented on the frequency of interaction from professors and alumni.

I’ve learned more about my guest speakers…so it’s kind of an avenue to find people that have either been in the program, even learn more about your professors, see what they kind of talk about…But, I don’t know, I find that people are pulling away…there’s not as much traffic as I thought there was going to be…I thought, you know, all teachers would be using it or…you would see more from alumni (I10).

Another respondent shared that, to her, the site “feels student centered. I know that industry professionals do use it and profs, and I think that’s great. But I feel like I’ll use it to its full potential while I’m a student…I feel like it is very current student driven” (I8).

The remaining peripheral respondents who had addressed the issue of stakeholders engaged on #Humberpr were categorized as non-#Humberpr users. It is worth noting that is does not necessarily imply that they are unfamiliar with the site, but rather that they may have been following through reading but not actively engaging with others in the space. One such respondent identified that professors, alumni and employers were on the site, sharing that
“alumni are on it a lot. It’s great because I could talk to this person and I could ask what they thought of the program or I can look them up on LinkedIn and stuff” (I12). The same respondent shared that “I know that everyone’s on Twitter that like if I hashtag anything regarding Humber PR or reaching out to Humber profs …everyone can see it that uses that hashtag, like alumni” (I12). When asked who they thought was part of the #Humberpr community, another respondent suggested “students, professors, I think people who are interested in the program…I think it’s mostly like PR students and like people in the class now and alumni and professors”(I2). When asked if she thought industry practitioners engaged on the site, the response was “I don’t think so unless they were a Humber alumni and they are working in the field now” (I2). The last respondent declared that his knowledge of #Humberpr was limited, “I just heard about it through the PR committee and just now with this [interview]” (I5).

Peripheral participants exhibited a range of stakeholder engagement levels on #Humberpr. Some may have engaged directly with stakeholders through Twitter, but by not using the hashtag left no visible trace. Based on the narratives, there did not appear to be a direct correlation between frequency of hashtag use and extent of stakeholder engagement.

6.6.2.10 Stakeholders as Influencers in PR Learning

Stakeholders influencing PR students include faculty, peers, and external alumni and industry professionals.

**Faculty.** According to several of the interviewees, PR professors were a positive influence on Twitter. I8 shared, “…with Professor K, she’s so supportive she actually retweets and favourites a lot of things students do so it’s almost empowering…Because, I think, ultimately, they’re out to support us on Twitter, the Humber profs” (I8). The respondent went on to say that, “…for me, having that encouragement from staff was actually really good, otherwise I probably wouldn’t have gone on as much or made as many connections” (I8). Another respondent described how their social media professor showed them “how this hashtag should be used…so anything that is posted by way of that is appropriate, is accepted and is welcome. You’re part of the conversation” (I9). A third respondent felt “encouraged” (I12) by her exposure to professors on #Humberpr. She cited an incident where a professor responded to one of her humorous tweets, describing the exchange as “hilarious.” She said, “it’s good to see that side of your professor … It’s good to see a more personal relationship I guess, not too personal, but less student/prof
interaction, and more human-like. So that’s what I like about it” (I12). I12 was asked how this relationship might help her PR education, and she responded, “that doesn’t make it intimidating when you want to approach them about certain things. Like ‘is there any way that I can talk to you about my marks’, because then you know that you can talk to them.” Students appreciated the role of the professor as a coach, but also as a colleague with whom they could engage. Being part of a conversation and having a “human-like” interaction confirms that the respondents appreciated the affordances of social media and the potential for enriched faculty relationships outside of class.

Peers. Peers were identified as playing an active role in engaging PR students in experiential learning opportunities on #Humberpr. I8 acknowledged that the role of peers is useful.

Now that we’re looking for internships, like a lot of people are saying I connected with this person on Twitter, I’m sort of thinking oh yeah I should be on there too. So, it’s hearing from my classmates their experiences, and then that kind of motivates me to go on and see what they’re posting, who they are connecting with (I8).

I8 also added that she sought social approval from her classmates while learning to use Twitter. “Some people have been on Twitter for years and they are very comfortable... They were putting up their hands. So it’s kind of like seeking them out and getting their advice a little bit.” I9 suggests that peers are an important PR network moving forward after graduation.

I would say the people that have really understood the people they are going to school with are their future career networks. There are classmates of mine who have not considered that fact. That we are going to be graduating at the same time. That were are going to be entering the PR world at the same time and I don’t think they really understand the benefits of networking and I don’t think they really understand how their network will help them in their career (I9).

I10 felt that the content she and her colleagues have to post online does not have value for the #Humberpr community.

I don’t find that I’m not welcome. Sometimes I just feel why I post, what information do I have that’s worthy of being hashtagged, other than ‘hey, it’s mid-term season, life sucks’. What more can I bring to the table. Will I be more of an asset when I’m alumni? Will I be more of an asset when I’m on internship...(I10).

Peers are able to assist each other both as information sources and as future networking opportunities. I9 named a specific student as being a key contributor to the hashtag community, and the student was identified in the current research as one of the most active participants on the
hashtag. This demonstrates how expertism in social media is a fluid position and can be appropriated not only by professors and practitioners, but by students as well. However, as I9 points out, not all of her classmates are recognizing the potential benefit of online peer interaction. This further supports the difference between living versus learning technology use, with the online space regarded by many as a social, not an academic or professional, community.

Despite the experiences shared by a number of respondents regarding their Twitter engagement with a variety of stakeholders, which has benefitted them with experiential learning opportunities, I10 remarked, “I’d love to see more things from teachers, employers, alumni, just more so giving their feedback, their advice. …it’s nice to see that connection, and then kind of think, oh, they know what’s going on in the program” (I10). Community building and the resulting experiential learning gained from online interaction is regarded as beneficial but is only possible through the joint engagement of all potential stakeholders. Although there is potential for the variety of stakeholders to strongly influence the PR learning, there is a frustration, or sense of disappointment, that ensues when reply buttons aren’t hit, posts remain unacknowledged and stakeholder engagement is intermittent or non-existent.

Although the Twitter presence of professors and peers can have a positive influence on PR learning, it should be acknowledged that a power dynamic exists, both between professors and students, and among peers. I10 addressed this dynamic, stating,

> [t]here are certain things that have nothing to do with #Humberpr. Like the concert I went to this weekend. That has nothing to do with #Humberpr. I’m not going to hashtag Humberpr to that because it has nothing for my friends to know about, my classmates, my profs. They’re going to probably be like, oh, shouldn’t you be doing your work (I10).

Although the interviewee was addressing the potential for judgement, it was enough to influence her content decisions on the hashtag. The power dynamics among stakeholders were further addressed in subsequent interview themes related to the publicness of Twitter and online brand management.

**External Stakeholders.** Emerging from the interviews was a strong focus on the experiential learning benefits gleaned from the interactions with peers, faculty, alumni and industry professionals on #Humberpr.
Engaging with both internal and external stakeholders to learn about internships and career opportunities was one of the positive outcomes cited by a number of respondents (I2, I8, I10, I11, I12). I12 shared, “I just really like [Humberpr] because if I follow a lot of PR profs there’s always internships being retweeted and info on how to ace interviews and all that stuff. I find that that’s very helpful” (I12).

The promise of direct exposure, not only to professors, but also alumni and prospective employers posting internship opportunities has strongly influenced the use of Humberpr. I10 shared, “…[A] lot of even grads or employers, they will use a hashtag to get out to students. An internship was posted over Twitter with Humberpr because they know PR students are looking for internships”. Respondents appreciated the role of these external stakeholders in their experiential learning by connecting with “people in the industry” (I7), arranging informational interviews (I8), and gaining a variety of industry perspectives. I4 shared,

I think it’s beneficial because it opens up my networks…it opens us up to other people in PR programs and alumni and people in the industry…see a broad range of opinions and reach out to those networks and find opportunities you wouldn’t get if you weren’t using it…I’ve had interactions with VPs…(I4).

I4 added that she felt “if you aren’t on those networks, you aren’t going to be able to progress very far” (I4). One respondent, I11, who currently has a private Twitter account, acknowledged the potential benefit of Twitter in her future learning, sharing “I think when it comes to the time of getting a PR internship, then that’s kind of the time when I’ll expose myself, when it’s closer to the date when I need a specific link and specific path to it” (I11).

I9 expressed concern about the reality of the engagement with external stakeholders on Twitter.

Yes, this helps you follow a guest speaker on Twitter, but what is that going to do. That’s the end. Are you going to reply to them, like ‘hey’ I know you didn’t give out business cards today but what’s your email? Hey, does your firm have…when is the reply button going to be hit. I think it could be involved, could be a career benefit but it’s not in that position yet (I9).

Interviewees appreciated the experiential benefits associated with industry connections, whether they engaged directly with the stakeholders or simply in theory. However, the value of such an experiential opportunity is in the conversation. If the ‘reply’ doesn’t occur on the part of either the student or the other party, engagement doesn’t occur. It remains unclear if the barrier is the students’ lack of confidence that engagement will take place.
6.6.2.11 Public Nature of Twitter

Despite the potential for positive online interactions with #Humberpr stakeholders, respondents acknowledged the publicness of Twitter which allows for the possibility of online activities being monitored by professors and employers, with some respondents finding the practice disconcerting.

I see people, people are so much, they are pretty crude, you know what I mean…like cursing and stuff. If your future employer were to see these posts, what are the chances of you getting a job, you know what I mean? A lot of people, kids, don’t realize that everything that they post is being monitored in some way, shape or form (I3).

I5 shared concern about online monitoring and speculated as to its affect on online behaviour, stating “I don’t think people are as authentic to themselves as if when they don’t have professors, or their peers or industry professionals watching the conversation they are having” (I5). I10 agreed that the perception of perpetual monitoring influences online performance.

It’s pretty overwhelming when you feel like you can’t say certain things or do certain things. It kind of hinders your personality…it’s overwhelming to have those eyes looking on you but then it also helps you make sure that you’re doing things appropriately…But, at times, it would be nice to just post without worrying about, say, a consequence of …posting (I10).

I4 addresses the proposed need for online self-censuring, suggesting that “I think you have to filter out some of your thoughts and maybe what you would say”. However, she adds,

I don't think that you should censor yourself in the way that you shouldn't say things or you can't tweet at companies and talk about if you had a bad experience and not put that because one day you are fearful you might work for an agency or company that deals with that particular company. As long as you don't want to be derogatory and use foul language. It is a representation of yourself” (I4).

I5 shared concern, also using the word ‘fear’, to say, “I guess it was sort of engrained into me earlier on, I never really started using it until the first year of this program. They kind of instilled a little bit of fear in me where it's like everything is permanent. Everyone is seeing what you are posting and one bad post can ruin your entire image”.

I11 confided that she opened a new Twitter account since starting at Humber, and has kept it private. Her rationale was
I accept people that I know and have interest in and I already, before I accept them I look at their page and what they’re tweeting about and really keep it restricted because again like what I said about the brand I’m trying to build, I want to have connections and people follow me that is actually relevant to what I’m tweeting about, not just people that are random because what good is that? (I11).

The respondent acknowledges that this may restrict her exposure to potentially beneficial contacts, but that it is a “safe” approach for her.

Two respondents addressed the option of a private account, with contrary views of privacy. Despite her concerns about the monitoring of online performance, as stated earlier, I10 shared, “if you make your account private, that shows you’re hiding something.” I7 was also against a private Twitter account, explaining:

Yeah, so my tweets, personally, are not private. Like they are not locked or anything like that... anyone can see them if they search my handle... I thought about making them private, but then I thought, that's kind of the whole point, ..., I might tweet about something that someone I never met might find interesting, then they want to follow me to get a similar perspective on things, or maybe a different perspective on things. I think that the fact that it is open and public is a good thing (I7).

Twitter’s publicness is a factor when considering its role in an educational context. The interviewees’ approaches to Twitter use are varied in response to this publicness, from avoidance to caution to acceptance. Students’ awareness of the implications of a misstep in such an open forum is a positive indicator of increasing social media savvy. However, the online gaze may also be a barrier to using Twitter in education and could help explain the reticence many students feel about engaging in a community of PR practice such as #Humberpr.

6.6.2.12 Managing Online Behaviour

Students of public relations, by virtue of their field of study, are taught the importance of managing identities, both corporate and personal. Managing these identities online is equally important and challenging. The following theme addresses the various strategies these PR students have employed to manage their online presence. Acknowledging that PR students may differ from the population at large, I3 noted that the digital native might know how to use social media by the time he or she is 12 years old, “but that doesn’t necessarily mean that a 12-year-old knows how to craft an actual message. I think that separates the average person from the PR
professional.” PR students are learning to manage messages and reputations on behalf of others, but they are also learning to manage their own online reputations or personal brands. I2 indicated awareness of her personal online brand when she shifted her Twitter use from a personal to a professional focus, a move precipitated by her experience using social media in an internship and job. “I needed to focus on …my reputation in the future.” Three respondents agreed on the importance of learning about online branding, not solely as PR practitioners, but personally as well. I11 shared, “We got a lot of insight from [Professor D] about our different uses of Facebook, Twitter, even LinkedIn, Instagram, like, all that connect to really promoting your brand. That was really crucial to know, and is a fundamental aspect of PR for sure.” I5 spoke about his second social media course, where he learned the value of building communities and identifying community influencers, “I think that’s a really cool way to align your branding with someone who has similar branding and being able to connect with an audience that you wouldn’t be able to typically communicate with directly.” I4 called for increased teaching in the area of online branding, “if we can even just work on presenting our own brand, that’s a good thing.” Two respondents demonstrated their own awareness of personal online brands, suggesting that it can sometimes be a barrier for online engagement. When asked what might be a barrier to using #Humberpr, I9 shared, “Posting something that might not align with my brand.” And I8 said, “I think, for me, I’m still figuring out my personal brand and what I feel comfortable with…I think once I have a better sense of what internship I’m going to have, what industry I’m going to be in, I’ll have more confidence to put that out on Twitter.” The notion of an online brand is instilled in PR students, both personally and professionally, and is a consideration when engaging online. The focus on a personal online brand may be more unique to a PR student, which could explain their relative social media-savvy and reluctance to misrepresent themselves on #Humberpr.

Specific strategies for engaging in an online space, particularly for purposes of situated learning, were shared by a number of interviewees. Several respondents (I4, I5, I6, I7, I8, I11) acquiesced to the online gaze of various stakeholders by developing strategies to manage their online behaviour, with the most common approaches being to remain neutral and avoid controversy. One respondent conceded that her online posts needed to be modified for the #Humberpr space, stating “I think you have to filter out some of your thoughts and maybe what you would say…because people in the PR profession are looking at your profiles to see what you are talking about” (I4). The cautionary approach was echoed by I5, who declared, “I watch what I type. If I
post something, I read it over and double check” (I5). I7 depicted this type of online filtering through an event she attended that was poorly run and the fact that she chose not to tweet her negative opinion: “I thought, OK, they might actually see it and I don’t want to be that person where, like oh look what she said. You know what I mean? Especially in the PR industry, you don’t want to say the wrong thing cause that could be what you are known for…” (I7). She explained her approach to tweeting, while considering the publicness of the tool. “Because my tweets are not private and they could go out to anyone, I try to be a little bit more neutral” (I7). I8 and I11 share the desire to remain neutral. According to I11, “You know, you don’t want your boss or other employers to be looking at your tweets and things that you are saying are unfair or not just. So I think it’s very important to keep that neutral relationship with everybody but still have your stand in every issue that arises” (I11). While I8 shared, “I’m always very careful to be…I would say…neutral. That’s important to me. I never really do anything controversial or take a hard opinion on anything on Twitter” (I8). I6 concurred, specifying that she refrains from posting controversial content. “Like when I observe something that I think people would find interesting or if people will agree with me, I’ll tweet it. I won’t tweet something that I think is too, I don’t know, if it’s too controversial or something, I won’t tweet. I’m not there to start fights or anything” (I6). I8 shared the concern about controversial Twitter content.

I’m thinking less about my classmates and more about staff and industry professionals who are reading it. Like, would I want my future employer to read this? What if I took a really hard stand on a controversial issue in government or something, I just wouldn’t want to pigeon hole myself too much in one area (I8).

Parents were another filter used to manage online behaviour. I7 stated “Well, how I think of it…if I’m ok showing it to my parents, then I’m ok to show it to other people” (I7), while I12 included professors, friends, as well as parents, as possible filters.

I never really post anything that my profs would take me aside and question me the next day. Just because, I mean if my parents don’t want to see it, my profs aren’t going to see it, my friends won’t see it. So it doesn’t really discourage me from using it knowing that you guys are on it (I12).

I7 offered an alternative approach to managing online behaviour,

If their Twitter has a lot of things they wouldn’t want industry people or professors to see, I don’t really have that issue, and I guess the best way to combat that is to maybe have a professional one and one, like two separate ones…(I7).
The choice to have two separate accounts was not the prevalent option among interviewees, although maintaining a private account was one student’s approach. Given the challenges students face with managing one account, two is undoubtedly even more challenging, and could be an additional barrier to usage.

The interviewees are demonstrating an understanding of the invisible audience in online communities and are devising ways to negotiate the space safely and effectively, particularly as future PR practitioners. Efforts to be neutral by avoiding controversy appear to be a primary strategy among interviewees for managing their online behaviour. Yet, it could be seen as a form of silencing by the ‘filters’ of parents, professors and PR practitioners that also occupy the online community. The power dynamic inherent in the parental, faculty and industry relationships cannot be denied, however, these ‘filters’ that encourage neutrality and self-censorship are potentially influencing students’ online learning, developing literacies for their personal, academic and corporate selves.

