Facebook Goes to College: Using Social Networking

Sites as Course Management Software in the L2 Classroom

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**Introduction**

Studying any form of electronic communications is a moving target. Social networking sites evolve quickly and user intentions and program applications change to match and eventually supersede the capacities of the programs. Any study of the social networking site Facebook, even those including large studies of users, cannot claim to be a representative sample of the intentions of all individuals using the site at the time of the study and are certainly not representative years later. In particular, studies of educational applications of technology have short lifespans as programs become obsolescent, upgraded or unavailable. Recent developments in distance learning, including the controversial implementation of MOOCs (Massive Open Online Courses) at many institutions in the United States, Australia and Germany demonstrate both the speed with which new technologies and new educational paradigms can be adopted and the complexity of evaluating the effectiveness of new educational technologies in a scientifically defensible manner. Despite the difficulties involved in studying a rapidly evolving academic development like blended learning environments incorporating social media, this article hopes to contribute to the discussion surrounding such classrooms, by providing a snapshot of recent academic applications of Facebook, particularly in second or additional language classrooms, to both highlight some of the more innovative ways the technology has been applied in second and additional language courses and to examine what the research says – and fails to say - about the measurable effectiveness of these applications. While the examination here focuses on the ESL/EFL classroom, where social media sites including Facebook have mainly been used to reduce affective barriers to language acquisition and to provide a venue for the production of natural language, other classroom applications will also be examined, in order to provide a more comprehensive picture of student reactions to these learning environments.

Facebook has been the source of intense scholarly interest since it became available to those outside of educational institutions in the United States in 2006. Its explosive growth led to a large number of articles in the popular press about the uses and abuses of the site. Because Facebook originated within educational institutions as an online utility available to students, classroom applications for the site have been suggested almost from the beginning. It is even fair to argue that Facebook was always a creature of the academy, taking its very name from the printed class directory at Harvard. While many scholars speak of Facebook being ‘repurposed’ as an educational tool, there is a very real sense that Facebook has always been a utility closely tied the world of higher education.

Despite its origin as a creature of the academy however, Facebook has not been widely adopted or studied as a tool for additional language learning. Concerns about student/teacher roles, privacy issues, and the existence of other online tools like course management software have dampened enthusiasm for the use of FB (Facebook) and other social networking sites in many educational settings. Some preliminary research has also suggested that Web 2.0 technologies, and social networking sites in particular, are not effective vehicles for conveying or enhancing traditional course content and can lead to what Benito-Ruiz (2009) calls *infoxication,* essentially exposure to information that this either distracting in nature or simply overwhelming. Additional research notes that the immediate access to non-academic content on FB can lead to time wasting (Fodeman and Monroe 2009) and dishonesty (Queilolo 2009).

 Other research, however, particularly coming from the incredibly dynamic environment of English language teaching programs in Asia, points to highly successful studies integrating Facebook into blended learning environments. These studies claim that use of FB increases student investment in language learning, leading to increased levels of participation through the reduction of affective barriers that can inhibit language acquisition in the classroom (Shih 2011, Yunus, Salehi and Chenzi 2011, Kabilan, Ahmad and Abidin 2010). The ESL/EFL classrooms profiled here demonstrate how blended learning environments exploiting interactive media in academic contexts can reduce the tensions typically associated with learning to write in an additional language, resulting in improved test performance and greater course satisfaction.

**Social Networks and Course Management Software**

 Because of Facebook´s tremendous popularity among young people, educational institutions, libraries and individual instructors have been inspired to use the social networking site as a means to connect with and even offer instruction to students and clients. In order to explore the uses of social networking sites in higher education, one must examine the emergence of online learning, FB’s institutional doppelganger. The advent of distance learning in the mid-nineties led to the development of online learning platforms or course management software (CMS) enabling students sitting in remote locations the chance to study and, in limited ways, interact with other students. Initial platform design offered both asynchronous and synchronous learning environments with limited interaction among participants in the form of discussion boards, chat rooms and group project rooms. Motivated by the vision of ‘anytime, anywhere’ education, distance-learning providers struggled to offer quality interactive education within the constraints of the software and student schedules. Essentially, the challenge consisted of trying to integrate student collaboration and interaction (which teachers knew improved student engagement) in an online environment when students were rarely logged on at the same time.

