Literature Review: Twitter Use in Higher Education
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Introduction
Twitter, a popular microblogging service founded in 2006, has dramatically influenced the ways in which people communicate and share information. This literature review provides an overview of the emerging role of Twitter use in the realm of higher education, examining the application of Twitter to supplement classroom instruction; case studies demonstrating how Twitter has been incorporated into particular fields; Twitter’s potential to develop networks of academics; and ways in which universities have harnessed Twitter to connect with students.

Twitter and the Classroom
Professors are using Twitter for a variety of purposes: to make classroom information available; to allow students to interact with others outside the classroom; to showcase student work; and to assist their students with gaining recommendations and connections (Veletsianos, 2012). Instructors can share course-related announcements and reminders with students in real time, while students can also contact their professors with time-sensitive issues (Chen & Chen, 2012; Domizi, 2013; Dunlap & Lowenthal, 2009; Everson, Gundlach, & Miller, 2013; Lin, Hoffman, & Borengasser, 2013; Tess, 2013). Twitter facilitates communication in large lecture courses and academic conferences by enabling the audience to participate and interact with lecturers in real time (Gao, Luo, & Zhang, 2012). Twitter also extends the boundaries of the classroom in unexpected ways. Instructors have used Twitter to connect students in different sections of the same course and even to initiate cross-institutional collaboration (Everson, Gundlach, & Miller, 2013).

Twitter has been found to improve student engagement and active learning in courses where it is utilized (Chen & Chen, 2012; Dayter, 2011; Domizi, 2013; Everson, Gundlach, & Miller 2013; Tess, 2013). It also increases student motivation by enhancing accountability and making it easier for students’ instructors and peers to assess their individual contributions (Chen & Chen, 2012; Dayter, 2011; Everson, Gundlach & Miller 2013). Students rate Twitter highly for providing them with the ability to access and share resources related to the course, including the ability to communicate with the authors of their textbooks and practicing professionals in their fields (Chen & Chen, 2012; Domizi, 2013; Dunlap & Lowenthal, 2013; Fox & Varadarajan, 2011; Everson, Gundlach & Miller, 2013; Gao, Luo & Zhang, 2012; Tess, 2013).

Students using Twitter are also able to improve their skills in writing for an audience and filtering the information that they should share with others (Dunlap & Lowenthal, 2009; Gao, Luo, & Zhang, 2012; Tess, 2013). In a study comparing the brainstorming process of a Twitter group to an in-person discussion group, students in the Twitter group gathered a larger amount of information and remembered more solutions that they had jointly created when they were quizzed on this activity, but they came up with less variation in the points they generated, evidence of Twitter’s ability to stifle reflective thinking (Kassens-Noor, 2012).
Twitter fosters a sense of community between students and their instructors, allowing students to continue their professional relationships with their instructors after the course has ended (Domizi, 2013; Dunlap & Lowenthal, 2009; Gao, Luo, & Zhang, 2012; Tess, 2013). Frequent student and instructor usage of Twitter has also been positively correlated with perceptions of teacher credibility, teacher content relevance, and instructors’ immediacy (evaluated through in-class, nonverbal behaviors) (McArthur & Bostedo-Conway, 2012).

By using Twitter as a tool for course-related communication, students gain self-confidence and a greater level of comfort in expressing their opinions, since this method of online communication allows students who do not traditionally join in discussions to increase their participation in the course (Chen & Chen, 2012; Dayter, 2011; Fox & Varadarajan, 2011; Gao, Luo, & Zhang, 2012; Paul & Iannitti, 2012; Yakin & Tinmaz, 2013). Twitter also enables students to connect with and support each other, strengthening their social ties (Chen & Chen, 2012; Domizi, 2013; Gao, Luo & Zhang, 2012; Smith & Tirumala, 2012).

The character limit imposed by Twitter forces students to be concise and focused, a benefit cited in several studies, but it also has the effect of limiting the development of more complex arguments and self-reflective thinking (Chen & Chen, 2012; Domizi, 2013; Dunlap & Lowenthal, 2009; Everson, Gundlach & Miller, 2013; Gao, Luo & Zhang, 2012; Kassens-Noor, 2012; Wright, 2010).

**Critiques of Academic Twitter Use**

Some professors remain critical of Twitter’s use in higher education. A 2009 Faculty Focus survey found that a large percentage of faculty saw no place for Twitter in higher education, and in a 2011 study only 12% of higher education faculty reported using Twitter for professional purposes (classroom assignments comprised less than 1% of these uses), with faculty citing time, lack of privacy, and lack of integrity as major issues with Twitter. This same study found that nearly half of professors stated that Twitter had a “low value” for classes, whereas resources like YouTube, wikis, and blogs were rated much more highly (Faculty Focus, 2009; Lin, Hoffman & Borengasser, 2013).

Other Twitter-related issues that have been discussed are the relevance of FERPA and the need for instructors to discuss online privacy issues with their students; awareness of the data collected by certain sites; issues of intellectual property; and potential lack of accessibility of these sites for students with disabilities (Everson, Gundlach, & Miller, 2013). And the amount of time that may be required to sort through and evaluate students’ Twitter posts presents another potential difficulty for faculty (Chen & Chen, 2012).