6.6.2.13 Barriers to Using Twitter in Education

While online monitoring may be considered one barrier to using Twitter in PR education, there are others that emerged from the interviews, including: lack of confidence in content; possibility of miscommunication; and pressure of an online audience, among other reasons for a cautiously peripheral and even non-existent presence on Twitter.

All 12 of the interviewees shared their thoughts on potential barriers to participation on #Humberpr, with some common themes emerging.

Four respondents felt that the prospective content they might post on #Humberpr would be inadequate for the online community. According to I1,

   When I just scroll, I find it’s kind of pointless because it’s a lot of like pointless thoughts, like, I feel like unless you are a big organization or someone famous or someone who has something interesting to say, like you shouldn’t have a Twitter account…I just don’t think there is really a point unless there is a big interest in that person or that organization…(I1).

I2 concurs that famous people’s tweets carry more importance. “Yeah, it’s like for someone who is a celebrity, posting small stuff, like people actually care about what they are saying. I think, for me, it’s like no one cares about what I am saying or how I feel about certain things, like I
don’t have that kind of reach” (I2). I3 shared, “I don’t care if other people do it [post on Twitter], so why would anybody care if I did it?” I7 echoed the thoughts about the challenges of sharing entertaining content.

Most of the time I don’t tweet because I don’t think I have anything interesting to say. Not that it’s not interesting…because you only have 140 characters, so you want to make it funny, you want to make it memorable. So sometimes I feel like I don’t have anything really witty or funny to say about this so I’ll just leave it for another time or I’ll just not tweet it (I7).

Rather than not being entertaining, I4 felt the lack of original content was problematic. “I get really tired of seeing people always retweeting things and not coming up with original content. I see a lot of people who just retweet the article that says like ‘5 PR tips’ and there is really nothing to gain from it”. From one perspective, this can be a barrier for those who feel they cannot meet the expectation of producing original content, which would prevent them from posting. Alternatively, the lack of interesting or original content can be a barrier even to peripheral participants engaged in the receptive act of reading.

Three respondents expressed concern that the online community could misconstrue their posted messages, a feasible risk given the public nature of the space and the variety of stakeholders. I5 considered the presence of cyber bullying but felt he had not been “affected” by that. Instead, he said, “I’d be afraid more like if something I said could be misconstrued or people could react negatively” (I5). The concern with having her message misconstrued also resonated with I8, who felt it could be blamed on the nature of the Twitter application. She said, “…because of the 140-character limit…sometimes maybe you feel you can’t fully explain yourself in a tweet” (I8). I10 shared the concern about the nature of the online community, stating that she would

…[R]ather have a one-on-one [connection], because whatever you say on Twitter can be interpreted differently, so it kind of makes you want to refrain, because someone could take that out of context…you have to pick and choose when to say certain things, so those certain conversations are left for conversations in person compared to conversations on Twitter (I10).

The nature of the audience engaged in the online Twitter community may have an impact on online participation. I6 talked about the challenges of having a large Twitter following. “I have like 200 or something followers, like it’s not a big deal. But for people who have a lot of people they have to answer to when they tweet something, I think that might hold them back” (I6). I11 was more concerned with unknown followers.
…Twitter is very accessible to meeting new people but you don’t actually know them. Especially when people give you direct messages like I’ve had in the past, and they meet me on Twitter and I feel uncomfortable, that’s definitely discouraged me to use it (I11).

I12 expressed concern about the pressure exerted by professors on maintaining a professional online presence. “I know a lot of our profs are anal about us, don’t put anything on social media that would jeopardize your future employment, it’s kind of like that’s the standard though”. Although she didn’t overtly state this as a barrier, it is feasible that the high expectations to maintain a professional online performance could potentially hinder engagement.

While the barriers cited by the majority of respondents were related to content and the online environment, I9 shared her concern with the physical act of tweeting in real time.

I’m not that fast at tweeting. When I tweet, I’m conscious of what’s going on around me and whether or not it would be considered rude or if I’m tweeting and then not embracing an experience and then living an experience…find it difficult to be present in both [life and online]…140 characters is a limitation. Sometimes I have an idea and I want to convey it and then I type it out and I realize I’m about 20 characters over…do I take the time right now either to parse it into two tweets or figure out where to cut words… (I9).

The limitations of Twitter itself could lead to a ‘silencing’ effect, since negotiating a textual message may be challenging enough, but the character limitations may be further taxing some students’ literacy skills.

On a different tangent, one respondent criticized faculty for the “mixed messages” they send regarding the use of social media in class.

We’re encouraged to tweet and to have discussions but some of our instructors, some of our classes will not allow us the use of phones. ‘Don’t have your phone out, don’t have your computer out, I don’t want to see any of that’. And it’s very confusing, because they’re telling us social media is very important, you need to use it, but put your phone away…How do you know I’m not tweeting about this, or looking up a term that you just talked about? …why do you assume?” (I9).

The mixed message could be a barrier to engagement, particularly in the context of Twitter use in education. Access to the tool should perhaps not be as prohibitive; instead it should allow students to integrate the tool into their own learning experience as preferred. The issue of social media access in the classroom is potentially a policy issue across an institution, and particularly within a PR program that expects to develop strong social media literacy.
Inadequately entertaining or relevant content is keeping interviewees from more frequently tweeting. In addition, the tangible elements of the tool -- typing tweets restricted to 140 characters, may be an additional impediment to online engagement, but perhaps more of an issue for active tweeters than readers. The lack of original content may be more of a hindrance to peripheral users, who are engaged on the site to access content that proves worthy of their time and effort.

6.6.2.14 Mandatory Twitter Use in PR Education

As a consequence of incorporating Twitter in education, engagement would become a necessity, but the nature of the engagement would have to be considered. While students are currently engaged with Twitter as a living technology, it may be more challenging to prescribe Twitter use in their studies and transition them to using Twitter as a learning technology.

6.6.2.15 Mandating Twitter Use in Class

Probing interviewees on the concept of mandating Twitter use in PR classes, of the 12 interviewees, eight weighed in on the issue. Five agreed with the requirement that students engage on Twitter for a class, with two fourth-year BPR respondents acknowledging that they were already required to engage in their Building Communities fourth-year social media class, stating that “it’s a requirement within the course to actually post content. It’s a good way to develop those skills” (I4). The other three respondents expressed support for the practice of mandating Twitter use. One respondent cited that “a lot of jobs will require you to [post]. I think, like, it’s a PR role, so knowing how to use the social media accounts…I think it’s such a good…platform to use when you have a career in PR” (I6). Another stated, “I definitely think it could be beneficial to teach young people who have not been in this professional setting before, like, to teach them what to put onto social media” (I7). A third respondent appreciated the support from faculty who required Twitter participation, stating “…for me having that encouragement from staff was actually really good, otherwise I probably wouldn’t have gone on as much or made as many connections” (I8). I2 acquiesced to the mandated use of #Humberpr, but admitted that the requirement to use the tool didn’t endear her to it.

Well, it was kind of forced. It would be like in class and they would be like can you guys tweet? Well, it wasn’t forced but they would encourage us to do it and I was like, you know, whatever, I’ll do it…I don’t remember using #Humberpr for anything else, unless I was like in class doing something (I2).
Three respondents took the opposite view of mandatory Twitter use. One respondent shared that her instructor required mandatory tweeting during a specific one-week timeframe. The student expressed frustration stating, “I may not have anything to tweet about this week…I tweet sometimes quite frequently and then other times I don’t…if I’m going to say something, it’s going to be deliberate, thoughtful, strategic” (I9). A second respondent suggested that mandatory use should be restricted to a “temporary assignment [which should be] managed to a point…where it’s not too public but visible to the teacher…I think it shouldn’t pass too much of a boundary, just because we want to protect what we have here and keep it appropriate…you don’t know how harsh it could get out there…” She also said “there are definitely people that are hesitant to do so, because not a lot of people have practice with [social media] and I think that’s really important if you’re going to assign something” (I11). The third respondent didn’t feel that mandatory Twitter use across all courses would “be smart at all cause it would just be distracting” (I12). She did clarify that the social media course would be the exception, if the intention were to use Twitter to monitor online student participation. “I’m on Twitter and I’m also participating in your assignment, so then you can see me doing what you want me to do…so I think that would be great if you could incorporate an assignment and fun things at the same time” (I12).

Some interviewees were supportive of the idea of mandated use if it meant developing content related to PR skill development. Some students, however, would need to be reminded that mandated Twitter use would be a move away from the living use of the tool, and require a more professional approach that may not hold the same appeal or be as ‘fun’.

6.6.2.16 Grading Twitter Use

During the interviewing, a distinction was made between mandating Twitter use and grading online performance. Six respondents directly addressed the issue of grading Twitter use, which they understood to be a level of accountability that goes beyond simply participating in an online space. One of the respondents that was definitively in favour of the practice stated “…in my Building Communities class, there is a requirement to get a grade, so yes of course, that’s the incentive, that’s what would motivate me, my grade’s on the line” (I5). The second supporter of grading suggested “it would be nice [because] some students are already on it while they’re doing their assignment…I know for a fact that if I ever work on things I’m also on social media.
So if I’m being graded for my participation on social media then that’s like killing two birds with one stone” (I12). The third respondent was more resigned, stating that if Twitter activity was mandatory, “I would definitely be open to that, especially if it was for a grade. I couldn’t argue with that, I’d have to follow through” (I11).

Two of the respondents were reticent regarding the practice of grading their Twitter performance. One respondent stated that, “I don’t think that everybody would be on the same level of usage, so it would be very difficult to attach a grade based on, I don’t really know how you would…” (I4). The second respondent stated that grading her Twitter activity “would make me feel a little more pressured, you have to kind of be more popular online to get a grade…” (I8). The student suggested that grading be done on a report rationalizing your participation, “maybe our thoughtfulness behind them”, rather than who “got the most favourites… that would just feel like a popularity contest to me or something” (I8).

The sixth respondent shared that her online Twitter use has not been mandatory since she “was never graded on it” (I9). She suggested that this resulted in a lack of accountability (I9). Nevertheless, the respondent expressed concern over mandating Twitter use, given that she chooses to be strategic in her occasional posts, meaning that she prefers to tweet when and how she chooses.

Although grading Twitter use was not a popular aspect of social media education, the sense from the interviewees was that it could be a requirement of the educational process.

6.6.2.17 Suggestions for Improved Twitter Use in PR Education

Toward the end of most interviews, the respondents were asked if they had any additional comments or suggestions. Nine of the 12 interviewees volunteered suggestions or areas for improving the use of Twitter in PR education. Two respondents addressed the lack of #Humberpr promotion across the programs. I8 recommended introducing #Humberpr to the students prior to the start of classes to encourage use.

…[I]f before we started the Humber PR program, if they could have sent something out in the summer to encourage us to start using it. Because I didn’t know about the Humber PR hashtag until I got here. I think it would have made me more comfortable if I know about it a few months in advance (I8).
I5 felt that the hashtag could have been highlighted more overtly across a variety of communication vehicles.

…[D]efinitely on the bottom of assignments, for different events, like make mention of it. I don't ever remember seeing like saying: join the conversation #Humberpr, or looking for answers? Send your questions to #Humberpr, that would be another approach. I don't ever remember professors addressing the hashtag or seeing it in any internal e-mails we would have got (I5).

Improvements for Twitter use in PR education included learning more about Twitter use in crisis situations. I2 suggested, “I think that would just be useful and beneficial for us as future PR practitioners to be ready for that in the real world” (I2). Also mentioned was learning about best practice use of Twitter in PR, as shared by I8, “I almost think as a student if we did case studies on successful Twitter hashtags or campaigns, that would be interesting.” I2 suggested organizing seminars for more detailed instruction on social media use, explaining, “so, for people who wanted to specialize in social media, maybe we can offer…not a course, but like a seminar or something” (I2). I8 shared, “just overall, it’s been really positive. I almost think in our social media class if we could have had a specific class on Twitter” (I8).

Several respondents suggested having a greater emphasis on ways that Twitter helps communities connect. I7 shared,

I think that one of the things, like specifically the social digital media class we have, I think it would be beneficial to talk more about Twitter. I feel like we didn't really talk about it, like we talked about social media and how it's a good tool for PR professionals, but we really didn't delve into how the hashtagging can create a community or can connect people and get you close to people who are in the industry… I think if it was talked about a little more of like it being an educational tool, then people who do not have it, would feel more inclined to get Twitter (I7).

I3 stressed the need to “…create a community…So, say Humber, and more specifically Humberpr, and structure it so it’s used, rather than just talked about. I can see that benefitting students for sure” (I3). While I3 and I7 felt Twitter wasn’t sufficiently supported in class, I9 found it was

…a venue to share opportunities…a venue to ask questions and share knowledge…I’m absolutely loving it…It’s like, ok, I want to be a sponge, tell me more, tell me more. And, I think, looking forward, there’s no reason that my learning at Humber necessarily has to stop when I graduate. That it can continue in that online medium…(I9).
Seeing Twitter as a space for continued learning offers yet further incentive to promote the experiential learning benefits to students.

I10 perceived that the hashtag isn’t sparking conversations, and offered, “I’d like to see even our professors talking with us or an interaction there”. While I12 was encouraged, “it’s just good knowing I can follow my teachers on Twitter and them being like, oh, I can follow you back, kind of thing. So it’s good” (I12). It may be relevant to note that I10 was a moderate #Humberpr user, while I12 was a non-user, which suggests that I10’s comments are founded in her raised an interesting query:

Who’s behind the hashtag? It’s like who is the Oz? Who is running this whole thing. Yes, we have a PR committee, but other than them posting about the events, are they really behind the hashtag? …someone needs to be behind the counter…you need to have somebody who’s responding.

She was advocating for a #Humberpr community manager, of sorts, to ensure greater engagement among users.

Three respondents simply offered positive feedback on the current teaching approach, suggesting, “I think it’s good that Humber has such an emphasis on Twitter use” (I6), that the PR program should “continue using it” (I4), and that the evolving nature of social media requires continuous study (I5).

Two respondents didn’t agree with continuing to teach Twitter use, with one respondent interpreting the evolving nature of social media as being a challenge for the learning environment to keep pace. “Having workshops and maybe have like a lecture, maybe two or three lectures on it [social media]. Not a course. It’s forever changing…” (I1). Another respondent said,

I think the training isn’t necessarily for social media; it’s just, like, literally being able to write and craft a message. I think that’s more important than the actual Twitter use. Yeah, you may know everything about Twitter, but if you can’t craft a message, it’s not going to be as impactful or effective…Anyone can use Twitter, it’s just typing (I3).

I11 did not address the teaching of Twitter use specifically in her interview responses.

While a number of respondents felt satisfied with the incorporation of Twitter in their PR training, there were clearly some concerns, suggesting that the tool need not be taught. There
were also some suggestions for improvement, including: promoting the hashtag more overtly prior to the start of the PR programs; integrating the hashtag across a greater variety of courses; encouraging engagement with the hashtag after graduation; and engaging with professors more effectively. Overall, respondents appear to embrace the tool, but the role it plays in PR learning is not yet clearly established. On a positive note, however, respondents appeared to welcome more training in Twitter use and Twitter engagement with faculty.

6.6.3 Summary of Interviews

The 12 research participants interviewed for this study were all categorized as peripheral participants based on the research methodology described in the previous chapter. The narratives were coded according to themes that emerged from the focus group and from common threads of information shared by the interviewees. The three key research questions guided the categorization of the themes, with the interview findings primarily addressing Research Questions #2 and #3. Although a number of themes emerged from the findings, the following is a summary of key findings that will be analyzed in the subsequent discussion chapter. The main narrative themes used to address Research Question #2 were: balance between personal and professional Twitter use; PR students uses of Twitter; teaching Twitter in PR education; using #Humberpr; and managing online behavior. The main narrative themes used to address Research Question #3 were: stakeholders engaged on #Humberpr; stakeholders as influencers in PR learning; barriers to using Twitter in education; and the public nature of Twitter.

6.7 Chapter Conclusion

Each of the five phases of the mixed methods research study played a role in addressing the three research questions.

RQ #1: What are the PR students’ perceptions of Twitter use in PR education?

RQ #2: What are peripherally-participating PR students’ experiences in using Twitter in PR education?

RQ #3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?
Tracking #Humberpr was instrumental in categorizing the PR students according to frequency of actual Twitter use and identifying the majority of students as peripheral participants. Actual Twitter use tracking validated the self-reported use of the interviewees. Each of these phases contributed to the integrity of the subsequent findings.

The survey was the primary instrument used to address Research Question #1, finding PR students had Twitter accounts and perceived Twitter as easy to use. A distinction between student perceptions of Twitter use and that of #Humberpr emerged in the findings, which will be probed in the subsequent discussion chapter. The focus group and interview narratives primarily addressed Research Questions #2 and #3, focusing on the peripherally-participating PR students’ experiences with Twitter in education and Twitter’s influence on their learning. Key findings will be addressed in the subsequent discussion chapter.
7 Introduction

Having taught social media for seven years to more than 500 college-level PR students, I identified a radical disconnect between the digital native discourse I was reading about in the media and the realities I observed in my own classes. PR students were actively engaged on social media platforms such as Facebook, Instagram, LinkedIn, YouTube, Tumblr and Twitter, but much of their digitally-native savvy was limited to posts related to their social lives. The students had a limited perspective on social networking and the possibilities it afforded them as students and as future PR practitioners. Some of the interviewees addressed this point, most memorably a student who witnessed the benefit of Twitter during and after the Calgary flooding in the summer of 2013, where she saw Twitter connecting community members together for a very real and important benefit. Despite being a Twitter account holder for a number of years, it took this unique use of the tool for her to gain insight into its possibilities. I witnessed these types of awakenings in my classroom as students came to recognize the communication possibilities afforded by social networking tools such as #Humberpr. In the case of the PR students, #Humberpr established an online community of practice that bound the students, faculty and external stakeholders such as PR practitioners and Humber alumni.