As pioneering distance-learning programs pushed CMS to evolve into a more sophisticated learning tool, traditional instructors soon discovered that CMS could be used in hybrid or blended courses offering regular classroom instruction combined with remote, online, elements. While blended classroom environments with online interactivity seemed to promise the best of both worlds, students were initially lukewarm to the idea, criticizing not so much the concept of blended on- and offline learning, but the implementation of the online component (Kember et. al 2010, Kember 2007, Johnson and Aragon, 2003). In fact, although CMS platforms have been on campus for over 15 years and are an accepted part of many academics’ instructional world evidence suggests that their potential as an integrated part of a complete instructional package remains underutilized (Brown et. al. 2011). Depending on the individual professor and the course management platform provided by the institution, online class management software provides students access to lecture notes, course updates, assignments, hand-in folders, feedback, discussion boards and more. When these systems are appropriately integrated into course design, they have proved popular and useful among both instructors and students (Hunt et. al 2004). The programs, however, do come with limitations. They tend to be simple and static; purchased and maintained by large institutions, they are neither infinitely customizable nor dynamic. In addition, because they are part of the architecture of institutions, they require separate log-ins, often with password protocols different from those allowed elsewhere and difficult to accomplish on hand-held devices.

The software, however, may not be entirely to blame. Recent research into how students and instructors use these tools, demonstrates that lukewarm student response, when it occurs, may not reflect their opinions about interactive course software but, rather, the limited range of application employed by individual instructors or provided by institutions. In a fascinating study of how CMS´ are used in blended educational environments, Brown McCabe and Meuter (2011) discovered that students and instructors employed CMS – in their case, Blackboard – to perform very limited tasks. Using Celsi and Wolfinbarger´s Wave typology, Brown McCabe and Meuter argue that instructors´ capitalize on the Wave 1 (supporting off-line teaching) and the Wave 2 (replicating or mirroring classroom instruction) possibilities of their platform but largely fail to engage the third Wave (integrating interactive learning spaces) technologies. Thus, instructor’s track attendance (Wave 1) or post lecture notes/powerpoints (Wave 2) but rarely develop the capacity to create video chat rooms, or shared multi-media documents (Wave 3). Using Wave 3 technologies, the authors´ argue, creates the “greatest potential to create an enhanced learning environment” (156) and these are the tools least likely to be employed.

It is precisely here, with the advent of Wave 3 interactive technologies that Facebook moved from being a social tool used by university students to an educational supplement to online learning software. Traditional CMS requires students to log in using university assigned user names and passwords. This additional layer of security – often tied to university email addresses – ensures that academics remains a separate sphere, divorced from students online, socially networked, lives. Roblyer, McDaniel, Webb, Herman, Witty (2010) note that despite published accounts of the problems of using Facebook in educational settings ranging from cyber-bullying (Flynn 2009) to reduced academic performance (Paul, Baker and Cochran 2012, Kirchner and Karpinski 2010) many faculty members increasingly feel personally compelled to ‘meet students where they live’ and incorporate FB groups into their courses, in order to communicate more effectively with students who are using the service to manage other aspects of their lives. In fact, the rather convincing evidence of an inverse relationship between time spent on Facebook and academic achievement among college and university students (Paul, Baker and Cochran 2012, Kirchner and Karpinski 2010), is itself often cited as a reason for repurposing FB to academic use and, at least in theory, capturing students most at risk for doing poorly in their classes.

Ophus and Abbitt (2009) conducted the most extensive survey of university students´ receptiveness to academic uses of Facebook. Their survey revealed that while 77% of students had used Facebook to communicate about courses with fellow students, 85.5% had never used the utility to communicate with instructors (643). While the students surveyed felt relatively positive to using Facebook to access course information – lecture notes, assignments and so on – they also expressed a preference for using CMS rather than FB for the majority of their classroom work, mentioning privacy issues and distraction as arguments limiting the use of social networks for academic purposes. The majority of students surveyed said that they would open a new Facebook account if forced to communicate with instructors and students using the utility. Since opening a second account would require a separate login, it would, in effect, eliminate the convenience factor of using Facebook rather than traditional CMS.