Students also reported certain downsides to Twitter’s use. In one study where Tweets were integrated into classroom lectures, the majority of students found that Twitter was distracting, prevented note taking, and interrupted classroom instruction. Students in this course preferred that Twitter be limited to use outside the classroom for review purposes (Fox & Varadarajan, 2011). Other issues for students include a lack of familiarity with Twitter, and the risk of becoming overwhelmed by the large amount of information generated on Twitter (increasing the
likelihood that insightful questions and comments would never be addressed) (Fox & Varadarajan, 2011; Gao, Luo & Zhang, 2012).

**Field-Specific Twitter Usage**

Twitter has been adapted for use in a multitude of specific fields, including public relations, medical education, project management, and information systems (Dunlap & Lowenthal, 2009). Marketing students have successfully used Twitter to observe how professionals utilized social media to interact with customers (Gao, Luo, & Zhang, 2012). Twitter has also had extensive use in foreign language learning; it has been used in micro-gaming activities, digital storytelling, and providing students with access to native speakers to strengthen their communication skills. Twitter has been found to decrease students’ discomfort in communicating in foreign languages and students have rated it as an effective tool in their development of language skills (Dayter, 2011; Gao, Luo, & Zhang, 2012; Tess, 2013). A study of English language learners at a German university found that students felt free to react to their assigned readings without being hindered by formal syntactic structures, and their learning-by-reading outcomes improved greatly with Twitter use (Dayter, 2011).

Twitter has been used in study-abroad programs, allowing students to share reactions to the historical sites that they visit, make connections with local officials and representatives, and focus on documenting their experiences (Ellis, 2014). It has also been used in statistics courses, allowing students to pay greater attention to the use of statistical information in the media, although students in this study reported feeling constrained by Twitter’s character limit and thought Facebook might provide a better venue for sharing resources (Everson, Gundlach, & Miller, 2013).

Twitter has also been used as a tool for teacher education students. In a course aimed at developing self-reflective practices, students tweeted about complexity, curriculum planning, pedagogy, and reflections, reporting that they were more motivated to think about “why and how” they did certain things, making it easier to create lessons, and having the additional benefit of reducing feelings of isolation given the challenges that they faced as new teachers (Wright, 2010).

**Twitter for Professional Networking and Knowledge Sharing**

Twitter has the potential to create opportunities for networking and making professional connections in academia. Live-Tweeting classes or conferences can create virtual networks of learning between practitioners, learners, and outside groups (Gao, Luo, & Zhang, 2012). In some cases, academic Twitter accounts can attract the attention of professionals in these fields, and individuals in higher education have the opportunity to develop small groups of peers through Twitter communication to enhance their professional development (Lewis & Rush, 2013). Twitter contact between higher education faculty develops professional networks, bolsters personal relationships offline, and fosters communication between individuals in a field that do not have the option of meeting in person (Faculty Focus, 2009; Lewis & Rush, 2013; Veletsianos, 2012).
Studies of higher education faculty use of Twitter show mixed adoption of this technology. According to a 2009 survey, only about a third of respondents used Twitter, with many others skeptical of its educational relevance (Faculty Focus, 2009). For those scholars who are on Twitter, the majority of participation is focused on sharing information, news, media, and resources (Faculty Focus, 2009; Veletsianos, 2012). Professors also request and provide assistance, resources, and advice on teaching practices, and share information on their professional and personal accomplishments, enhancing their teaching abilities and their connections with one another (Veletsianos, 2012).

**University Twitter Profiles**

IHEs are increasingly maintaining Twitter profiles. Of the Top 100 schools ranked by *US News and World Reports*, 95.7% link to Twitter pages on their websites and 94.8% link to Twitter on their home pages, a rate of adoption second only to Facebook use (Greenwood, 2012). However, broader adoption of Twitter is more limited; a 2008 survey of 148 schools revealed that two thirds of campuses did not have an official Twitter account (Reuben, 2008). Early adopters of Twitter in Higher Education were primarily marketing, admissions, and alumni relations professionals (Faculty Focus 2009). Other Higher Education applications for Twitter that have been discussed include use in emergency situations or as a live chat for recruitment (Reuben, 2008).

The primary purpose of Twitter for Institutes of Higher Education (IHEs) in the United States is to serve as a newsfeed for a general audience, with a minority of tweets aimed at prospective students, current students, faculty, alumni, and parents (Linvill, McGee, & Hicks, 2012). Many informational tweets published by colleges provide links to their websites for further detail (Linvill, McGee, & Hicks, 2012; Yolcu, 2013). Studies of Israeli and Turkish IHEs reveal similar uses of Twitter, with colleges and universities sharing: information about the university, admissions information, academic and professional news, general news, and public relations information (Forkosh-Baruch & Hershkovitz, 2012; Yolcu, 2013).

**References**