Nevertheless, engagement levels on #Humberpr remained low for all but a few of the students. Some became avid tweeters, leaders in their peer group and program ambassadors with external stakeholders, while most remained on the periphery of the action. Disappointingly, my research found that the same held true for other #Humberpr stakeholders, including faculty.

Given that 310 million monthly active users have accounts on Twitter, I expected that students had an awareness of Twitter and some experience using the tool. The area of interest for my study was the movement from the social or personal use of the tool as a living technology to the academic/professional use of the tool as a learning technology. A further impetus for the study were the insights offered by Ito, et al. (2008) and boyd (2014), acknowledging the role of faculty

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40 Twitter website information accessed from www.about.twitter.com/company, May 9, 2016.
and others in scaffolding student learning to assist students in the transition from living to learning technology use. Adding to the complexity is faculty’s expectation that PR students not only embrace Twitter in the academic space but also understand the tool in a professional capacity. After all, social media literacies have become a requisite skill in the growing field of PR and communications. This factor made Twitter a particularly interesting space, given its allowance for situated learning among a variety of stakeholders.

Lave and Wenger’s (1991) situated learning theory places learning within a social context, rather than as a unidirectional transfer of knowledge. Situated learning is a holistic learning experience, taking place within a community of practice and through interactions not only with learners and experts, but also with “peers and near-peers” (p. 93). Positioning social media knowledge within the context of an online community, this knowledge is arguably best acquired through community interaction, observation, engagement, modeling and mentoring. For PR students, for whom social media is a relevant PR skill, immersion in a learning space such as #Humberpr has value. My study offers a unique perspective on this topic for two reasons: First, it focuses on PR as an academic discipline of study that is under researched. Second, it explores the experiences of the peripherally-participant PR students on #Humberpr, offering them a voice in research, rather than focusing on active users.

The purpose of researching PR students’ perceptions of Twitter use in education is to explore the transition from Twitter use as a living technology to a learning technology, probe students’ use of Twitter in PR education, and investigate the role of the peripheral participant to determine if the periphery is an enabled or problematic position.

I have organized this discussion chapter according to the study’s three research questions and, in addressing each question, also situate my significant findings within relevant theory and contemporary scholarly literature.

7.1 RQ#1: What are the PR Students’ Perceptions of Twitter Use in PR Education?

Through the survey phase of my study, I found that 95% of the PR students surveyed had a Twitter account, reinforcing Twitter’s position as the second most popular social media platform to Facebook. In addition to having access to Twitter, PR students felt confident and enjoyed the
tool, which they overwhelmingly agreed was easy to use. The majority also agreed on the usefulness of Twitter as a PR learning tool, by making PR practitioners more accessible and by developing career-related skills.

7.1.1 #Humberpr as a Community of Practice

Approximately half of the PR student respondents in the survey agreed that they used #Humberpr primarily to learn about PR and to connect with both classmates and industry professionals, suggesting that the hashtag established a community of PR practice. My findings were consistent with that of Lowe and Laffey’s (2011) study involving marketing students, which demonstrated students’ affinity for Twitter and its usefulness for learning.

Establishing Twitter as a community of practice is key to Twitter-in-education discourse. According to Wenger et al. (2009), “the dimensions of a technology-enabled community of practice were community, domain and practice” (p. 11). Community referred to a space of trust and mutual engagement among community members; domain referred to a place of common interest; practice was “how to live knowledge, not just acquire it in the abstract” (p. 7). Based on this definition, and through the perceptions of PR students, #Humberpr meets the criteria of a community of practice: There is trust and mutual engagement, given the degree of sharing and interaction within the hashtag community; the field of public relations is the domain of common interest; and practice refers to the opportunities for engagement with external stakeholders, by informally modeling and mentoring, as well as information sharing. Based on the learning gained through Twitter and #Humberpr, as reported in the survey results and in the subsequent interview narratives, the PR students engaged with the hashtag as a PR community of practice.

The literature reviewed in Chapter 4 positioned Twitter as a prospective community of online practice in a variety of scenarios, many of which involved students and faculty within an academic environment. A limited number of educational studies of Twitter use acknowledged the public nature of Twitter and its ability to facilitate students’ engagement with external stakeholders, although the studies did not focus on these relationships. Two recent studies addressed student interaction with external stakeholders more directly, in the fields of journalism (Hewett, 2013) and health care (Gagnon, 2014). Each of these studies addressed Twitter’s value as a community of practice for their respective academic disciplines, although neither study addressed the peripheral participant’s perspective.
With Twitter engagement almost ubiquitous for surveyed PR students, it is not surprising that the majority of students found Twitter to be a useful PR learning tool. It is also noteworthy that 29 per cent of PR students engaged with #Humberpr during the tracking period, and only half of the students surveyed agreed with the usefulness of #Humberpr. PR students acknowledged that relevant PR learning, including situated learning through observation, engagement and mentoring, can occur on Twitter. However, the gap between these self-reported perceptions of Twitter use and the limited actual engagement on #Humberpr confirm the suspicion first raised in my class. My students’ social media savvy and enthusiasm for Twitter was limited to their social use of the tool and did not necessarily extend to their academic use of #Humberpr. I pursued the reasons for the limited engagement with #Humberpr in Research Question #3.

7.1.2 Significant Findings for Research Question #1

With respect to PR students’ perceptions of Twitter use in PR education, the significant finding in my study is that #Humberpr is a situated learning space that connects students to peers, faculty and external stakeholders to develop academic and professional PR skills. There is limited literature on the topic of Twitter as a situated learning space where students engage with external stakeholders, and there is no literature that focuses specifically on the peripheral participants’ perspective. My study offers a unique perspective by focusing on PR as the academic discipline of study and by exploring the learning experiences of peripherally-participating PR students on #Humberpr.

7.2 RQ#2: What are the Peripherally-Participating Students’ Experiences in Using Twitter in PR Education?

My research distinguishes itself by offering students who are usually silent on a social networking site the opportunity to share their unique online experiences. My study reveals that peripherally-participating students learned about public relations from their experiences using #Humberpr, a Twitter-enabled community of PR stakeholders. The peripherally-participating students determine their own degree of online engagement, develop online literacies to help them navigate their migration from using Twitter as a living to a learning technology, and benefit from connections that extend beyond the #Humberpr community of practice and into a Twitter diaspora. A discussion of the key findings follows.
7.2.1 Online Peripheral Participants are Elusive

Developing a method of tracking actual #Humberpr use and categorizing peripheral participants were key features of my mixed-methods research design, and these features provided the gateway to learning about the online experiences of students who engaged peripherally online. This approach also warranted two literature review chapters in my thesis – Chapter 3 focused on peripheral participant research and Chapter 4 on Twitter-in-education research. Although the focus of my study is on Twitter use in education, the limited number of studies that focused on the peripheral participant’s use of Twitter in education motivated me to conduct additional research into the peripheral experience itself. Many studies contextualize peripheral participation within online communities such as email lists, chat rooms, discussion boards, websites and group lists (Preece, et al., 2004; Sun, et al., 2014; Malinen, 2015; Edelmann, 2013), where researchers could track actual participation. Dennen (2008) identified peripheral participants in an online course. Debatin, et al. (2009) identified peripheral participants on Facebook. However, Few studies to date have tracked actual peripheral behaviour on social networking sites in the context of education, demonstrating that social networking sites differ from other online spaces (Rau, et al., 2008; Crawford, 2009).

Few of the studies included in the Twitter-in-education literature review addressed peripheral participants. Many of the studies required mandatory participation, which disallowed peripheral behaviour, or the studies did not address peripheral participation in the findings. Lowe and Laffey (2011), Rinaldo, et al. (2011), Lin, et al. (2013) and Reed (2015) acknowledged the existence of peripheral participants in their respective studies, but they recommended remediation for these students to full participation. Costa, et al. (2008), Elavsky, et al. (2011) and Soluk and Buddle (2015) accepted that peripheral participants are engaged in learning, even if only observing from the sidelines. Lowe and Laffey (2011) called for future research to examine peripheral users on Twitter and discover their reasons for non- or limited use. Of the studies included in the literature review, none addressed the peripheral students’ experiences with Twitter, where they engaged with external stakeholders beyond the classroom.

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41 It should be noted that Dennen (2009, 2014) studied academic bloggers’ online interactions, including peripheral behaviour, and should be included in SNS discourse. However, with the focus of my paper specifically on Twitter use in education, I restricted the use of Dennen’s studies to my chapter on peripheral participation.
Part of the reason for the limited research in online peripheral participation has been the invisibility of the peripheral participant (Soroko & Rafaeli, 2006; Lee, et al., 2006; Merry & Simon, 2012; Malinen, 2015), particularly when tracking actual use in social networking sites.

7.2.2 Peripheral Participation is a Legitimate Choice

My study found that the majority of Humber PR students were peripheral users of #Humberpr and that the frequency of participation varied depending on their comfort level with Twitter as either a living or a learning technology. Students who were more comfortable using Twitter in an academic setting were more likely to use #Humberpr. My study’s focus was on a Twitter environment where participation was voluntary rather than mandatory, and this focus was an effort to legitimize the role of peripherality in online spaces and not to seek remediation for the peripheral participant. Costa, et al. (2008), Elavsky, et al. (2011) and Soluk and Buddle (2015) shared similar protocols in their Twitter-in-education studies. These studies not only made room for peripheral participation but acknowledged its legitimacy.

Essential to understanding the peripherally-participating PR students’ experience using Twitter in education is Wenger et al.’s (2009) notion that not all community participants aim to be the centre of activity, which explains the range of frequencies of #Humberpr use among the PR students. Crawford (2009) reminds us that just because many students see themselves as digital natives, they aren’t ubiquitously ready, willing, and able to tackle the academic use of social media. Crawford states that, “[d]isparities emerge between what users are technically able to do and the limits of their schedules, desires and bodies” (p. 526). Although most students in my study identified Twitter as useful, fewer students shared the same perspective about #Humberpr, which harkens back to Crawford’s statement. Remaining on the periphery of #Humberpr may serve the needs of students who view #Humberpr with trepidation for various reasons which I will discuss in response to Research Question #3.

7.2.3 Twitter Diaspora Emerges from #Humberpr

My study found that peripheral participants predominantly read posts on #Humberpr to gain knowledge, connections and resources which they shared in other spaces, both online and offline. For example, a PR student might read content on #Humberpr, carry that knowledge into the
classroom, and leave no visible online trace of her presence. I might label her as a peripheral participant on #Humberpr, yet she may be an active participant in the class itself.

The PR student’s experience is an example of a Twitter diaspora, and this builds on Wenger et al.’s (2009) notion that peripheral participants carry learning from one community to another – from an online platform like Twitter to other online platforms like LinkedIn, or to offline spaces such as the workplace or the classroom. Students can enhance class discussions and their overall learning by using the new tips and tricks that migrated with them. I chose the concept of a diaspora, rather than of dispersion, because it connotes the carrying of knowledge, culture and behaviour from the Twitter community of origin, in this case #Humberpr, to alternative spaces.

A number of studies have reinforced Wenger et al.’s (2009) notion of online peripheral participation, where participants carry their learning from one community to another, articulating that visible online traces, such as tweets, are not the only measure of engagement (Arnold & Paulus, 2010; Cranefield, et al., 2015; Reed, 2013). Dennen (2008) concurs that online learning through observation of others is also a legitimate practice. Twitter’s own blog post acknowledged that 40 per cent of users stay on the periphery of engagement, curating a custom news feed instead of actively tweeting (Leetaru, 2015). The fundamental premise behind peripherally-participating PR students’ experiences in using Twitter is the idea that online engagement is not exclusively visible, when reading is the dominant activity over posting and participants engage across a variety of networks.

### 7.2.4 Students Gain PR-Specific Twitter Literacies

My study found that PR students who participated peripherally on #Humberpr gained valuable PR-related literacy skills. Focus group and interview data revealed that students’ transitions from an exclusively social use of Twitter to a more academic use on #Humberpr was frequently precipitated by an internship or volunteer opportunity or by suggestions stemming from the PR faculty. The students stated that they gained awareness about the “right” (I4), “beneficial” (I9) and “appropriate” (I10) way to use the tool, in efforts to avoid being “perceived as stupid or unprofessional” (I8). As students in a public relations program, they learn to be mindful of reputation, both a company’s and their own – and that includes reputation management in the online space. For this reason, many of the students addressed the importance of managing their online behaviour when considering Twitter engagement.
Ensuring neutral and non-controversial statements, tempering their opinions so as not to offend their audience, and engaging in self-censorship helped PR students manage their #Humberpr posts. The students acknowledged that professional online skills were important for networking opportunities with external stakeholders. In my study, I have identified literacies related to online identity performance and neutral messaging, which answers the call by Jenkins, et al. (2009) to develop 21st-century social skills through collaboration and networking. The online experiences of the PR students also addressed Turkle’s (2015) call for the development of stronger conversational skills. These literacies may be unique to PR-savvy students who likely benefitted from the social media course they all needed to complete as part of their respective PR programs.

7.2.5 #Humberpr is a Community of Practice

As discussed in Research Question #1, my study found that public relations students peripherally engaged on #Humberpr benefitted from the presence of a variety of stakeholders related to the PR field, including peers, faculty, alumni and industry practitioners. My study supports Lave and Wenger’s (1991) theory that situated learning is formed from the social interaction within an online space among a diverse population of participants (p.56). As a virtual space, #Humberpr has mixed the voices, interactions, resources and links of a variety of stakeholders (Wenger, et al., 2009) to create a potentially dynamic and resource-rich situated learning environment for PR students (p. 196). The community of practice afforded by #Humberpr contributed to the PR students’ overall learning by connecting all three of the PR programs together. Benefits of engaging with #Humberpr included sharing events and internship opportunities; gaining PR resources from peers and PR agencies, including interview, networking and resume writing tips; learning what one student described as “tools and tricks of the trade” (17); and networking with alumni and guest speakers. Issues related to prospective barriers to engagement, including power dynamics among stakeholders, are addressed in Research Question 3.

7.2.6 Significant Findings for Research Question #2

My study’s original contribution is that, although elusive, peripherally-participating Twitter users were given a voice in research. By doing so, my study found that peripheral participants occupy a legitimate place in PR learning, where they gain literacies and benefits which they carry to other spaces and communities of practice, both online and off.
My study also addressed the call for academic discipline-specific research by focusing on the experiences of public relations students. Public relations, as an academic discipline, encourages and even requires the use of social media to equip students with the necessary professional skills. Given the digital native billing attributed to this generation of young people, it may seem that using social media academically and in the workplace would be, for them, a no-brainer. This might be true if PR only required fundamental social networking skills - in other words, using Twitter as a living technology. As it stands, however, the PR professional’s use of social networking sites has evolved to a more strategic level of information sharing and client conversation, demanding, in turn, a more sophisticated understanding of Twitter. For the PR student, this means evolving from digitally-native expertise in the social ways of Twitter to having a more comprehensive appreciation of Twitter as a learning technology. This transition is rife with challenges and explains the proliferation of peripheral participation in a space such as #Humberpr.

The following section further probes peripherally-participating PR students by examining key influences on their Twitter-enabled learning experiences.

7.3 RQ#3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?

My study revealed three key areas of influence on students’ Twitter use for PR learning: key stakeholder groups; the role of Twitter as a tool; and self-reported barriers to engagement. Some of the influences enabled a peripheral user to see the benefits of #Humberpr. However, negative influences such as low stakeholder engagement and the power dynamics between stakeholders problematized the peripheral-participant’s role in the community of practice. These negative influences marginalized or silenced them, keeping them from engaging with the site. A discussion of each of the three key areas of influence on peripheral participants’ Twitter use in education follows.

7.3.1 Stakeholders’ Influence on #Humberpr

My research found that the influence of #Humberpr stakeholders on peripherally-participating students was primarily positive and enabled students’ PR learning. Operating in a public space, #Humberpr is a connector, bringing a variety of stakeholders into a common domain of interest
and creating an environment for situated learning. Because a career in public relations requires the literacies associated with social media, including the ability to collaborate and network, it is logical that these literacies are best learned in situ within the relevant stakeholder community. This does not, however, imply that active engagement is necessary for learning. Wenger (1998) explained that “identities are constituted not only by what we are but also by what we are not” (p. 164) and stressed that a non-participant in one space is not defined “by non-participation, but is shaped by the series of spaces that they do, and don’t engage in” (p. 165). According to Wenger, peripherality is a state of less-than-full participation, but one that is an enabled position, potentially, but not necessarily, moving to a state of fuller engagement. Wenger contrasted this with marginality, which he defined as a restricted form of participation, suggesting “whether non-participation becomes peripherality or marginality depends on relations of participation that render non-participation either enabling or problematic” (p. 167), pointing out that “there are degrees of each” (p. 167).