Ophus and Abbitt studied North American students enrolled in biology courses at a large university. Their evidence suggested that students were initially resistant to the infiltration by education of a sphere they felt was inherently private. In 2007, Facebook attempted to add an online version of the CMS Blackboard, fully accessible via Facebook. This experiment was phased out in 2008 (Bosch 2009) again noting student resistance to the infiltration of the academy into their private lives. Other attempts to integrate college and university CMS environments with Facebook like Purdue University´s Mixable have faced lukewarm reception among students (the program had, at the time of this writing, 80 users). One study (Dalsgaard 2006) argued that while traditional CMS environments serve their Wave 1 and 2 functions, they provide limited room for interactive, problem-based learning. Thus, it is not enough to simply use Facebook as a portal to the CMS. Rather, instructors experimenting with Facebook´s instructional uses hope to take advantage of social networks´ inherent participatory structure, betting that online learning located within the network itself will allow for easier collaboration among course participants (Ophus and Abbitt 2009). Rumors continue that Facebook is pursuing agreements with the providers of CMS platforms to link online course ‘rooms’ through Facebook logins.

**Facebook and Language Learning**

It is easy to overstate the early evidence of student resistance to the academic infiltration of FB; while students did express privacy concerns they also reported robust interest in using FB as an academic communication channel (Irwin et. al 2012, Bosch 2009, Ophus and Abbitt 2009, Roblyer et al. 2010). Using Facebook alone as course management software in blended learning environments probably occurs informally with some frequency, although research on the learning effect of such a strategy is in its infancy. Because FB allows for students to carry on linguistic activities that are interactive in an asynchronous, easily accessible area, foreign language instructors, particularly those in countries where students have relatively little contact with native speakers, have turned to the social networking site as a means to reduce the affective filter inhibiting students’ written language production, and to increase enthusiasm for language learning through the use of interactive Wave 3 technologies.

Although a relatively new to the ESL classroom, Facebook has already spawned a number of case studies where FB is integrated into blended language learning environments. These studies have generally demonstrated that the potential academic benefits to outweigh the more difficulties in negotiating issues related to privacy and distraction (Koh and Chuah 2012, Yunus, Salehi and Chenzi 2012, Shih 2011, Kabilan, Ahmad and Abidin 2010). This section of the article examines some of the resent research using Facebook as a vehicle for additional language learning with an eye towards evaluating its applicability in the additional language learning context.

Arguments for including Facebook in language learning classrooms typically adopt some of the rationales mentioned in our discussion of course management software and the limitations of its use. Easily accessed, versatile and familiar to students, Facebook also offers a way to circumvent the ‘sage on a stage’ model of second language learning and to integrate Wave 3 technologies into the arsenal of pedagogical techniques available to the teacher of foreign languages. Specifically, Facebook offers a way to provide students with opportunities to practice additional language writing within an environment that is relatively informal and comfortable for student writers. Shih (2011), for example, integrated FB-based writing assignments into her 18 week ESL class in Taiwan. Twenty-three students participated in the course, posting small writing assignments on the course Facebook page and responding to the texts posted by their classmates. The students were assessed formally both before and after the course and, for the purposes of analysis, Shih divided the students according to their pre-test scores into high, middle and low proficiency English users.

In common with earlier studies of social networking sites in education, the students enrolled in Shih’s course reported moderate to strong satisfaction with the FB based assignments and the integration of SNS’ into their education process generally. Students reported particular satisfaction with the process of receiving peer feedback on their English language writing via FB. While scores on the post-test indicated significant improvement among all groups, the low proficiency group saw the most benefits, increasing their mastery of text structuring, vocabulary and spelling and overall organization.

These findings have been largely supported by the larger scale experiment conducted by Kho and Chuah (2012) in which 85 ESL students in Malaysia were required to participate in critical thinking exercises on a course Facebook page. The students in Kho and Chuah, posted comments about an assigned article and were then encouraged to participate in a discussion about the article with other students using the Facebook commenting feature. The Kho and Chuah students were overwhelmingly positive about the exercise, recording a 97% satisfaction rate with the assignment. When asked, however, if they preferred FB discussions the classroom ones, only 70% responded positively.

Even this weaker preference for FB discussions is stronger than that reported by Yunus, Salehi and Chenzi (2012). Yunus et. al. studied 43 Malaysian English language students. The students were enrolled in a college-level ESL course where written summaries of assigned reading materials were posted to a class FB page and students were required to participate in online discussions and brainstorming activities around themes introduced in the summaries. In common with the students in Shih and Kho and Chuah, these students reported very strong satisfaction with the writing and feedback portions of the assignment. Like the students’ in the North American studies, however, Yunus et. al. students did not strongly prefer FB discussion to those taking place in a traditional classroom environment. In fact, among the specifically ESL FB pilots examined here, Yunus et. al reported the lowest satisfaction rate with FB-based discussions with only 53.5 percent of the student agreeing that FB discussions were more effective than traditional classroom versions (79). All of the studies examined here integrated FB into a blended learning environment that included both traditional classroom instruction and FB activities and, while students reported very strong – over 90% in all studies – satisfaction with the experience of writing and receiving feedback via FB they were only weakly positive to the idea of actually replacing physical learning environments with social networks.

Also interested in EFL mixed learning environments, Wu and Hsu (2011) experimented by incorporating FB into their English classes at a university in Taiwan. Here too, students were generally positive to the integration of FB into the course, describing FB as “a pressure-free environment for English learning … (that made) them feel less stressful” (Wu and Hsu, 2011, 6). Simpson (2012) reported similar results from her pilot course integrating FB into ESL classes at a university in South Korea. In common with other students enrolled in these blended learning environments incorporating social media, the Korean students noted that FB use led to a reduction of tension and provided a comfortable venue for trying out language skills.

Given the nature of foreign writing instruction and the complicated web of factors that impact target language acquisition there have not yet been any large-scale projects with control group judging the effectiveness of the using SNS’ within the additional language classroom. Students in all of the studies examined here cited the inherent interactivity as one of the strongest factors leading to the high levels of satisfaction with the FB assignments. Because Facebook softened boundaries between class participants, including boundaries between students and instructors, students reported feeling more comfortable with the draft-writing and feedback stages of foreign language composition. It is interesting to note that the students in these ESL courses do not report the privacy anxieties noted in the North American studies.

**The Instructor as Facebook Friend**

In all of the ESL studies, students reported an increased rapport with fellow students and their instructor. In fact, the majority of the positive effects of FB use in the blended learning environments reported in the studies examined above have their origin in the reduction of anxiety often associated with foreign language learning. Since the 1970s, a voluminous body of evidence arguing that anxiety represents a tremendously powerful block to language acquisition has emerged. For nearly two decades, MacIntyre and Gardner studied the role of anxiety in foreign language learning, arguing that in many individuals, anxiety effectively blocked second language acquisition (1994). In response to this work and work based upon it, instructors have long recognized the importance of creating relaxed learning environments and taking active steps to reduce tensions in the second language learning classroom.

The instructor’s role in the creation of a positive learning environment is crucial and considerable research demonstrates that students routinely find instructors who *self-disclose,* or create personal connections with studentson Facebook to be more credible, competent and caring (Special, Li-Barber 2012, Mazer, Murphy & Simonds 2009, 2007). Facebook provides another way to reduce the tensions associated with additional language learning and to humanize the figure of the language instructor. According to this research, instructors who personalize teaching using humor, anecdotes, and personal stories and/or those who allow access to FB profiles that contain some degree of personalized content in the form of pictures, links and frequent status updates not exclusively focused on academics, reap the rewards in terms of increased student respect and attention. Further, the movement to incorporate social networking technologies into educational settings finds support in a number of studies demonstrating that using social networking technologies improve student/teacher and student/student relationships (Wolfe 2007). Supporting this research, other studies have concluded that social networking sites have value within higher educations as they allow students ‘the capacity to radically change the educational system… to better motivate students as engaged learners rather than learners who are primarily passive observers of the educational process’ (Ziegler 2007, 69). In short, because Facebook easily taps into Wave 3 applications of online technology, it has the capacity to promote learning in ways traditional uses of CMS do not.