Complicating the #Humberpr learning environment is boyd’s (2008a) notion of social convergence, which is “when disparate social contexts are collapsed into one” (p. 18). The state of social collapse can have a positive effect on peripheral participants’ PR learning. Peers, professors, and industry practitioners share resources, mentor others, and provide internship and job opportunities, illustrating Wenger’s point that a learning space can enable those with less-than-full participation. Some interviewees in my study, however, expressed concerns that the publicness of Twitter opens the space to an invisible audience of peers, faculty and industry practitioners that may be judging their every online move, with consequences that could impact reputation and compromise job prospects. Using Wenger’s term, Twitter has the potential to be a problematic or marginalizing space that restricts participation.

The following section discusses each of three key stakeholders on #Humberpr: peers, faculty and PR practitioners. In addition, I have examined their influence on peripherally-participating PR students’ learning, both positive and negative.

7.3.1.1 Peers

My research showed that peers were often a positive force for learning on #Humberpr. PR students shared resources and experiences, connected each other to practitioners, and acted as each other’s future career network. More experienced Twitter users offered advice and social
approval to Twitter newcomers. Some peers were seen as mentors and even experts on the site. As one interviewee described, “[s]ome people have been on Twitter for years and they are very comfortable…They were putting up their hands. So it’s kind of like seeking them out and getting their advice a little bit” (I8). Interviewees identified one particularly active Twitter user as a peer expert on Twitter, having played a significant modeling role to his classmates. These findings were consistent with Lave and Wenger’s (1991) notion of expertism, which suggested that the “teacher/learner dyad” (p. 56) insufficiently captured the relationship of participants in a community of practice, pointing to a space of “essential actors” (p. 56) that included experts, novices, peers and near-peers, and suggested that learning can occur with any of these actors. Thompson (2010) and Arnold and Paulus (2010) commented on Lave and Wenger’s reframed understanding of expertism in situated learning, agreeing that the notion of expertism was “fluid” (Thompson, 2010, p. 370), and leadership could be “contestable” (Arnold & Paulus, 2010, p.137), although each specified that this applied in workplaces outside of education. My study offers an example where expertism may be a fluid notion in an informal academic environment. Albeit, the student-as-expert experience was limited to a few individuals. My study also found evidence of a misplaced notion of expertism among the group, who overwhelmingly considered themselves technologically savvy, with one focus group respondent sharing that their generation’s social media-savvy leaves industry “begging” (FG5) for their skills. However, another interviewee countered this notion by sharing a guest speaker’s feedback that entry-level PR positions are changing, in that companies will no longer hand the social media reins to the junior person, but treat that role with the same strategic sophistication of other communication approaches. With PR industry people re-claiming their role as expert communicators within the social media realm and debunking the digital native status of new graduates, PR graduates may require a shift in self-perception. Faculty can initiate this shift in perception through effective social media instruction while at school to better prepare students for the expectations of the workplace.

In terms of the peripheral participants, my study found that peers who engaged with #Humberpr directly or provided encouragement offline were an enabling force. However, some students saw the lack of peer engagement on #Humberpr as problematic. Some students mentioned their posts weren’t being retweeted, reply buttons weren’t hit, there was little original content posted, and commentary was weak. One particular interviewee talked about the lack of feedback among
peers, where nothing appeared to happen to the tweets, just silence. The interview narratives suggest that there is a dearth of critical reflection and support among peers in Twitter posts, which has a negative impact on #Humberpr engagement.

7.3.1.2 Faculty

My research showed that respondents saw faculty as another positive influence with respect to Twitter use. A few faculty would model online behaviour by retweeting and favouriting student posts, which one student reported as being empowering. Faculty taught PR-related skills, such as personal online branding, writing, corporate social media best practices and the application of analytics, in an offline environment, with the intention of applying those skills to online practice. Faculty engagement has proven to have a positive impact on students’ online engagement, as shown in studies such as Dunlap and Lowenthal (2009b), Junco, et al. (2010), Lomicka and Lord (2012) and Bledsoe, et al. (2014).

Consequently, student engagement suffers when faculty disengage from social media. An interviewee shared, “They [faculty] are telling us social media is very important, you need to use it, but put your phone away... How do you know I’m not tweeting about this, or looking up a term that you just talked about?” (I9). Faculty’s inconsistent embrace of social media in their classrooms left students with “mixed messages” (I9). My study found that faculty have limited engagement with Twitter in teaching, which is consistent with Seaman and Tinti-Kane’s (2013) study that found instructors’ use of social media tools in teaching lagged behind their personal and professional use (p. 5). Knight and Kay (2016) compared academics and students’ use of Twitter in education, also finding that no academics used Twitter in their teaching sessions (p. 150). Faculty’s limited engagement with Twitter in teaching was particularly problematic given their potential role as social connectors, “building and leveraging social networks to implement pedagogical methods much richer and dynamic than the traditional classroom experience” (Remund & Freberg, 2013, p. 2). In a situated learning space such as #Humberpr, more robust and consistent student-faculty engagement would facilitate a richer PR learning experience.

7.3.1.3 External Stakeholders

Students particularly coveted external stakeholders, such as alumni and practitioners, on Twitter, with my research showing the external stakeholders were the gateway to volunteer opportunities, internships, and, ultimately, to PR jobs. In addition, interviewees remarked on the benefits of
having alumni and practitioners present on #Humberpr, including connecting with people in the industry, arranging informational interviews and gaining a variety of industry perspectives. One interviewee shared, “You have a chance to see a broad range of opinions and reach out to those networks and find opportunities you wouldn’t get if you were not using it” (I4). Students cited evidence of such interactions where they had VPs and international practitioners following them on Twitter. My literature review identified five Twitter-in-education studies that addressed the interaction of students with external stakeholders (Rinaldo, et al., 2011; Dunlap & Lowenthal, 2009b; Veletsianos, 2011; Hewett, 2013; Gagnon, 2014). Of these, only Hewett and Gagnon explored the role of Twitter in connecting students to mentors within their respective academic disciplines. However, neither of these studies addressed the peripheral participant perspective, specifically.

7.3.1.4 The Challenges of Limited Stakeholder Engagement

My research found that the lackluster faculty and practitioner engagement on #Humberpr was disappointing to students, who would prefer a greater presence by faculty and practitioners.42 One student commented on the low level of traffic on the site (I10), while another said, “I’d love to see more things from teachers, employers, alumni…giving their feedback, their advice” (I9). The students’ call for greater online engagement with faculty and practitioners suggests that the influence of these stakeholders on their learning experience enables their participation on the site, regardless of whether that participation is visible or not. The students in my study felt that by establishing conversation with stakeholders, especially faculty and industry practitioners, they gained a comfort level that crossed the boundaries of Twitter, spilling into other online spaces and even offline, into the classroom or the workplace. One interviewee commented that establishing a comfort level with faculty on Twitter gave her confidence to approach faculty on other issues, such as her grades. Recent Twitter-in-education studies that discussed situated online learning opportunities identified that conversation among students and external

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42 Qui, Hewitt and Brett’s (2014) study of note-taking in large and small student group configurations in “online discourse-intensive distance education courses” (p. 289) also found instructor participation to be a significant contribution to learning. Based on their findings, Qui, et al. recommended that instructors maintain a visible presence in the discourse in an effort to guide and model quality note taking required for success in the course (p. 300). Qui, et al.’s study echoes the findings in my thesis regarding the importance of instructor engagement in online learning spaces.
stakeholders was a desirable outcome of Twitter interaction (Gagnon, 2014; Grosseck & Holotescu, 2012; Veletsiano, 2011). The call for greater faculty engagement is consistent with DeGroot, et al.’s (2015) study into the effects of educational Twitter posts on students’ perceptions of instructor credibility. DeGroot, et al. found that some students commented that they see faculty as “human beings” (p. 14) when they engage with them on Twitter. However, not all students in DeGroot’s study agreed, suggesting that the “student/teacher relationship should be left inside of school, not social life or social media” (p. 14). Turkle (2015) encourages greater classroom conversation as a teaching strategy, which, as the current Twitter-in-education research suggests, students may facilitate through initial engagement on Twitter. My research findings demonstrate the benefit of Twitter’s affordance of two-way communication and associated social convergence as an opportunity for human contact and interaction in an online CoP such as #Humberpr.

7.3.1.5 The Effect of the Stakeholder’s Gaze

The majority of my study’s respondents identified the gaze of peers, professors, practitioners, and even parents as influencing their online performance, although not necessarily negatively. The gaze served as a filter, encouraging them to question the content of their posts. Strategies in managing their online identities included keeping posts neutral and non-controversial. One respondent suggested that self-censoring is a strategy to combat the vulnerability they feel online, ensuring that their comments aren’t derogatory or use foul language. In response to this seemingly oppressive gaze, one respondent articulated, “It’s overwhelming to have those eyes looking on you, but then it also helps you make sure that you’re doing things appropriately” (I10). My findings were consistent with Ferguson and Wheat (2015), who found that early career researchers engaging with mentors on Twitter also experienced “fear of misinterpretation, misrepresentation, confrontation” (p. 10). Reflecting upon the relationship of PR students, particularly peripherally-participating students, with #Humberpr, I considered Wenger’s (1998) interpretation of non-participation as peripheral or marginal. Despite the fact that faculty and practitioners wield power over students, their gaze can have an enabling effect by providing students with resources, networking opportunities and job prospects. When acting as filters, encouraging students to act neutrally, conscientiously, and to self-censor, these stakeholders are helping students find their way along the continuum from using Twitter as a living to a learning
technology. Future research could further investigate the gaze of online stakeholders in the context of surveillance and privacy discourse.

7.3.1.6 Summary – The Influence of Key Stakeholders

My study offered an intentional investigation into peripheral participants’ experiences with the key stakeholders on #Humberpr and found that peers, faculty and practitioners had a generally positive influence on the use of Twitter in PR learning.

Despite the fact that they were peripherally participating on #Humberpr, students were observing the stakeholders, a legitimate peripheral activity as indicated by recent literature (Costa, et al. 2008; Dennen, 2008; Elavsky, et al., 2011; Ebner, et al., 2010; Soluk & Buddle, 2015). They spoke with the stakeholders in classrooms, in workplaces, and on alternative online platforms such as Facebook and LinkedIn, developing human connections. And they gained knowledge through these activities. As a result, a visible online presence on #Humberpr should not be the sole measure of Twitter’s influence on PR learning (Arnold & Paulus, 2010; Cranefield, et al., 2015), nor should increased engagement necessarily be the goal. Jenkins, et al. (2016) articulated that online participation requires strong social skills “to understand a social situation, to connect with others to build an audience and to have enough social status to speak without consequences” (p. 22). Students in the study identified a few of their peers as Twitter experts who had the social status to engage confidently on Twitter and without negative consequences. There were, however, positive consequences such as valuable networking opportunities with practitioners. Nevertheless, we need to teach most students to battle the social convergence and context collapse of online spaces and develop the requisite social skills to assert their own voices and feel comfortable speaking in these contexts. The associated power dynamics inherent between student-faculty and student-practitioner should not be ignored. But, in a situated learning environment where expertise is fluid (Thompson, 2010) and leadership is contestable (Arnold & Paulus, 2010), a skilled PR student might resist being silenced by the presence of power-wielding stakeholders. In fact, it may be the absence of these players that has a stronger silencing effect, when, in their absence, they are not mentoring, engaging, modeling or shaping learning.

In the following section, I probe the reasons that students remain predominantly silent in academically-focused online spaces.
7.3.2 Self-Reported Barriers for #Humberpr Engagement

My research found that the dominant self-reported barrier to Twitter and #Humberpr engagement was having “nothing to say”, accounting for 30 per cent of responses. Additional prospective barriers, cited in the survey, included the following: reading and browsing is enough; not enough time to post; and no perceived value to posting. Overall, my findings related to the identification of barriers were consistent with Nonnecke et al.’s (2004) study, on which I had based the barrier-related survey questions. However, the weighting of the importance of some of the barriers varied between the two studies. While the percentage of respondents citing “nothing to say” as a reason for not posting was consistent between the two studies, the primary reason that emerged for not posting in Nonnecke, et al.’s (2004) study was that respondents felt they gained sufficient information by reading the contributions of others (p. 4). The second most important reason was that they were still learning from the group. A possible explanation for the disparities between the two studies in the weighting of the self-reported barriers could be the fact that Nonnecke, et al.’s study was of an online forum, while my study was of a social networking site. Exploring the attributes of these and other research spaces may be a direction for further research.

Interview narratives in my study supported the sentiment of having “nothing to say”, with several interviewees sharing that they felt they lacked credibility to share original content on Twitter. One respondent stated, “I don’t feel that I’m not welcome. Sometimes I just feel why post, what information do I have that’s worthy of being hashtagged…will I be more of an asset when I’m alumni?” (I10). Another felt that only large organizations and famous people should be on Twitter. Yet another respondent felt challenged to make her tweets entertaining and relevant: “When I have a tweet, like, ready to send, I’m like, ok, is this tweet going to get any love? If it’s not going to get any love, then there is no point in putting it out there” (FG4).

Based on these narratives, the students demonstrated a lack of confidence in their critical literacy skills required for navigating an online community of practice, including textual literacy, essentially reading and writing, and social skills for collaboration and networking (Jenkins, et al., 2009). They may also lack qualities of effective online participation such as the skill to contribute effectively and the emotional resilience to handle negative feedback (Jenkins, et al., 2016). The development of these vital 21st-century skills will help students find their voices and, hopefully, something to say.
Additional reasons for having “nothing to say” online may be related to the students’ location along the living-learning Twitter continuum. Students were more resistant to #Humberpr engagement as they perceived the hashtag community of practice as an academic and professional space rather than a comfortable social space. Both Reed (2013) and Knight and Kay (2016) support the notion that academic use of social networking sites complicates student engagement. Reed studied students’ perceptions of Twitter use in informal higher education learning and questioned whether formalizing the use of social networking tools may cause students to disengage from the tools (p. 18). Knight and Kay compared academics’ and students’ use of Twitter in an educational context, finding that students were unlikely to be motivated to engage with social networking sites when tutors failed to encourage the use of social networking tools during teaching sessions (p. 150). In each study, the academic use of an SNS appeared to disengage students, particularly when faculty failed to support the development of the requisite literacy skills.

7.3.2.1 Summary – Self-Reported Barriers

The students in my study’s community of PR practice read more than they posted, and they immersed themselves in a situated learning space with a variety of stakeholders that could potentially serve as models and mentors, so it is surprising to think that these purported future professional communicators might have “nothing to say” in terms of self-reported barriers. My findings were consistent with Nonnecke, et al.’s (2004) study on which the barrier-related questions were based. Having “nothing to say”, in fact, suggests the possibility of a deficiency in both critical thinking and critical literacy skills among these students, which may be marginalizing them into silence.

7.3.3 The Role of Twitter as a Tool

In my research, peripherally-participating PR students shared that the publicness of #Humberpr, together with attributes such as the 140-character limit and hashtag conventions, influenced their decision whether to migrate from Twitter as a social tool to Twitter as an academic tool in the form of #Humberpr. My research supports the notion that Twitter is a useful tool in PR learning. Twitter is easy to use, and, as evidenced by the over 310 million active monthly users, it remains a social or living technology to most. Without adopting a technologically deterministic view of Twitter and #Humberpr, these aspects of Twitter as a tool may pose potential barriers to Twitter
use in PR learning, and they warrant exploration. Demographic differences among Twitter
account holders may also act as barriers. While my research did not focus on demographic
diversity among peripheral participants on Twitter, it is useful to point out some of the findings
that could influence Twitter use.

Benkler (2006) stated in his commentary about technological determinism that “different
technologies make different kinds of human action and interaction easier or harder to perform”
(p. 17), suggesting more people are likely to adopt those things that are easy to do, and the
opposite is also true. To Benkler’s point, my research asserted that the majority of PR students
found Twitter to be an enjoyable tool that they felt confident using, and they perceived Twitter to
be useful for PR learning. As a result, 95 per cent of the PR students with confirmed Twitter
accounts have embraced Twitter. #Humberpr, used as a learning technology and, arguably, a
‘harder’ space for engagement, was less enthusiastically embraced. Approximately half of the
students agreed that they followed #Humberpr for the purpose of learning about PR and making
connections with peers and industry professionals.

As demonstrated in my research, most students chose to remain on the Twitter periphery when
asked to engage on #Humberpr. The following section explores the aspects of Twitter that
influence peripherally-participating PR students’ experiences with the academically-oriented
#Humberpr.

7.3.3.1 Public Nature of Twitter

According to my research, the majority of the students interviewed were comfortable with
Twitter’s publicness, considering it “a good thing” (17) and that privacy on Twitter “meant you
were hiding something” (110). In fact, the issue of online privacy did not emerge as a significant
theme in the research. The survey results showed that while the majority of students were aware
that social media sites encouraged them to share their personal data, and they used privacy
settings on Facebook, the students’ responses to their use of privacy settings on Twitter were
highly divisive, appearing on both ends of the Likert scale. When asked why they may not be
posting on Twitter, only 3% of the survey sample cited privacy as a reason. Only one student in
the interview research maintained a private Twitter account, and she did this because it made her
feel safer. Another was concerned that the excessive disclosure often encouraged in social media
sites might compromise her safety. Another student shared that he was fearful of the online
permanence. In the instances of students who elected a private or silent approach to Twitter, they were proactively protecting themselves against the publicness of the tool and managing their online identities accordingly. Although probing privacy as a potential barrier to Twitter use in education would be worthwhile in future research, my study did not indicate this was a primary student concern.