**Implications for use**

Research, then, presents a relatively rosy picture of Facebook´s effectiveness as an educational tool because of its ability to encourage active participation from class members through feedback functions and its role in reducing anxiety within language use activities at least among ESL students studying in Asian countries. As Facebook solidifies its position as a global social network, establishing online course environments within the service itself becomes, if not desirable, a looming inevitability as it eliminates another layer of logins, another interface for students and instructors to master. In fact, is seems likely that more and more online courses including MOOCs, and more offline course content, will migrate there or at least incorporate a way to log in via FB and thus disseminate information about the course through social media. As everyone is aware, however, Facebook is an independent, for-profit company, in a rapidly evolving phase. The ethical issues involved with using Facebook within traditional higher education remain under-explored despite lurid headlines outlining the perils of a life lived online. The remainder of this paper will discuss some of the challenges involved in adapting developing social networks to educational uses as well as student reactions to social networking´s affordances in non-ESL contexts.

Educators are certainly familiar with stories of online peril, ranging from the predictable ‘Young Teachers Go Wild – Party Pictures on Facebook’ to accounts like that of Dartmouth professor Reiko Ohnuma whose status update "I feel like such a fraud. Do you think dartmouth (sic) parents would be upset about paying $40,000 a year for their children to go here if they knew that certain professors were looking up stuff on Wikipedia and asking for advice from their **Facebook** friends on the night before the lecture” found its way onto the larger internet via a student captured screenshot (Young 2009). While Facebook users have long had the ability to limit the audience for their postings – Professor Ohnuma had inadvertently left her status updates public – increased use of group functions to convey academic content open up ethical issues beyond that of inappropriate teacher or student revelations. Just as in the offline world, Facebook participates in a network of social signification much larger than the simple transfer of information in the form of a wall post or status update.

Wang et. al (2012) reports that while students generally recorded respectable levels of satisfaction with the implementation of private groups linked to course content, they remained concerned about their privacy and expressed profound concerns about being Facebook friends with their professor. Instructors integrating FB into their courses in different ways, those opting to use private groups, are forced to insist that students ‘friend’ them for the duration of the class. While this offers the advantage of a private, protected course FB page, it does involve a certain level of intimacy that worries some students and instructors, particularly those in the United States and Great Britain.

UK researcher Neil Selwyn studied the Facebook profile postings of undergraduates enrolled in the Coalsville University School of Social Sciences over an eighteen week period (2009). The students were enrolled in offline classes and Facebook was not used an official element in course delivery. Nevertheless, the students did indeed discuss school and academics on Facebook. Selwyn found that students frequently exchanged academic and practical information about their courses. He also found, however, that students more frequently used Facebook for “the *post‐hoc* critiquing of learning experiences” in the form of pointed, and often crudely formulated, criticisms of lectures and lecturers and to create a public image of themselves as disinterested and/or inept students. Using Goffman´s 1959 term ‘role distance’ to characterize student behavior on Facebook, Selwyn argues that the social networking site provided a space for students to create “disruptive, challenging and disengaged social identities” that were far from the passive and silent undergraduate mass often encountered in the seminar room or lecture hall.

And these anarchic self-presentations were not isolated occurrences, Selwyn claims, rather

The dominant roles on *Facebook* were either as the passive, disengaged student or the angry, critical student, with a strong sense of some students striving to ‘keep a particular narrative going’ (Giddens 1991, 54) about their non‐engagement with the educational aspects of their university experience. In comparison, opportunities to present a self‐image of being more intellectually engaged or enthused by one's studies were noticeable by their absence. 172

For these ‘angry and critical’ students, at pains to express their distance from the educational venture in which they were enrolled, the dangers of friending a professor, even one carefully packaged through assiduous privacy settings are obvious. Not only do postings by friends, tagging, notes and other Facebook vehicles provide ways for negative content to bleed through the walls of privacy settings, but the very act of friending an instructor would destroy the carefully constructed façade of disinterest and hostility crafted by the students. One simply cannot simultaneously self-present as hostile and/or disengaged while creating a tangible tie with the objects of one’s scorn. None of this, Selwyn concludes, should lead to a ‘moral panic’ among teachers or administrators, as universities have always provided a place for students to try on identities and to work out their own place in the social world of adults. Facebook is, then, simply another arena for this process. Facebook affordances, however, do not yet allow for students and faculty to ignore one another at the virtual pub.

Again, Selwyn’s study merely examined the ‘social’ use of FB by university students and not the behavior of student enrolled in blended learning environments. Selwyn’s results, however, do correspond with the perceptions recorded by the ESL students enrolled in English language classes. In their mind, FB represented a relatively free arena for trying out new skills without the stress and pressure of a traditional academic environment. Selwyn’s students too use FB as an arena for escaping from the hierarchies of the academy. The potential for both learning and anarchy exists in deinstitutionalized environments like Facebook and instructors employing the media must be aware of these potentialities.

**Conclusion**

Facebook’s ability to construct environments conducive to the production of less filtered language fosters both identities amenable to learning, as we saw in the studies of Asian ESL/EFL courses, and individual and shared identities that actively question traditional higher education. Here it is important to note that the students participating in the courses studied by both Kho and Chuah (2012) and Yunus, Salehi and Chenzi (2012) expressed only a weak preference for their online, FB discussion sessions. The students had access to both online and offline discussions, and associated reduced levels of stress and an increased level of natural language production with the online discussions but noted that traditional classroom environments allowed for the transfer of more specific linguistic information. Moreover, while the students in these studies did indicate a modest enthusiasm for the idea of migrating all course discussions to online environments, they had never participated in ESL/EFL courses taught entirely online. Enthusiasm for the innovative integration of FB into their traditional courses may testify to their dissatisfaction with traditional classroom learning as the sole means of instruction.

To conclude, I would like to return to the case of Reiko Ohnuma, the Dartmouth religion professor who learned an important lesson about Facebook´s power to both support and destabilize traditional learning. Ohnuma´s posting asking if Dartmouth parents would be happy about professors using Wikipedia and Facebook friends to construct a lecture reveals really very little about Ohnuma herself. Academics, like everyone else, do indeed consult Wikipedia when looking for initial information on topics. And, also like everyone else, they frequently bounce ideas off their friends – very often other academics. If Professor Ohnuma´s post is humorous, it is because for many, Facebook friends have the same relation to the notion of friendship as Wikipedia entries have to the domain of knowledge. No student would have captured a screenshot of a status update by a professor confessing to consulting reference material and talking to colleagues before a lecture. It is precisely that knowledge gained through reading Wikipedia and friends obtained through Facebook are both perceived as somehow less legitimate, less authentic than knowledge gained and friendships forged outside the flickering world of the computer screen. I am not arguing here for the moral superiority of either offline knowledge or friendships, merely noting that they are often experienced as qualitatively different from their online counterparts, hence the sting in Ohnuma´s humor.

Likewise, the Reiko Ohnuma found on Facebook closely resembles the students Neil Selwyn observed at Coalsville University. Inhabiting an arena which feels more democratic, less rule-bound, Ohnuma and the Coalsville students actively created self-portraits that were more anarchic, more vociferous and perhaps more human that the ones common to your average university lecture hall, more characterized by silence and embarrassment than by the exchange of ideas or the production of natural language.

The ESL students in the studies of blended learning environments in Asia automatically responded to the leveled academic environment provided by their instructors on FB and felt able to produce target language writing free from the stress and pressure of the classroom. In the same way, Ohnuma writing on Facebook freely confesses that she ‘feels like a fraud’ and the Coalsville students´ offer their lecturer concrete and unfiltered feedback - yada, yada bollocks. Many lecture halls quite simply fail to provide a space for instructors to admit their limitations or for students to aggressively criticize their instructor. Perhaps the bruising immediacy and startling intimacy of Facebook will indeed offer a way out of the ritualized arena often found in traditional learning environments.

Bibliography

Avery Gomez, Elizabeth, Denzhi Wu, and Katia Passerini. "Computer-supported, Team-based Learning." *Computers and Education* 55, no. 1 (2010): 378-90. doi:http://dx.doi.org/10.1016/j.compedu.2010.02.003.

Bourdieu, Pierre, and Loïc J. D. Wacquant. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press, 1992.