7.3.3.2 Twitter’s 140-Character Limit

My research found that the pressure to perform succinctly and in a timely manner is a possible hindrance to Twitter engagement. One student shared, “you only have 140 characters, so you want to make it funny, you want to make it memorable. So sometimes I feel like I don’t have anything really witty or funny to say about this so I’ll just leave it for another time or I’ll just not tweet it” (I7). Another student identified the challenge of tweeting in real time while remaining aware of her surroundings and not being rude. She shared, “[I] find it difficult to be present in both [life and online]” (I9). Textual literacy, including message crafting and timing on Twitter, are valued 21st-century skills (Jenkins, et al., 2016). Future research assessing Twitter content may advance our understanding of the shortfalls in online textual literacy.

7.3.3.3 Hashtagging is a Habit

The notion that hashtagging is an acquired habit was addressed by a student. Her point was that if you fall into the habit of not hashtagging, then it is less likely to be incorporated into tweets, even when appropriate. The student’s comment resonated with previous literature, where Malinen (2015) shared that “[h]abit plays a stronger role especially in tasks that require less cognitive effort; therefore, habit is linked to light-weight content production, such as ratings and messages…” (p. 233). Greater habit forming behaviour and practice with the tool may encourage higher engagement among those with a proclivity to be visible.

7.3.3.4 Demographics influencing Twitter use

While my research did not focus on demographic diversity in Twitter use, my survey probed for participants’ age, gender, program of study and membership in categories that included: disabled, aboriginal, LGBTQ, or visible minority or racialized group.

The average age of my study sample was 23.5 years, and ranged from 19-51 years. The sample skewed heavily female (78.3%), which is consistent with both the Humber PR program and the
PR industry weightings, as reported in Chapter 6. My findings revealed a binary male/female gender categorization, despite the fact that my survey offered a third alternative.

My study also probed membership in a variety of categories I elected to label as minority groups, including the following: disabled, aboriginal, LGBTQ and visible minority. My findings revealed a significant difference between self-reported minority respondents and non-minority respondents on two questions related to the topic of using #Humberpr as a tool for learning about PR, which represented two of the 77 survey questions. Minority respondents expressed diverse viewpoints about the effectiveness of #Humberpr in learning about PR, while non-minority responses were more homogeneous in their agreement with #Humberpr’s usefulness in PR learning. While this factor alone cannot contribute a substantive demographic story about Twitter use, it calls for further investigation into demographic diversity on Twitter.

The majority of the studies in Twitter use in education included in the literature review captured similar demographics, although it is worth noting that no other study in the literature review addressed disabled or LGBTQ students. However, few of these studies used these demographics within their research study. Two studies (Costa, et al., 2008; Johnson, 2011) found no significant difference in their results based on age, gender or academic background. There is currently limited research into demographic diversity among peripheral participants using Twitter in education, making it a challenging area of study. Future research is required to determine if demographics influence academic Twitter use.

### 7.3.3.5 Summary of Twitter as a Tool

Despite the tool-related challenges students face, and which potentially inhibit online engagement, one interviewee articulated that she “didn’t really feel inhibited, I feel like there’s just opportunities if you use it correctly” (I8). The public nature of Twitter, together with other attributes of #Humberpr, influences PR students’ learning, causing some to avoid the tool, others to approach it cautiously, while a few have accepted its role as a learning technology and decided to engage with it “correctly” (I8).

While aspects of Twitter as a tool may keep some students on the periphery, the majority are comfortable with Twitter. My research indicates that it is more likely the literacies associated with communication, rather than those associated with the navigation of the tool, that are
potentially silencing, rather than enabling, students’ educational and professional participation with Twitter.

### 7.4 Chapter Conclusion

Social networking sites as communities of practice for informal learning are under-researched in educational discourse. My study contributes to this discourse in three important ways.

First, my study acknowledges that the use of public and networked SNSs in education is wrought with challenges, as evidenced by students’ difficulty transitioning from “living” (Kennedy, et al., 2008, p. 119) to “learning” (p. 119) technology use.

Second, my study explored a hashtag community of practice, #Humberpr, which represented a situated learning space connecting students to peers, faculty and, most importantly, external stakeholders, to develop academic and professional PR skills. Discovering that the majority of students refrained from active engagement on the site, my study gave a voice to these peripherally-participating students’, legitimizing their invisible online experiences.

Third, my study identifies key influences on the learning of peripherally-participating PR students, noting that the influences can be enabling or problematic. Through engagement on the hashtag, stakeholders - including peers, faculty and practitioners - positively impacted students through shared resources, networking and conversation that interviewees referred to as “human contact” (I2). Students were building both online and offline relationships as a result of this contact. The attributes of Twitter as a tool also influenced online engagement, with the majority of students confidently using a tool they found easy and useful for PR learning. However, there were barriers that stood in the way of using Twitter for situated PR learning. Self-reporting that they had “nothing to say” was the main barrier to Twitter engagement among students. It may be no wonder that Twitter absence is the chosen route. After all, Twitter is a public space where one leaves a permanent footprint, and Twitter requires users to produce succinct and timely tweets and encourages users to be entertaining and relevant to their invisible audiences. These audiences may include faculty and practitioners that cast an intimidating gaze. Students have their hands full navigating Twitter, and more so, navigating an academic and professional space such as #Humberpr. Amidst these challenges, students face yet another barrier – the peripheral participation of peers, faculty and practitioners on a SNS intended for building community
(Arnold & Paulus, 2010) and networking (Crawford, 2009). Faculty and practitioners, and sometimes even peers, can facilitate online connections (Cranefield, et al., 2015; Lai & Chen, 2014), which develop the skills of collaboration, networking and conversation identified as vital for digital youth (Jenkins, et al., 2016; Turkle, 2015). The peripheral participation of faculty and practitioners on #Humberpr leaves students on their own to negotiate the transition between using Twitter as a living technology and #Humberpr as a learning technology.

Essentially, peripheral participation of the majority of students is a natural consequence of the lack of scaffolding available to them on under-populated communities of practice. My study extends to a broader higher education context, wherever situated learning, such as networking and mentoring with external stakeholders, takes place.
Chapter 8
Conclusions and Recommendations

8 Introduction

Tweeting at an event, following a sports figure or entering a contest, young people have been swept up by the participatory culture fostered by social networking sites, and have incorporated Twitter firmly into their social lives. With over 310 million monthly account holders\textsuperscript{43}, Twitter is indisputably the second most popular social networking site after Facebook among purported digital natives. Yet when asked to engage with the tool for academically-motivated purposes, these young people do not ubiquitously embrace Twitter. In fact, in my own Humber public relations classes, students exhibited a reticence to engage in Twitter, the phenomenon that inspired me to ask – Are there perks to being a Twitter wallflower?

My research thus set out to explore PR students’ experiences using Twitter in their PR learning, with a focus on the wallflower, known more commonly as a “lurker”\textsuperscript{44}, or as I have emphasized, a peripheral participant. The importance of my study to the field of public relations is that Twitter is a vital new communications tool, and the industry expects PR graduates to be knowledgeable in its professionalized use. However, the majority of PR students only engaged peripherally with #Humberpr, the established situated learning space with access to a variety of stakeholders that includes PR practitioners. Although a growing body of current research is emerging on the topic of Twitter use in higher education, the focus of that research is primarily on student-faculty interaction. There is limited research on the peripheral student participant in social networking sites, and even more limited research on student-practitioner interaction. To explore the PR students’ experiences on #Humberpr, I embarked on addressing the following three research questions:

RQ#1: What are the PR students’ perceptions of Twitter use in PR education?

\textsuperscript{43} Twitter website information accessed from www.about.twitter.com/company, May 9, 2016

\textsuperscript{44} The term, lurker, is explored extensively in Chapter 3.
RQ#2: What are peripherally-participating PR students’ experiences in using Twitter in PR education?

RQ#3: In what ways does the use of Twitter influence the learning of peripherally-participating PR students?

The following chapter considers the implications of my empirical findings for the use of Twitter in PR learning and in higher education more broadly. The chapter also discusses the implications of my findings, outlines the limitations of the study, and offers recommendations for future research.

8.1 RQ#1 – PR Students’ Perceptions of Twitter in Education

“I think everyone who’s born, any millennial, has social media or knows how to use social media by now. If they don’t, they are going to learn by the time they are 12” (I3).

The purpose of Research Question #1 was to distinguish student perceptions of general Twitter use from their perceptions of tagging tweets with #Humberpr. As illustrated by the quote from interviewee I3, the findings confirmed that Twitter use was almost ubiquitous among the survey participants. Not surprisingly, #Humberpr use was significantly lower. The data supported the notion that while Twitter represents the social or living use of the technology, #Humberpr represents the academic or learning use (Kennedy, et al., 2008). #Humberpr established itself as a situated learning environment that hosted tweets by students, faculty and practitioners. The significance of #Humberpr to my research is precisely this connection between students and stakeholders beyond the classroom. The allure of Lave and Wenger’s (1991) situated learning theory is the premise of “rescu[ing] the idea of apprenticeship” (p. 29). Although the theory has evolved away from the apprenticeship model to include a broader concept of situated learning, the notion of a learning community of student-apprentices engaging with practitioner-mentors applied to my study. The CoP affords the learner access to a differentiated cluster of mentors, which Lave and Wenger (1991) described as faculty, experts, “peers and near-peers” (p. 22). Access to mentorship is key to public relations learning, as well as to the development of 21st-century skills such as collaboration and networking (Jenkins, et al., 2016). It is the access that #Humberpr provides to PR students which inspired my research, exploring the experience of the peripherally-engaged users of #Humberpr. Current literature is limited on student-practitioner
interaction on social networking sites, and the invisibility of peripheral participants further limits the available research. Establishing #Humberpr as a situated learning space which connects PR students to the wider world and identifies the peripheral students within the space was a significant contribution to the research, paving the way to address the subsequent two research questions.

8.2 RQ2: Peripherally-Participating PR Students’ Experiences in Using Twitter for Learning

“…through what I’ve discovered using #Humberpr and finding those [PR] agencies, they tweet a lot about helpful things like tools and tricks of the trade.”

(I7)

By gaining direct access to peripheral participants, it was possible to probe students’ actual, rather than self-reported, experiences with #Humberpr. Narratives such as the quote above from interviewee I7, illuminated the experience of those who observed the rich content on #Humberpr but did not leave visible traces of their online activities. The study found that PR students not only learned tools and tricks of the trade but gained relevant PR-specific literacies such as tweeting with a PR industry-appropriate tone, tempering of opinions and engaging in self-censorship.

There is an increasing number of Twitter-in-education studies, with most focusing on the student-faculty interaction. There are a few studies that address the student-practitioner interaction, but they do not use the lens of the peripheral participant in the context of Twitter-in-education research. Peripheral participants are rarely the focus of the research in Twitter use in education, and when they are the focus, it is usually in the context of remediating them to full engagement rather than recognizing them as legitimate players in the learning space. My research sought to legitimize the role of the peripheral participant by offering them a voice in the research. Validating the peripheral experience is in keeping with Wenger’s (1998) evolution of situated learning theory, which recognized that we all occupy the various spaces of our lives with varying degrees of engagement, and in many of these spaces we are less-than-full participants. As demonstrated by the research study participants, learning from one space, where they may be peripheral participants, is often transferred to other spaces. Provocatively labelled as the Twitter diaspora, this transfer means their participation may be fuller in other spaces such as LinkedIn or the classroom. My study findings are important to PR learning because they demonstrate that
educators should not judge students’ online engagement and learning solely on the visible traces they leave in social networking spaces. As indicated by peripheral-participant and interviewee I7 in the quote that introduced this section, she reassures us that she has discovered helpful PR-related information on #Humberpr.

8.3 RQ#3: Influences on PR Learning

“I don’t feel that I’m not welcome. Sometimes I just feel why post, what information do I have that’s worthy of being hashtagged…will I be more of an asset when I’m alumni?” (I10)

The purpose of Research Question #3 was to probe the influences that may enable, or marginalize, online performance. One of the most significant findings was that the peripheral participants often locate themselves on the periphery of an online site because, despite the fact that they can confidently navigate the tool, and they understand the value of the hashtag as a community of PR practice, they feel they have “nothing to say”. My findings are consistent with current studies in peripheral participation, with having “nothing to say” a dominant reason for peripherality (Nonnecke, et al., 2004). As illustrated by the narrative of interviewee I10, she shared that her student status was a liability to her online engagement. While my study consistently demonstrated the value that peers, faculty, and practitioners provided on #Humberpr by sharing resources, networking and initiating conversations, it is important to remember that #Humberpr represents a space of social convergence, which requires critical literacy skills to navigate. The ability to negotiate identity among this variety of stakeholders, some potentially power wielding, is complicated (boyd, 2014). One of the literacies identified by Jenkins, et al. (2016) was to gain “enough social status to speak without consequences” (p. 22). I10 illustrates a reticence to participate online, which was echoed by a number of study respondents. They shared that, while not necessarily intimidated by the faculty’s gaze, they see faculty as having power over them. This perceived hierarchy encourages the students to demonstrate a more professionalized use of #Humberpr by filtering their online comments, for example. My study found that such skills as message crafting within a 140-character environment was, for some, an additional obstacle to online engagement.

Negotiating the dynamics inherent in interactions with the variety of stakeholders on #Humberpr proved a barrier to students’ online engagement. Yet, interestingly, it appears that it is not necessarily the gaze of the faculty and employers that is silencing students. Rather, it is the lack
of engagement from these stakeholders that is disengaging many students and forcing them to the sidelines or even off of the community of practice altogether. Despite the dearth of research in student-practitioner interactions in Twitter-enabled spaces, studies in student-faculty engagement, such as Dunlap and Lowenthal (2009b), Junco, et al. (2010) and Lomicka and Lord (2012), confirm that faculty engagement has a direct and positive impact on students’ online engagement. This parallels my study’s findings that greater faculty and practitioner engagement improves the online experience of students, even those who are peripheral observers.

The PR profession values authentic collaboration, networking, and conversational skills as well as strong textual literacies to empower practitioners with the communication expertise essential for the field, both offline and online. My study contributes to the development of these PR industry expectations by demonstrating that the majority of PR students are underprepared to contribute meaningfully to an online situated learning space such as #Humberpr. While students recognize that #Humberpr can benefit their PR learning, even offering human-like interaction, many lament the absence of faculty and practitioners on #Humberpr, who would be poised to offer mentorship and skill development for greater academic and professional success.

A final comment regarding the significance of these empirical findings relates to the field of PR study itself. While social networking sites are communication tools that belong squarely within the domain of public relations and communications, public relations is an under-researched academic discipline in the area of Twitter-in-education research. In addition to the other areas of significance referenced earlier in this chapter, my study’s focus on PR students’ experience with Twitter in PR learning contributes to the call for more academic discipline specific research in the area of Twitter in education.

The following section addresses the practical implications of my research on PR education.

8.4 Practical Implications for Using Twitter in PR Education

As the field of public relations and communications continues to grow, it is increasingly important that future practitioners possess the 21st-century skills and literacies required for the profession. While the traditional approach to acquiring the necessary professional skills was through college training and work placement, the emergence of social media offers additional opportunities for situated learning. Recognizing the importance of social media training proves
doubly important to PR students, who must learn to manage SNSs for their PR profession as well as develop social networking skills for mentoring and networking opportunities with prospective employers. PR students’ need to develop strong social media literacies was the imperative for my research. My study’s research findings have several implications for situated PR learning, including suggestions from student interview narratives. The following section details each of these implications.

8.4.1 Transitioning Twitter Use to an Academic Space is Challenging

Students may be technologically savvy and comfortable with Twitter as a living technology, but the transition to using Twitter in academic and professional contexts has its challenges. While some educators mandate Twitter use within a classroom, the focus of this study was on the use of Twitter, specifically #Humberpr, as a voluntary community of practice for Humber PR students and other stakeholders, including those external to the classroom, the program, and the college. Probing those students who elected to forego engagement in a space that promised networking opportunities with prospective employers best illuminated the challenges of transitioning to a learning technology. Virtual networking and mentoring opportunities may promise valuable rewards such as work placements and employment, but they require literacies that are not inherently understood by the student participants. Program faculty should consider the impact of supplemental learning opportunities such as a networking hashtag similar to #Humberpr, and incorporate appropriate digital literacies and skill development throughout the program to scaffold these valuable learning opportunities.

8.4.2 Twitter Use Must be Taught

An interviewee in the research study shared, “I think if it was talked about a little more of like it being an educational tool, then people who do not have it, would feel more inclined to get Twitter” (I7). It is important to transition students from the social or living use of Twitter to the academic or learning use beyond simply explaining the tool. My study found that technology was not a barrier because Twitter was easy to use. The biggest barrier, in fact, was that students had “nothing to say”. Experiential student learning should be scaffolded with the presence of peers, faculty and external stakeholders as mentors. Throughout the program, faculty should coach students through privacy issues, train them to think critically, and teach them online best practices, including message crafting (Dunlap & Lowenthal, 2009b). If faculty taught students
communication and critical literacy skills, they would build students’ online confidence, even if students chose to remain invisible on Twitter. The social media class does not mandate the situated learning on #Humberpr because of the public nature of the tool and the need to respect students’ online identities. As well, the PR program does not restrict social media literacies to the first-year social media course, so these literacies should be a consideration for faculty across all PR courses. Incorporating aspects of social media in each class sustains and scaffolds the learning across the multiple semesters of each of the PR programs, both inside and outside of the classroom. Peripheral participants gain and transfer knowledge across a variety of platforms, both online and off. This challenges an instructor to use a multiplatform approach to teaching, and this approach may include incorporating alternative tools for engagement (Cranefield, et al., 2015), or using a group-work approach (Soluk & Buddle, 2015) to effectively engage the variety of participants in a classroom situation.