Dalsgaard, C. "E-learning beyond Learning Management Systems." *European Journal of Open, Distance and E-learning*, 2006. Accessed October 24, 2012. http://www.eurodl.org/materials/contrib/2006/Christian\_Dalsgaard.htm.

DiMicco, Joan, David R. Millen, Werner Geyer, Casey Dugan, Beth Brownholtz, and Michael Muller. "Motivations for Social Networking at Work." In *Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work*. 2008. Accessed October 24, 2012. doi:doi10.1145/1460563.1460674.

Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. "The Venefits of Facebook "friends:" Social Capital and College Students' Use of Online Social Network Sites." *Journal of Computer Mediated Communication* 12, no. 4 (2007). Accessed October 24, 2012. http://jcmc.indiana.edu/.

Fife, J. M. "Using Facebook to Teach Rhetorical Analysis." *Pedagogy: Critical Approaches to Teaching Literature, Language, Composition, and Culture* 10, no. 3 (2010): 555-62. doi:10.1215/15314200-2010-007.

Flynn, N. "Facebook, Take 2: Cyberbullying." May 19, 2009. Accessed October 12, 2012. http://blogs.edweek.org/edweek/LeaderTalk/2009/05/facebook\_take\_2\_cyberbullying.html?qs=facebook.

Fodeman, Doug, and Marje Monroe. "The Impact of Facebook on Our Students." *Teacher Librarian* 36, no. 5 (2009): 36-40.

Ingeman, Steven. "The Tweet Life: Philosophical Reflections on the Age of Ephemera." *Popular Culture Review* 23, no. 2 (Summer 2012): 27-40.

Johnson, Scott D., and Steven R. Aragon. "An Instructional Strategy Framework for Online Learning Environments." *New Directions for Adult and Continuing Education* 2003, no. 100 (2003): 31-43. doi:10.1002/ace.117.

Kember, David, Carmel McNaught, Fanny C.Y. Chong, Paul Lam, and K. F. Cheng. "Understanding the Ways in Which Design Features of Educational Websites Impact upon Student Learning Outcomes in Blended Learning Environments." *Computers & Education* 55, no. 3 (2010): 1183-192. doi:10.1016/j.compedu.2010.05.015.

Kember, David. *Reconsidering Open and Distance Learning in the Developing World: Meeting Students' Learning Needs*. London: Routledge, 2007.

Kirschner, Paul A., and Aryn C. Karpinski. "Facebook and Academic Performance." *Computers in Human Behavior* 26 (2010): 1237-245. Accessed October 24, 2012. http://www.academia.edu/230379/Facebook\_and\_Academic\_Performance.

Kleck, Christine A., Dawn Ziergerer Behnken, and S. Shyam Sunda. "The Company You Keep and the Image You Project: Putting Your Best Face Forward in Online Social Networks." In *57th Annual Conference of the International Communication Association, Creating Communication: Content, Control, Critique,*. Proceedings. May 24-28, 2007. Accessed October 24, 2012. http://citation.allacademic.com/meta/p\_mla\_apa\_research\_citation/1/7/2/7/5/pages172756/p172756-1.php.

MacIntyre, Peter D., and R. C. Gardner. "The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language." *Language Learning* 44, no. 2 (1994): 283-305. doi:10.1111/j.1467-1770.1994.tb01103.x.

Mazer, Joseph P., Richard E. Murphy, and Cheri J. Simonds. "The Effects of Teacher Self-disclosure via Facebook." *Learning, Media and Technology* 34, no. 2 (2009): 175-83. doi:10.1080/17439880902923655.

McCabe, D. B., and M. L. Meuter. "A Student View of Technology in the Classroom: Does It Enhance the Seven Principles of Good Practice in Undergraduate Education?" *Journal of Marketing Education* 33, no. 2 (2011): 149-59. doi:10.1177/0273475311410847.

McCabe, Deborah Brown, and Meuter L. Matthew. "A Student View of Technology in the Classroom: Does It Enghance the Seven Principles of Good Practice in Undergraduate Education." *Journal of Marketing Education* 33, no. 2 (August 2011): 149-59.

Ophus, John D., and Jason T. Abbitt. "Exploring the Potential and Perceptions of Social Networking Systems in University Courses." *Journal of Online Learning and Teaching* 5, no. 4 (2009): 639-48. Accessed October 28, 2012. http://jolt.merlot.org/vol5no4/ophus\_1209.pdf.