The resulting efforts may enhance the PR students’ opportunities for finding relevant and satisfying work placements and positions upon graduation, which is the ultimate goal of most applied college programs.

8.4.3 Faculty Should Use Twitter

My study and others (Dunlap and Lowenthal, 2009b; Junco, et al., 2010; Lomicka and Lord, 2012; Bledsoe, et al., 2014) confirmed that students engage more with a social networking tool if their instructors have a regular presence on the space. A vibrant community of practice provides the information-sharing and relationship-building that benefit experiential student learning, and faculty can create this community through a designated hashtag that includes students, faculty, alumni and practitioners. The key is for faculty to be engaged. This includes effectively promoting the Twitter hashtag among stakeholders; networking with colleagues, alumni and practitioners; posting original content; adding links to posts; and favouriting and retweeting student posts. Faculty must act as social connectors to facilitate dialogue (Remund & Freberg, 2013, p. 2). Because, after all, Twitter engagement, even peripherally, may encourage conversations that lead to human-like interactions with students, the benefits of which reverberate both online and off.
8.4.4 Online Participation is Not Limited to Visible Traces

Students gain a variety of benefits, skills and experiences through peripheral online participation, as demonstrated in my study and others (Cranefield, et al., 2015). Peripheral participants are legitimate members of a community of practice, even if they choose to be present elsewhere, like on a class Blackboard site or in a classroom. Mandating Twitter engagement may be an option, but it is important to consider the impact on a student’s online identity, given that Twitter is persistent, replicable and scalable (boyd, 2014, p. 11). If using Twitter as a community of practice for experiential learning, the invisible audience may also compromise students’ privacy and breach their online comfort level. As a result, students may engage online when mandated to do so, but their engagement is likely inauthentic (Dennen, 2008; Ebner, et al., 2010; Lomicka & Lord, 2012).

While a variety of educational contexts have seen increased Twitter use, my study demonstrates that Twitter is a powerful social networking tool that educators should approach with healthy doses of both caution and enthusiasm.

The following section addresses some of the limitations of the study that researchers should consider for subsequent Twitter-in-education research.

8.5 Limitations

My study addressed a gap in the Twitter-in-education research by exploring the role of Twitter in peripherally-participating PR students’ learning, and there were some research limitations to consider. The research protocol and study participant levels limited generalizability of the findings. In addition, the dearth of existing research in peripheral participant interaction with Twitter use in education can be seen as both a limitation to the research, as well as an opportunity. The following section details these points.

8.5.1 Challenges of Generalizing a Mixed-Methods Approach

My non-probability mixed methods research approach limits the study to the current sample, and my study is not statistically generalizable to a larger population. However, the focus on public relations students’ experiences was a research imperative for me. As a result, my study’s focus on PR students’ experience with Twitter in education responds to the call for further research in
academic discipline specialization (Gagnon, 2014; Gao, et al., 2012; Hewett, 2013; Junco, et al., 2010; Kassens-Noor, 2012; Kennedy, et al., 2010; Veletsianos, 2011). In addition, as a PR professor with a focus on social media, I am squarely positioned within this field of study. Given that this was an exploratory study, the results have addressed the research questions. However, future research may consider an effort at randomizing survey participants and increasing probability sampling. Nevertheless, the findings are pedagogically practical and, therefore, possibly generalizable to other populations of students.

8.5.2 Survey Sample Size

My study’s survey response rate was 67 per cent, with 281 completed surveys from a sample of 421 PR students. Essentially, the response rate was reliant on class attendance on the day the survey was administered, during a one-week period in November 2014. Aggregated attendance in the PR classes during the week of survey administration was 296. If the survey response rate was calculated on the basis of class attendance, the response rate was an impressive 94.9 per cent. I decided to administer the survey toward the end of the semester to capture the student experiences with social media through the course of the semester. However, class attendance tends to decline through the course of a semester, and it is not uncommon for attendance toward the end of the semester to suffer, as students complete course work, projects and exam preparation. A future research consideration may include offering larger incentives to engage survey participation or administering the survey in classes with habitually higher attendance numbers.

8.5.3 Interview Sample Size

My study engaged with one focus group of six members and interviewed 12 students one-on-one, providing a sampling of views from across the three PR programs and with a range of #Humberpr engagement levels. However, the study was to originally have had two focus groups and additional interviewees (although no pre-determined target was set). The email recruitment strategy proved suitably effective, but focus group and interview participation was limited to mutually convenient times for the three PR programs as well as the research assistant’s schedule. Greater flexibility in scheduling, or scheduling outside of core class times, may have potentially generated more interest, but as a commuter college, increased participation may still not have
materialized. In the future, a snowball sampling approach could be employed to generate additional research participants.

8.5.4 Gaps in Existing Research in Twitter Use in PR Education

My study’s focus on Twitter in education, peripherality and public relations is both a challenge and an opportunity. The narrow focus limits the scope of a literature review, which could potentially challenge research reliability. In addition, near-comparable studies in Twitter use in education focus on the active learner and remediation of lurkers, rather than the peripheral experience. However, the opportunity to contribute a study that has addressed some of these gaps offers an alternative perspective on the peripheral learners’ experiences and offers a unique contribution to the Twitter use in education research.

In the next section, I address directions for future research regarding the engagement of Twitter in education.

8.6 Future Research

The field of Twitter use in education is relatively new, given that the social networking tool came into existence in 2007. Associated areas of study, such as the role of peripheral participants, are understandably under-researched. Based on my research findings, in what follows, I identify key areas where further investigation would contribute significantly to educational theory and practice. I also raise questions regarding technology-enhanced learning and literacies, and I outline the use of social media in educational spaces.

8.6.1 Demographic Effect on Twitter Use

The potential effect of peripheral participants’ demographics on Twitter engagement, particularly in the context of Twitter use in education, is under-researched. The review of Twitter in education literature, in Chapter 4 of this thesis, revealed that only four of the studies addressed demographics in their assessment of Twitter use. One study investigated the effect of age on differences in time spent online with Twitter, another compared students’ Twitter usage based on their varying academic levels, while two studies found no significant impact of age, gender or educational background on their findings. A number of studies gathered demographic data such as age, gender, academic level and race/ethnicity. As articulated in Chapter 5, my survey
instrument captured demographic data in the survey questions, probing for age, gender, academic level, and membership in categories such as disabled, aboriginal, LGBTQ and visible minority. A point of differentiation between my study and those included in the literature review was that my study probed for membership in the disabled and LBGTQ communities. Findings suggested that no significant differences existed between self-reported minority respondents versus non-minority respondents except for two questions that were essentially similar in concept.

As my findings demonstrate, there are a variety of influences that affect Twitter use in education that can potentially be enabling or marginalizing. Students that self-identify as minorities across any of the categories may experience Twitter, and other social networks, differently. These questions are beyond the scope of my study but are worthy of further exploration in a more demographically diverse community (Hargittai & Litt, 2011), perhaps outside of a discipline-specific research context. Ultimately, a stronger understanding of the demographic differences among Twitter users could lead educators toward more effective use of Twitter in education.

8.6.2 Probe Further Academic-Discipline Specialization

The discourse around Twitter use in education is not limited to one academic discipline. Twitter, as an SNS, is not discipline specific. As discussed in Chapter 1, professors across all academic disciplines are being called to engage students in experiential opportunities (Humber College, 2012, p. 56) that include SNSs such as Twitter. Also, students across all academic disciplines are voicing their need for exposure to practitioners in internship and fieldwork (Bradshaw, 2013, May 17), which can be facilitated by Twitter, and other online tools. The Twitter in education discourse is also not limited to one academic discipline, evidenced by the call for further research in Twitter’s role across a variety of academic disciplines (Gagnon, 2014; Gao, et al., 2012; Hewett, 2013; Junco, et al., 2010; Kassens-Noor, 2012; Kennedy, et al., 2010; Veletsianos, 2011). My research into PR-specific Twitter use was partially inspired by this call. My findings suggested that PR students might differ in their social media and Twitter use given the focus of their prospective communications profession. Since all research participants had completed a social media course at the time of the research study, this may have advantaged them in their social media competency. Replicating my study with students from other academic disciplines would probe this assumption. In addition, gaining a strong understanding of the role of the
academic discipline as an influence on Twitter engagement would be a benefit to educators considering the use of Twitter as a teaching tool.

8.6.3 Ethnographic Study of Twitter Use in Education

Defining the legitimate peripheral participant within social networking sites is a new area of study that would benefit from future research. Making it particularly challenging is Lave and Wenger’s (1991) assertion that “there may very well be no such thing as an ‘illegitimate peripheral participant’”, which was articulated prior to the emergence of SNSs and their limitless possibilities for peripheral and active participation. While my study found that peripherally-participating students on Twitter carry their PR learning to other online and offline communities, in line with Lave and Wenger’s (1991) situated learning theory, deeper analysis of their online activity would contribute to LPP discourse, particularly in the context of social media.

The notion of a Twitter diaspora, introduced in Chapter 7, is provocative, and researchers could explore the diaspora by tracking actual online performance. Addressing the question of whether an online space can be the subject of an ethnographic study, I offer Tom Boellstorff’s ethnographic study of Second Life, documented in his book, *Coming of Age in Second Life*. Boellstorff spent two-and-a-half years tracking his avatar’s experiences on the virtual site, in an attempt to legitimize the online space as a place of social construction among “virtual humans” (Boellstorff, 2008, p. 5). There are two particularly relevant aspects of Boellstorff’s study: First, that virtual spaces are sites of emerging cultural norms that we have yet to unravel – which is relevant to Twitter communities of practice discourse and the migration of information sharing and relationships across permeable boundaries, both on- and offline. Second, Boellstorff’s choice to conduct an ethnography rather than rely on self-reported data, which assumes “people are able to articulate the various aspects of the cultures that shape their thinking” (p. 68), may more effectively capture actual behaviour. Employing these two elements of Boellstorff’s work, an ethnographic study of Twitter use among peripherally-participating students could track the trajectory of the Twitter diaspora, and any ensuing engagement.

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45 It should be noted that Dennen’s (2009, 2014) study of academic bloggers’ online interactions employed an ethnographic approach, which could also serve as a framework for future research into the Twitter diaspora.
8.6.4 Privacy on Twitter

Privacy on SNSs is described as the privacy paradox (boyd & Ellison, 2007; Livingstone, 2008) in Chapter 1, which explains that although privacy settings are available on most platforms, many users see these settings as counteracting the networking benefits of the sites. My research supports the notion of the privacy paradox. According to my findings in Chapter 6, the majority of PR students surveyed were aware that social media sites compromise personal data, and they confirmed using privacy settings on Facebook. Yet these same students did not read terms of service agreements, and their responses were divided on the subject of locking down their Twitter settings. Privacy was not a primary barrier to engagement, with only 3% of the study sample citing privacy as a reason for not posting on Twitter. However, some interviewees raised issues of privacy, principally with respect to mandating Twitter use. Others categorically dismissed privacy concerns on Twitter, with interviewees claiming it shows you have something to hide (I10), or it defeats the purpose of the tool (I7). Privacy issues were not a primary influence on Twitter use in PR education. This could be explained by the research study’s focus on PR students in an academic context using Twitter for situated learning, where public, networked use of Twitter was a necessity. However, with the lure of social networking within participatory culture, it could be argued that online privacy has never been more important.

A greater understanding of citizens’ rights to privacy (Shade, 2008), as discussed in Chapter 1, and awareness of privacy issues contributed to the development of social media literacies in education. A deeper probe of privacy on Twitter is beyond the scope of this study. However, future research may be conducted using a more representative student population outside of a discipline-specific research context to explore privacy issues with respect to SNS use in education and beyond.

The following section offers some final insights into my overall thesis.

8.7 Overall Conclusion

You see things. You keep quiet about them. And you understand. You’re a wallflower.

- Stephen Chbosky, The Perks of Being a Wallflower, 1999
So, are there perks to being a Twitter wallflower? The answer is yes, for as my research demonstrates, the so-called ‘wallflower’ is a peripheral participant and as such is a legitimately participating learner. The student benefits from the collaboration, networking and conversations afforded across the Twitter diaspora - on LinkedIn, Facebook, offline in the classroom, and on Twitter itself. But if the wallflower is alone on Twitter, these opportunities wilt. For the wallflower to thrive in an academic climate, she needs faculty to be both present on the site and to recognize that consistent and visible online student participation is not the main objective. Instead, faculty must commit to nurturing online literacy skills, modeling appropriate online behaviour, and acting as social connectors. After all, for a student to learn 21st-century literacy skills, she needs a teacher who understands that a 21st-century learning environment includes peripheral students who are considered engaged learners.

I call upon 21st-century educators to better understand the perks – and the pitfalls – of the learning experiences of the wallflowers in our classes. The long misunderstood and dismissed significance of peripheral participation challenges us to design all learning spaces – technology enhanced and otherwise – to recognize and accommodate the spectrum of learning and literacies represented in today’s educational environments.
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Appendices
Appendix 1 – Twitter Use in PR Education   Survey

TWITTER USE IN PR EDUCATION

You are invited to participate in a research study exploring your perceptions of Twitter and your experiences using Twitter in your PR education. The study is expected to contribute to our understanding of effective teaching approaches.

The survey takes less than 10 minutes to complete, and participation is voluntary. Your personal information will remain private, and only aggregated results will be used in the research. Please answer the questions to the best of your ability.

Thank you for your participation.

SECTION 1: YOUR PERCEPTIONS OF TWITTER USE IN PR EDUCATION

<table>
<thead>
<tr>
<th>Please rate the extent to which you agree or disagree with the following statements:</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am actively engaged on social media sites in general.</td>
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<td>2. I have an account on the following social networking sites: (choose all that apply)</td>
<td>Facebook</td>
<td>Twitter</td>
<td>Instagram</td>
<td>LinkedIn</td>
<td>YouTube</td>
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<td>Other, please specify</td>
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<td>3. I regularly post content on Twitter.</td>
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<td>4. I regularly read content on Twitter.</td>
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<td>5. I regularly re-tweet other’s posts on Twitter.</td>
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<td>6. Twitter has no value to me.</td>
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<td>7. I choose not to post on Twitter because I prefer to remain anonymous.</td>
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<td>8. I post on Twitter mainly if it is a course requirement.</td>
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<td>9. My tweets are regularly re-tweeted.</td>
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<td>10. I don’t have enough time to post on Twitter.</td>
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<td>11. My followers on my Twitter account are increasing.</td>
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<td>12. I find reading and browsing on Twitter is enough for me.</td>
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<td>13. I’m still learning about Twitter, so I don’t tend to post.</td>
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<td>15. I did not put a great deal of effort into using Twitter.</td>
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<td>16. I feel confident using Twitter.</td>
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<td>17. I don’t enjoy Twitter because the posts on Twitter are of poor quality.</td>
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<td>18. I don’t post on Twitter because I don’t know how to post.</td>
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<td>19. It is important to me that others follow me on Twitter.</td>
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<td>20. I consider myself an active Twitter user.</td>
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<td>21. I prefer reading tweets rather than posting them.</td>
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<td>22. When classmates don’t post on Twitter, it makes Twitter less useful to me.</td>
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<td>23. I’m shy about posting on Twitter.</td>
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<td>24. I have nothing to post on Twitter.</td>
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<tr>
<td>25. I rarely post on Twitter because others already responded the way I would.</td>
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</tbody>
</table>
26. I have no intention of using Twitter.  
27. I don’t have enough time to read Twitter posts.  
28. When I choose not to post on Twitter, it’s because ____________________________  

29. I don’t expect all of my classmates to post on Twitter.  
30. I tag my PR-related tweets with #humberpr.  
31. I prefer reading tweets instead of posting.  
32. I expect my classmates to actively participate on Twitter.  
33. I do not post if there are no program requirements to post on Twitter.  
34. Although I use Twitter, I don’t tag my posts with #humberpr.  
35. I follow #humberpr to stay connected with classmates.  
36. I follow #humberpr to learn about PR.  
37. I follow #humberpr to connect with PR industry professionals.  
38. I read the terms of service for each social media site I use.  
39. I am aware of the privacy settings on the social media sites I use.  
40. I use privacy settings on Facebook.  
41. I use privacy settings on Twitter.  
42. I am aware that social media sites save my personal data.  
43. I am aware that social media sites encourage me to share my personal data.  

SECTION 2: EXPERIENCES WITH TWITTER IN PR EDUCATION  

Please rate the extent to which you agree or disagree with the following statements:  

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>44. Reading Twitter posts enhanced my awareness of PR.</td>
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<td>45. Posting on Twitter enhanced my awareness of PR.</td>
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<td>46. Re-tweeting posts on #humberpr enhanced my awareness of PR.</td>
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<td>47. I found #humberpr a useful way to learn about PR.</td>
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<td>48. Using Twitter enhanced my understanding of PR activities.</td>
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<td>49. Using Twitter improved my overall knowledge of PR.</td>
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<td>50. Using Twitter did not help me realize the practical applications of PR</td>
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<td>51. Using Twitter develops career-related skills, such as networking</td>
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<td>52. Having peer feedback on my tweets was a positive aspect of using Twitter</td>
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<td>53. Posting on Twitter helped me connect with my professors</td>
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<tr>
<td>54. Posting on Twitter helped me get to know my classmates</td>
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<td>55. Reading posts on Twitter helped me get to know my classmates.</td>
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<td>56. The learning experience provided by Twitter was not worth the effort</td>
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<td>57. Using Twitter makes PR examples more prominent</td>
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</table>
58. Using Twitter makes PR practitioners more accessible.  
59. Using Twitter for this class enhanced my ability to see how PR theory linked to the real world.  
60. I find Twitter valuable to my learning in the PR program.  
61. I feel I can access more up-to-date information as a result of using Twitter in this program.  
62. Posting on Twitter about the program makes PR more ‘real’.  
63. Reading tweets about the program makes PR more ‘real’.  
64. I feel this program is more up-to-date because of the use of Twitter.  
65. I found Twitter valuable to my PR networking.  
66. I learned how to use Twitter for PR purposes by following PR practitioners.  
67. Twitter helped me to actively engage with PR practitioners.  
68. Having PR practitioner feedback was a positive aspect of posting on Twitter.  
69. Twitter did not help me connect to PR practitioners.  

SECTION 3: TWITTER’S USEFULNESS AND EASE OF USE

<table>
<thead>
<tr>
<th>Please rate the extent to which you agree or disagree with the following statements:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>70. Using Twitter will improve my PR learning.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>71. Using Twitter will improve my PR learning productivity.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>72. Using Twitter will enhance the effectiveness of my PR learning.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73. Using Twitter will be useful for my PR learning</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74. Twitter is easy to use.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75. My interaction with Twitter does not require a lot of mental effort.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76. My interaction with Twitter is clear and understandable.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77. I would find it easy to get Twitter to do what I would want it to do.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78. Assuming future PR courses were to use Twitter as a learning tool, I intend to use it.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79. If future courses were to use Twitter as a learning tool, I predict I would use it.</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4: PLEASE TELL US ABOUT YOURSELF

80. What program are you enrolled in?  ○ PR certificate  ○ PR diploma  ○ PR degree

81. What year did you enter your current program?  ○ 2011  ○ 2012  ○ 2013  ○ 2014

82. What year were you born in? ____________

83. Which of the following expresses your gender?  ○ M  ○ F  ○ Other  ○ Decline to disclose

84. Do you consider yourself a member of any of the following groups? (choose all that apply)
   ○ Disabled  ○ Aboriginal  ○ Visible minority/racialized group  (Optional: Please specify ________)
   ○ LGBTQ  ○ Decline to answer  ○ No

Thank you for participating in the survey.
Appendix 2 – Information Letter

Information Letter
for
Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students.

February 2015

Dear Humber PR Student:

I am inviting you to participate in my research project, entitled Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students.

My name is Andrea Tavchar and I am a PhD candidate at the Ontario Institute of Studies in Education at the University of Toronto, as well as a professor of public relations here at Humber College. To fulfill the requirements of my PhD, I am the principal investigator conducting a study of Humber public relations students across all three programs: post-graduate certificate, advanced diploma and bachelor’s degree, to explore PR students’ experiences and perceptions of Twitter in PR education. Given that PR students are expected to know how to use social media as a tool of professional practice, it is important for educators to better understand how to most effectively teach the use of these tools. Of particular interest to my study is the range of social media participation among students, and I hope to better understand the impact social media participation has on learning. There is no direct benefit to your learning, but the intention is to continue to develop the PR program for future students.

You have been approached to participate in an individual interview, taking place in early 2015. Participation is voluntary and there is no known risk to participating. You are free to refuse participation at any time, with no negative consequences. You are also able to withdraw your information at any time during the process by contacting the research assistant.

We will code the identity of interview participants and only the research assistant will have access to the codes, to ensure confidentiality. As the principal investigator and a professor in the bachelor of public relations program, I will not have access to the codes, nor will I be conducting any interviews with BPR students. I will, however, be aware of the identity of certificate and diploma students, as I will be conducting these interviews. Please note that only aggregated data will be used when reporting results, so your identity is never revealed.

Approximately 12 PR students will be asked to participate in individual interviews scheduled for February or March 2015. The interviews will be held at Humber College’s Lakeshore campus and will last approximately 30 minutes. Interview participants will each receive a $10 Humber dining card. The interviews will be audio-recorded to ensure accuracy in the transcription of data. Please note that participant data will be coded so as to de-identify participants and maintain confidentiality.

Research data, including hard copies and electronic data on USB keys, will be stored in a locked cabinet on Humber College’s Lakeshore campus, in Building L. Once the principal investigator completes the dissertation paper, in 2016, all identifiable data will be destroyed. Hard copies will be shredded in confidential shredding bins and electronic data will be erased from all locations. Please remember that you can withdraw your involvement from the focus groups or interviews at any time by contacting the research assistants. Contact information is provided at the end of this letter.
Once the research is complete, and the principal investigator’s dissertation is approved in mid-2016, the document will be made available in the Ontario Institute for Studies in Education’s library, located at the University of Toronto. Or, you are free to contact me, the principal investigator, at the conclusion of the study (see details below).

This research study has received approval from Humber College’s Research Ethics Board. You may contact the Chair of the REB, Paul Griffin, to discuss any issues or concerns that may arise regarding your participation in this study.

If you wish to follow up with the research assistants with questions, or wish to withdraw from the study, please see the contact information below.

Thank you for your consideration regarding participation in the research study. The information you share will be useful in developing Humber College’s future PR programs.

Sincerely,

Andrea Tavchar, PhD Candidate
Professor, Public Relations, Humber College
andrea.tavchar@humber.ca
416 675 6622 x79310

Dr. Paul Griffin
Humber REB Chair
paul.griffin@humber.ca
416 675 6622 x3226

Kyle Liao
Research Assistant
liao.kyle@gmail.com
Appendix 3 – Consent Letter

Free and Informed Consent Form

for

Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students.

I, __________________________, have carefully read the attached Information Letter for the Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students research study. The research assistant has explained the study to me and has answered all of my questions. I understand that if I have additional questions, I may contact the research assistant, or the principal investigator, Andrea Tavchar, or Paul Griffin, Chair of the Research Ethics Board at Humber College, at any time during the study. I also understand that I may decline or withdraw from participation at any time without negative consequences.

My signature below verifies that I have agreed to participate in the Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students research study as it has been described in the Information Letter. My signature below also verifies that I am fully competent to sign this Consent Form and that I have received a copy of the Information Letter and the Informed Consent Form for my files.

Agreement to Participate

________________________________________________________
Participant’s Signature

________________________________________________________
Date

________________________________________________________
Print Name
Appendix 4 – Recruitment Email

Revised Recruitment Email for Focus Group Participants
for
Are there perks to being a Twitter wallflower? Exploring the role of the peripheral participant in a Twitter-enabled learning space for public relations students.

Subject: Invitation to participate in a focus group about Twitter use in PReducation

On behalf of Andrea Tavchar, I would like to thank you for participating in the survey about Twitter use in PR education last November. From among the survey participants, we are recruiting approximately 16 PR students to join one of two focus groups being held next month, to further our understanding of Twitter use in PR education.

A focus group is a facilitated small-group discussion, where questions are posed to the group and the discussion is recorded and transcribed. Participant names are coded to de-identify you and maintain confidentiality. However, as is the nature of focus groups, your co-participants will be aware of your involvement in the group, although all participants are asked to refrain from sharing details from the focus group discussion. The facilitator will be a research assistant. Andrea Tavchar, as a professor in the BPR, will not be facilitating the focus group discussion, nor will she be aware of the identity of the participants.

The focus group is scheduled for Friday, January 30, 2015 in L4000 at the Lakeshore campus.

Participation in the focus group is voluntary, and each participant will receive a $10 Humber College dining card. There is no known risk to participating, and you are free to withdraw at any time, with no negative consequences.

If you are available, and would like to join the discussion in one of the groups please contact me by (date).

This research study has received approval from Humber College’s Research Ethics Board. You may contact the Chair of the REB, Paul Griffin, to discuss any issues or concerns that may arise regarding your participation in this study. Dr. Griffin may be reached at paul.griffin@humber.ca or at 416 675 6622 x3226.

On behalf of Andrea Tavchar, and the research team, thank you for considering our invitation.

Sincerely,
Kyle Liao
Liao.kyle@gmail.com
Appendix 5 – Focus Group Research  Questions

Focus group research questions

Welcome the group. Explain your role. Explain that as PR students, all of their opinions on the topic of **Twitter use in PR education** are valid and important and we want to hear from them all. (NOTE: Please don’t share that the topic is actually peripheral participation. Keep the overall research topic general).

Explain that what is discussed in the group is confidential and they are all asked to refrain from sharing each other’s views with anyone outside of the group.

Explain that you will be recording the session, coding their names, and transcribing so their identities are hidden.

Ask if they have any questions.

Offer them refreshments (which should be either on the table, or on an aside table).

Questions:

**What is your relationship with social networking sites?**
(Probe: do you use; are you comfortable with the tools; do you see it as part of your social life, or does it play a role in your education?)

**As PR students, confirm that they:**
- Took a social media course
- Have a Twitter account

**Have you ever tweeted?**
- Last 6 months?
- Around time of social media course?
- Probe their approximate frequency of engagement

**What motivates you to tweet?**
- Probe how do you use the tool
• Do you dip in and out vs have regular engagement (daily/weekly)
• Do you read vs post?

What might hold you back from participating?

What role does Twitter play in your PR education?
  • Mandatory vs voluntary participation?
  • Should it be incorporated into grades?
  • Was Twitter taught to you? (technology an issue?)
  • Were benefits clearly communicated to you?
  • Career benefit?
  • Does public nature encourage/discourage you from using?
  • Does this violate privacy?

What is your understanding of the role of #hpr?
  • Probe here for sense of community created by hashtag
  • Does the fact that there are a variety of stakeholders (ie. Alumni, industry, faculty) on #hpr encourage or discourage you from participating? Why?
  • What else might encourage or discourage you from using #hpr?
  • Do you use other hashtags?
  • As a PR student, do you think engaging on Twitter might be good training for the profession? (Probe why they don’t…)
  • If you don’t participate on #hpr, what message are you communicating about yourself?

Do you feel comfortable/welcome to participate in #hpr?
  • If not, why not?
  • Is it about the tool?
  • Is it about the others that are contributing to the site?
  • Is it about you? How?
• Does public nature of the tool impact your decision to participate?

What is the role of #hpr in PR education specifically?
  • Networking?
  • Is privacy an issue?
  • How might it be introduced into a class so that you would gain value from it? Probe use: not necessarily engagement/could just be reading

Do you use Twitter and hashtags in any other contexts in your life?

Closing question:

Anything more you’d like to add regarding the role of Twitter in your PR education? (whether you use it or not?)
Appendix 6 – Interview Research Questions

Individual Interview Questions

Welcome. Explain your role. Explain that as a PR student, their opinions on the topic of **Twitter use in PR education** are valid and important and we want to hear them. (NOTE: Please don’t share that the topic is actually peripheral participation. Keep the overall research topic general).

Explain that you will be recording the session, coding their names, and transcribing so their identities are hidden.

Ask if they have any questions.

Questions:

1. **What is your relationship with social networking sites?**
   (Probe: do you use; are you comfortable with the tools; do you see it as part of your social life, or does it play a role in your education; which tools do you use, do you connect personally, professionally, just with those nearby/locally?)

2. **What encourages/discourages you from tweeting?**
   - Probe how do you use the tool
   - Do you dip in and out vs have regular engagement (daily/weekly)
   - Do you read vs post?
   - (Probe: public nature of tool; social convergence – blending of all of your identities; probe marginalization, silencing of voice, ie. I have nothing to say)

3. **Let’s discuss what role Twitter plays in your PR education.**
   - Should Twitter be mandatory, with grades attached to engagement?
• Would you say benefits of Twitter were clearly communicated to you?
• Do you see it as a career benefit?

4. Let’s discuss the role of #hpr in your PR education.
   • How did you learn about #hpr? How do you use it? Or not?
   • What’s going on with #hpr that encourages or discourages you to participate? (Probe: mention of community)
   • Does the fact that there are a variety of stakeholders (ie. Alumni, industry, faculty) on #hpr encourage or discourage you from participating? Why? (Probe: can you identify the various stakeholders; what do you choose to ignore)
   • Do you find you learn about PR from #hpr participants?
   • Do you feel comfortable/welcome to participate on #hpr?

5. Do you use Twitter and hashtags in any other contexts in your life? (Probe: outside of PR, other communities)

Closing question:

6. Anything more you’d like to add regarding the role of Twitter in your PR education? (whether you use it or not?)

NOTE: Ask for their Twitter account ID ie. @andreatavchar
Appendix 7 – T-Test Results
<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm actively engaged on social media sites in general</td>
<td>4.34</td>
<td>0.803</td>
<td>0.000</td>
</tr>
<tr>
<td>Regularly post content on Twitter</td>
<td>3.09</td>
<td>1.28</td>
<td>0.245</td>
</tr>
<tr>
<td>Regularly read content on Twitter</td>
<td>3.77</td>
<td>1.257</td>
<td>0.000</td>
</tr>
<tr>
<td>Regularly retweet other user's posts on Twitter</td>
<td>3.3</td>
<td>1.223</td>
<td>0.000</td>
</tr>
<tr>
<td>Twitter has no value to me</td>
<td>2.04</td>
<td>1.083</td>
<td>0.000</td>
</tr>
<tr>
<td>Choose not to post on Twitter because I prefer to remain anonymous</td>
<td>1.79</td>
<td>0.95</td>
<td>0.000</td>
</tr>
<tr>
<td>Post on Twitter mainly if it is a course requirement</td>
<td>2.2</td>
<td>1.167</td>
<td>0.000</td>
</tr>
<tr>
<td>My tweets are regularly retweeted</td>
<td>2.66</td>
<td>1.034</td>
<td>0.000</td>
</tr>
<tr>
<td>Don't have enough time to post on Twitter</td>
<td>2.4</td>
<td>1.065</td>
<td>0.000</td>
</tr>
<tr>
<td>My followers on my Twitter account are increasing</td>
<td>3.36</td>
<td>1.115</td>
<td>0.000</td>
</tr>
<tr>
<td>Find reading and browsing on Twitter is enough for me</td>
<td>3.08</td>
<td>1.036</td>
<td>0.206</td>
</tr>
<tr>
<td>I'm still learning about Twitter so I don't tend to post</td>
<td>1.96</td>
<td>1.043</td>
<td>0.000</td>
</tr>
<tr>
<td>Enjoy using Twitter</td>
<td>3.72</td>
<td>1.07</td>
<td>0.000</td>
</tr>
<tr>
<td>Did I put a great deal of effort into using Twitter</td>
<td>3.27</td>
<td>1.167</td>
<td>0.000</td>
</tr>
<tr>
<td>I feel confident using Twitter</td>
<td>3.78</td>
<td>1.009</td>
<td>0.000</td>
</tr>
<tr>
<td>Don't enjoy Twitter because the posts on Twitter are of poor quality</td>
<td>2.05</td>
<td>0.815</td>
<td>0.000</td>
</tr>
<tr>
<td>Don't post on Twitter because I don't know how to post</td>
<td>1.54</td>
<td>0.799</td>
<td>0.000</td>
</tr>
<tr>
<td>It's important to me that others follow me on Twitter</td>
<td>2.91</td>
<td>1.165</td>
<td>0.220</td>
</tr>
<tr>
<td>Consider myself an active Twitter user</td>
<td>3.03</td>
<td>1.265</td>
<td>0.706</td>
</tr>
<tr>
<td>Prefer reading tweets rather than posting them</td>
<td>3.52</td>
<td>1.002</td>
<td>0.000</td>
</tr>
<tr>
<td>When classmates don't post on Twitter if it makes Twitter less useful to me</td>
<td>2.18</td>
<td>1.003</td>
<td>0.000</td>
</tr>
<tr>
<td>I'm shy about posting on Twitter</td>
<td>2.25</td>
<td>1.135</td>
<td>0.000</td>
</tr>
<tr>
<td>Have nothing to post on Twitter</td>
<td>2.36</td>
<td>1.122</td>
<td>0.000</td>
</tr>
<tr>
<td>Rarely post on Twitter because others already responded the way I would</td>
<td>2.19</td>
<td>1.013</td>
<td>0.000</td>
</tr>
<tr>
<td>Have no intention of using Twitter</td>
<td>1.88</td>
<td>0.998</td>
<td>0.000</td>
</tr>
<tr>
<td>Don't have enough time to read Twitter's posts</td>
<td>2.15</td>
<td>1.01</td>
<td>0.000</td>
</tr>
</tbody>
</table>
I found it useful to follow #HumberPR on Twitter to stay connected with classmates.

Although I found it useful to follow #HumberPR on Twitter, I don’t tag my posts with #HumberPR.

I expect my classmates to actively participate on Twitter.

I prefer reading tweets instead of posting them.

Although I found it useful to follow #HumberPR on Twitter, I don’t tag my posts with #HumberPR.

I use Twitter to learn about PR.

Reading posts on Twitter helped me get to know my classmates.

Posting on Twitter helped me get to know my classmates.

Having peer feedback on my tweets was a positive aspect of using Twitter.

I use Twitter to develop career-related skills, such as networking.