Queirolo, J. "Is Facebook as Good as Face-to-face." *Learning and Leading with Technology* 37, no. 4 (2009): 8-9.

Roblyer, M. D., M. McDaniel, M. Webb, J. Herman, and J. V. Witty. "Findings on Facebook in Higher Education: A Comparison of College Faculty and Student Uses and Perceptions of Social Networking Sites”." *Internet and Higher Education* 13 (2010): 134-40. doi:http://dx.doi.org/10.1016/j.iheduc.2010.03.002.

Selwyn, Neil. "Faceworking: Exploring Students' Education-related Use of Facebook." *Learning, Media and Technology* 34, no. 2 (2009): 157-74. doi:10.1080/17439880902923622.

Shih, Ru-Chu. "Can Web 2.0 Technology Assist College Students in Learning English Writing? Integrating Facebook and Peer Asessment with Blended Learning." *Australasian Journal of Educational Technology* 27, no. 5 (2011): 829-45. Accessed March 23, 2013. http://ascilite.org.au/ajet/ajet27/shih.html.

Simpson, Monique. "ESL@Facebook: A Teacher's Diary on Using Facebook." *Teaching English with Technology* 12, no. 3 (2012): 36-28. Accessed April 1, 2013. http://www.tewtjournal.org.

Skeels, Meredith, and Jonathan Grundin. "When Social Networks Cross Boundaries: A Case Study of Workplace Use of Facebook and LinkedIn." In *Proceedings of GROUP 2009*. May 2009. Accessed October 24, 2012. http://www.meredithskeels.com/Skeels\_GROUP2009.pdf.

Special, Whitney P., and Kirsten T. Li-Barber. "Self-disclosure and Student Satisfaction with Facebook." *Computers in Human Behavior* 28, no. 2 (2012): 624-30.

Thomas, Douglas, and John Seely. Brown. *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change*. Lexington, KY: CreateSpace, 2011.

Tong, Stephanie Tom, Brandon Van Der Heide, Lindsey Langwell, and Joseph B. Walther. "Too Much of a Good Thing? The Relationship between Number of Friends and Interpersonal Impressions on Facebook." *Journal of Computer-Mediated Communication* 13, no. 3 (2008): 531-49. doi:10.1111/j.1083-6101.2008.00409.x.

Wu, P., and L. Hsu. "EFL Learning on Social Networking Site?: An Action Research on Facebook." In *TLV Conference*. Proceedings of Teaching & Learning with Vision Conference, Queensland, Australia. 2011. Accessed April 1, 2013. http://tlvconf.files.wordpress.com/2011/04/tlv-paper-wu.pdf.

Wu, Sheng-Yi, Huei-Tse Hou, S.Y. Chen, E.Z.F. LIU, and Wu-Yuin Wang. "Discussion Models in Seamless OnlineLearning Integrated Discussion (SOLID) Environment: Selection vs. Performance." In *Advanced Learning Technologies (ICALT)*. Proceedings of Advanced Learning Technologies (ICALT), 2012 IEEE 12th International Conference. doi:10.1109/ICALT.2012.31.

Yu, James. "Dartmouth Religion Professor Apparently Clueless about the Perils of Facebook." IvyGate RSS. December 11, 2008. Accessed October 20, 2012. http://www.ivygateblog.com/.

Zhao, Shanyang, Sherrie Grasmuck, and Jason Martin. "Identity Construction on Facebook: Digital Empowerment in Anchored Relationships." *Computers in Human Behavior* 25, no. 5 (2008): 1816-836. Accessed October 24, 2012. doi:http://dx.doi.org/10.1016/j.chb.2008.02.012,.

Ziegler, S. "The (mis)education of Generation M." *Learning, Media and Technology* 32, no. 1, 69-81. doi:10.1080/17439880601141302.

Zuhadar, Leyla, Rong Yang, and Miltiadis D. Lytras. "The Impact of Social Multimedia Systems on Cyberlearners." *Computers in Human Behavior*, 2012. doi:ttp://dx.doi.org/10.1016/j.chb.2012.09.009, Usin.