Reading posts on Twitter helped me get to know my classmates.

Posting on Twitter helped me get to know my classmates.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading posts on Twitter enhanced my awareness of PR</td>
<td>3.56</td>
<td>0.994</td>
<td>0.000</td>
</tr>
<tr>
<td>Posting on Twitter enhanced my awareness of PR</td>
<td>3.15</td>
<td>1.079</td>
<td>0.021</td>
</tr>
<tr>
<td>Retweeting posts on #HumberPR enhanced my awareness of PR</td>
<td>2.99</td>
<td>1.095</td>
<td>0.027</td>
</tr>
<tr>
<td>Using Twitter enhanced my understanding of PR activities</td>
<td>3.18</td>
<td>1.074</td>
<td>0.005</td>
</tr>
<tr>
<td>Using Twitter improved my overall knowledge of PR</td>
<td>3.41</td>
<td>1.048</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter did not help me realize the practical applications of PR</td>
<td>3.27</td>
<td>1.069</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter helped me get to know my classmates</td>
<td>3.04</td>
<td>1.142</td>
<td>0.529</td>
</tr>
<tr>
<td>Reading posts on Twitter helped me get to know my classmates</td>
<td>3.28</td>
<td>1.155</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The learning experience provided by Twitter was not worth the effort.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Twitter makes PR examples more prominent</td>
<td>2.43</td>
<td>1.051</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter makes PR practitioners' more accessible</td>
<td>3.44</td>
<td>0.985</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter for this class' enhanced my ability to see how PR theory linked to the real world</td>
<td>3.27</td>
<td>1.079</td>
<td>0.000</td>
</tr>
<tr>
<td>Feel Twitter valuable to my learning in the PR program</td>
<td>3.43</td>
<td>1.076</td>
<td>0.000</td>
</tr>
<tr>
<td>Feel I can access more up-to-date information</td>
<td>3.77</td>
<td>1.018</td>
<td>0.000</td>
</tr>
<tr>
<td>Posting on Twitter about the program makes PR more 'real'</td>
<td>3.12</td>
<td>1.091</td>
<td>0.063</td>
</tr>
<tr>
<td>Reading tweets about the program makes PR more 'real'</td>
<td>3.18</td>
<td>1.094</td>
<td>0.008</td>
</tr>
<tr>
<td>The program is more up-to-date because of the use of Twitter</td>
<td>3.23</td>
<td>1.069</td>
<td>0.000</td>
</tr>
<tr>
<td>&quot;Learning how to use Twitter&quot; for PR purposes by following PR practitioners</td>
<td>3.13</td>
<td>1.176</td>
<td>0.068</td>
</tr>
<tr>
<td>Twitter helped me to actively engage with PR practitioners</td>
<td>3.14</td>
<td>1.109</td>
<td>0.041</td>
</tr>
<tr>
<td>Having PR practitioners' feedback was a positive aspect of posting on Twitter</td>
<td>3.12</td>
<td>1.088</td>
<td>0.009</td>
</tr>
<tr>
<td>Twitter did not help me connect to PR practitioners</td>
<td>2.69</td>
<td>1.224</td>
<td>0.000</td>
</tr>
</tbody>
</table>

One Sample Statistics/Tests (Test value='4')

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Twitter will improve my PR learning</td>
<td>5.07</td>
<td>1.454</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter will improve my PR learning productivity</td>
<td>4.87</td>
<td>1.48</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter will enhance the effectiveness of my PR learning</td>
<td>4.92</td>
<td>1.418</td>
<td>0.000</td>
</tr>
<tr>
<td>Using Twitter will be useful for my PR learning</td>
<td>5.18</td>
<td>1.365</td>
<td>0.000</td>
</tr>
<tr>
<td>Twitter is easy to use</td>
<td>5.97</td>
<td>1.233</td>
<td>0.000</td>
</tr>
<tr>
<td>My interaction with Twitter does not require a lot of mental effort</td>
<td>5.28</td>
<td>1.523</td>
<td>0.000</td>
</tr>
<tr>
<td>My interaction with Twitter is clear and understandable</td>
<td>5.68</td>
<td>1.236</td>
<td>0.000</td>
</tr>
<tr>
<td>&quot;I would find it easy to get Twitter to do what I would want it to do&quot;</td>
<td>5.48</td>
<td>1.378</td>
<td>0.000</td>
</tr>
<tr>
<td>Assuming future PR courses were to use Twitter as a learning tool, I would use it</td>
<td>5.48</td>
<td>1.429</td>
<td>0.000</td>
</tr>
<tr>
<td>Future courses were to use Twitter as a learning tool, I would use it</td>
<td>5.52</td>
<td>1.451</td>
<td>0.000</td>
</tr>
</tbody>
</table>
## Appendix 8 – Component #1: Usefulness of Twitter

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor Loading</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Twitter will enhance the efficiency of my PR learning</td>
<td>0.865</td>
<td>10.9</td>
<td>9.0</td>
<td>61.6</td>
<td>15.1</td>
<td>11.2</td>
</tr>
<tr>
<td>Using Twitter will improve my PR learning</td>
<td>0.851</td>
<td>10.9</td>
<td>63.1</td>
<td>12.2</td>
<td>11.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Using Twitter will improve my PR productivity</td>
<td>0.844</td>
<td>9.7</td>
<td>58.8</td>
<td>15.1</td>
<td>13.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Using Twitter will enhance my PR writing</td>
<td>0.829</td>
<td>9.7</td>
<td>67.7</td>
<td>11.5</td>
<td>8.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Using Twitter improved my overall knowledge of PR</td>
<td>0.729</td>
<td>10.9</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Using Twitter was easy to use</td>
<td>0.687</td>
<td>11.1</td>
<td>41.1</td>
<td>10.1</td>
<td>11.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Using Twitter was a valuable tool for my PR learning</td>
<td>0.695</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Twitter made my learning more prominent</td>
<td>0.718</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
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<tr>
<td>Twitter is a useful tool for my PR learning</td>
<td>0.723</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Twitter improved my understanding of PR</td>
<td>0.726</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
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<tr>
<td>Twitter is a valuable tool for my PR learning</td>
<td>0.730</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Twitter made my learning more prominent</td>
<td>0.733</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
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<tr>
<td>Twitter is a valuable tool for my PR learning</td>
<td>0.736</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Twitter made my learning more prominent</td>
<td>0.739</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Twitter is a valuable tool for my PR learning</td>
<td>0.742</td>
<td>10.8</td>
<td>36.7</td>
<td>27.7</td>
<td>19.4</td>
<td>5.5</td>
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</tbody>
</table>

*Note: All Likert scale responses were captured using 7-point Likert scales.*
### Appendix 9 – Component #2: Engagement with Twitter

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor Loading</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider myself an active Twitter user</td>
<td>0.835</td>
<td>15.9</td>
<td>31.3</td>
<td>21.7</td>
<td>19.9</td>
<td>15.7</td>
</tr>
<tr>
<td>Regularly post content on Twitter</td>
<td>0.796</td>
<td>14.0</td>
<td>28.1</td>
<td>21.4</td>
<td>22.1</td>
<td>13.5</td>
</tr>
<tr>
<td>Regularly use Twitter</td>
<td>0.758</td>
<td>25.1</td>
<td>38.3</td>
<td>25.6</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Regularly retweet others' posts on Twitter</td>
<td>0.681</td>
<td>17.9</td>
<td>31.4</td>
<td>23.2</td>
<td>18.2</td>
<td>9.3</td>
</tr>
<tr>
<td>My tweets are regularly retweeted</td>
<td>0.681</td>
<td>3.9</td>
<td>13.6</td>
<td>43</td>
<td>22.0</td>
<td>16.5</td>
</tr>
<tr>
<td>Regularly read content on Twitter</td>
<td>0.678</td>
<td>35.9</td>
<td>30.2</td>
<td>16.4</td>
<td>9.3</td>
<td>8.2</td>
</tr>
<tr>
<td>My followers on my Twitter account are increasing</td>
<td>0.674</td>
<td>10.7</td>
<td>44.3</td>
<td>25.4</td>
<td>9.4</td>
<td>10.1</td>
</tr>
<tr>
<td>It is important to me that others follow me on Twitter</td>
<td>0.595</td>
<td>7.8</td>
<td>25.6</td>
<td>31.3</td>
<td>20.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Feel confident using Twitter</td>
<td>0.562</td>
<td>24.3</td>
<td>43.9</td>
<td>20.4</td>
<td>8.3</td>
<td>3.2</td>
</tr>
<tr>
<td>I am actively engaged on social media sites in general</td>
<td>0.476</td>
<td>50.6</td>
<td>37.1</td>
<td>9.3</td>
<td>2.1</td>
<td>0.8</td>
</tr>
<tr>
<td>I rarely post on Twitter because others already responded the way I would</td>
<td>0.317</td>
<td>1.4</td>
<td>9.3</td>
<td>25.7</td>
<td>33.6</td>
<td>30.1</td>
</tr>
<tr>
<td>I prefer reading tweets instead of posting them</td>
<td>0.44</td>
<td>16.1</td>
<td>37.5</td>
<td>32.1</td>
<td>10.7</td>
<td>9.4</td>
</tr>
<tr>
<td>I still learning about Twitter so I don’t tend to/post</td>
<td>0.41</td>
<td>1.8</td>
<td>9.7</td>
<td>12.5</td>
<td>34.8</td>
<td>41.2</td>
</tr>
<tr>
<td>The learning experience provided by Twitter was not worth the effort</td>
<td>0.441</td>
<td>4.4</td>
<td>11.5</td>
<td>27.1</td>
<td>37.8</td>
<td>19.4</td>
</tr>
<tr>
<td>I don’t have enough time to post on Twitter</td>
<td>0.471</td>
<td>2.1</td>
<td>17.8</td>
<td>18.5</td>
<td>41.2</td>
<td>20.3</td>
</tr>
<tr>
<td>I did not post if there were no program requirements to post on Twitter</td>
<td>0.506</td>
<td>5.9</td>
<td>9.3</td>
<td>20.4</td>
<td>35.5</td>
<td>29.7</td>
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<tr>
<td>I don’t enjoy Twitter because the posts on Twitter are of poor quality</td>
<td>0.519</td>
<td>1.1</td>
<td>2.9</td>
<td>20.9</td>
<td>50.7</td>
<td>24.5</td>
</tr>
<tr>
<td>I post on Twitter mainly if it is a course requirement</td>
<td>0.583</td>
<td>3.6</td>
<td>14.6</td>
<td>14.3</td>
<td>32.0</td>
<td>34.4</td>
</tr>
<tr>
<td>I did not put a great deal of effort into using Twitter</td>
<td>0.635</td>
<td>14.6</td>
<td>33.8</td>
<td>23.1</td>
<td>21.1</td>
<td>7.5</td>
</tr>
<tr>
<td>I have no intention of using Twitter</td>
<td>0.636</td>
<td>2.1</td>
<td>5.4</td>
<td>15.4</td>
<td>32.5</td>
<td>44.6</td>
</tr>
<tr>
<td>I have nothing to post on Twitter</td>
<td>0.572</td>
<td>3.0</td>
<td>14.2</td>
<td>21.1</td>
<td>35.4</td>
<td>25.3</td>
</tr>
<tr>
<td>Twitter has no value to me</td>
<td>0.687</td>
<td>4.0</td>
<td>6.9</td>
<td>15.9</td>
<td>35.4</td>
<td>37.9</td>
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</table>
## Appendix 10 – Component #3: Ease of Twitter Use

<table>
<thead>
<tr>
<th>Component #3: Ease of Twitter Use</th>
<th>Factor Loading</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would find it easy to get Twitter to do what I want it to do</td>
<td>0.781</td>
<td>29.2</td>
<td>51.6</td>
<td>16.1</td>
<td>7.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Twitter is easy to use</td>
<td>0.781</td>
<td>39.4</td>
<td>47.6</td>
<td>7.9</td>
<td>3.6</td>
<td>1.4</td>
</tr>
<tr>
<td>My interaction with Twitter is clear and understandable</td>
<td>0.745</td>
<td>24.1</td>
<td>57.9</td>
<td>12.6</td>
<td>3.9</td>
<td>1.4</td>
</tr>
<tr>
<td>My interaction with Twitter does not require a lot of mental effort</td>
<td>0.641</td>
<td>26.5</td>
<td>54.7</td>
<td>11.3</td>
<td>11.1</td>
<td>2.5</td>
</tr>
<tr>
<td>I feel confident using Twitter</td>
<td>0.463</td>
<td>24.3</td>
<td>48.9</td>
<td>20.4</td>
<td>8.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Assuming future PR courses were to use Twitter as a learning tool, I intend to use it</td>
<td>0.393</td>
<td>29.2</td>
<td>61.9</td>
<td>8.3</td>
<td>6.2</td>
<td>3.6</td>
</tr>
<tr>
<td>If future courses were to use Twitter as a learning tool, I predict I would use it</td>
<td>0.385</td>
<td>22.3</td>
<td>60.5</td>
<td>8.6</td>
<td>4.3</td>
<td>4.3</td>
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<tr>
<td>Using Twitter makes PR practitioners more accessible</td>
<td>0.350</td>
<td>20.5</td>
<td>57.6</td>
<td>13.3</td>
<td>5.8</td>
<td>2.9</td>
</tr>
<tr>
<td>I am actively engaged on social media sites in general</td>
<td>0.308</td>
<td>50.6</td>
<td>37.1</td>
<td>9.3</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>I don’t enjoy Twitter because the posts on Twitter are of poor quality</td>
<td>0.328</td>
<td>9.0</td>
<td>14.2</td>
<td>21</td>
<td>35.6</td>
<td>25.3</td>
</tr>
<tr>
<td>I choose not to post on Twitter because I prefer to remain anonymous</td>
<td>0.327</td>
<td>3.9</td>
<td>14.2</td>
<td>21</td>
<td>35.6</td>
<td>25.3</td>
</tr>
<tr>
<td>I’m shy about posting on Twitter</td>
<td>0.454</td>
<td>3.6</td>
<td>12.8</td>
<td>19.9</td>
<td>32.4</td>
<td>31.3</td>
</tr>
<tr>
<td>I rarely post on Twitter because others already responded the way I would</td>
<td>0.548</td>
<td>1.4</td>
<td>9.3</td>
<td>25.7</td>
<td>33.6</td>
<td>30.3</td>
</tr>
<tr>
<td>I’m still learning about Twitter so I don’t tend to post</td>
<td>0.564</td>
<td>1.8</td>
<td>9.7</td>
<td>12.1</td>
<td>54.8</td>
<td>41.3</td>
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<tr>
<td>I don’t post on Twitter because I don’t know how to post</td>
<td>0.719</td>
<td>1.1</td>
<td>1.8</td>
<td>7.5</td>
<td>29.4</td>
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Appendix 11 – Component #4: Use of #HumberPR

<table>
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<tr>
<th>Component #4: Use of #HumberPR</th>
<th>Variable</th>
<th>Factor Loading</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I follow #HumberPR to learn about PR</td>
<td>0.887</td>
<td>16.8</td>
<td>34.4</td>
<td>16.6</td>
<td>18.6</td>
<td>13.2</td>
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<tr>
<td>I follow #HumberPR to stay connected with classmates</td>
<td>0.881</td>
<td>15.1</td>
<td>35.5</td>
<td>16.6</td>
<td>19.7</td>
<td>13.3</td>
<td></td>
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<tr>
<td>I follow #HumberPR to connect with PR industry professionals</td>
<td>0.863</td>
<td>18.3</td>
<td>30.1</td>
<td>20.4</td>
<td>17.2</td>
<td>12.4</td>
<td></td>
</tr>
<tr>
<td>I tag my PR related tweets with #HumberPR</td>
<td>0.548</td>
<td>15.1</td>
<td>30.8</td>
<td>19.4</td>
<td>16.8</td>
<td>79.9</td>
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<tr>
<td>I found #HumberPR a useful way to learn about PR</td>
<td>0.542</td>
<td>7.1</td>
<td>37.4</td>
<td>29.3</td>
<td>17.6</td>
<td>8.3</td>
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</tr>
<tr>
<td>Retweeting posts on #HumberPR enhanced my awareness of PR</td>
<td>0.414</td>
<td>6.8</td>
<td>29.3</td>
<td>29.3</td>
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### Group Statistics

<table>
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<tr>
<th>Study</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<tr>
<td>36. I follow #HumberPR to learn about PR</td>
<td>Minority</td>
<td>76</td>
<td>3.33</td>
<td>1.263</td>
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<td>Nonminority</td>
<td>170</td>
<td>2.80</td>
<td>1.152</td>
</tr>
<tr>
<td>47. I found #HumberPR a useful way to learn about PR</td>
<td>Minority</td>
<td>76</td>
<td>2.92</td>
<td>1.152</td>
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<tr>
<td></td>
<td>Nonminority</td>
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<td>2.39</td>
<td>1.063</td>
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### Independent Samples Test

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<th>Study</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig</td>
<td>t</td>
</tr>
<tr>
<td>36. I follow #HumberPR to learn about PR</td>
<td>Equal variances assumed</td>
<td>1.804</td>
<td>.180</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>1.804</td>
<td>134.83</td>
</tr>
<tr>
<td>47. I found #HumberPR a useful way to learn about PR</td>
<td>Equal variances assumed</td>
<td>.147</td>
<td>.701</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>.147</td>
<td>134.83</td>
</tr>
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