Title: Facebook, telecollaboration, and international access to technology in the classroom

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*Abstra*ct

This study uses the well-known social networking site, Facebook (FB), for a study of differences in perceptions on the use of technologies in the classroom around the world. This study is part of a larger project exploring telecollaboration and the use of online discussions between graduate students in an online masters program based in Australia and students in the graduate education program at a regional university in Greece. Postings reveal more similarities between the situations and perceptions of the participants from the different countries than differences. Most participants indicated that while they and their students had access in general to computers and the internet,they did not necessarily have this access in the classroom. Even when technologies were available in schools, participants identified a critical need for professional development to increase teachers' use of ICT. These findings are relevant to educators and policy development in terms of implementation of ICT or social networking in the language classroom.

Introduction

Facebook is a widely used social networking site with over 1.11 billion users (Wikipedia, 2013). Facebook is the most popular social networking site in Canada, the UK, and the US, with Facebook penetration highest in North America, followed by the Middle East/Africa, Latin America, Europe and Asia-Pacific (Wikipedia, 2013). With a few exceptions (e.g. Peoples Republic of China, Iran), Facebook can be accessed globally for free to anyone who has internet access and a Facebook account.

The site works with a user registering, then creating a personal profile, to which they can add other users as 'friends', and with whom they can then exchange messages, chat, etc. Additionally, users may join common-interest user groups, organized by workplace, school or college, or other characteristics, and categorize their friends into lists such as "People From Work" or "Close Friends" (Wikipedia, 2012). Although some security issues have been raised, in general, privacy can be maintained as the Facebook page owner has control over who is a 'friend', and what kind of access they have to content on the page. In this study, we propose that these features, together with the widespread familiarity of many students with the specific site and it's functions, and the fact that it is free to access, could position Facebook as an appropriate option for a 'virtual learning environment', by facilitating interactions and tellecollaboration between teachers in diverse teaching and learning environments.

Despite the relative newness of Facebook, which was only launched in 2004, there has been an explosion of research about various facets of Facebook since approx. 2009, when widespread uptake began to be seen. Research about Facebook spans a number of different fields, from psychology to education to business and medicine. Recent research includes analysis of the types of people who use Facebook (Carpenter et al., 2011; Gangadharbatia, 2010; Gosling et al., 2011; Orr et al., 2009; Ross et al., 2009), how different groups use Facebook (Attia et al., 2011; Ellison et al., 2007; Hum et al., 2011; Nosko et al., 2010; Park et al., 2009; Pempek et al., 2009; Waters et al., 2009), how Facebook can or is used in education (Eyesenbach, 2008; Goodband et al., 2011; Harrison & Thomas, 2009; Hew, 2011; Kabilan et al., 2010; Madge et al., 2009; Maranto & Barton, 2010; Pempek et al., 2009; Roblyer et al., 2010; Yan et al., 2010), privacy issues with Facebook (Qi & Edgar-Nevill, 2011; Smith & Kidder, 2010; Weir et al., 2011), and even content analyses of Facebook pages (Glyn et al., 2012; Hum et al., 2011).

Research indicates that Facebook use varies by both the type of user, as well as by purpose or use (Carpenter et al., 2011; Gangadharbatia, 2010; Gosling et al., 2011; Orr et al., 2009; Ross et al., 2009). Although the use of Facebook for educational purpose is relatively new, interest in this phenomenon is increasing (Eyesenbach, 2008; Goodband et al., 2011; Harrison & Thomas, 2009; Hew, 2011; Kabilan et al., 2010; Madge et al., 2009; Maranto & Barton, 2010; Pempek et al., 2009; Roblyer et al., 2010; Yan et al., 2010). Research on the use of Facebook in educational contexts has explored a number of groups in terms of their use of Facebook, although the majority of research has focussed on student users.

To date, considerably less research appears to have been done on how teachers use or perceive Facebook themselves (personally and/or pedagogically), although some research has suggested students reported higher levels of teacher trustworthiness and caring attributes when the teacher provided more information about themselves (e.g., self-disclosure) on shared Facebook pages (Hew, 2011). Research on Facebook in educational contexts also suggests considerable individual variation in the type and amount of use by individuals, but has not yet examined these issues in detail. To date, there appears to have been little research on how teachers use Facebook themselves, either privately or in educational contexts, and whether the characteristics and trends in Facebook use identifed for students generalize to teachers.

This paper attempts to address this research gap by exploring how teachers, who are also graduate students in Australia and Greece, perceive similarities and differences in access and use of technologies in their classrooms.

The Study

Earlier research by Woodman and Kazoullis (2007) using telecollaboration had indicated that important factors in successful telecollaborations included ease of use and access, familiarity with the platform or site, and providing targetted discussion questions, often involving self-reflection and application to students' own experience, for participants to share with their classmates while online (e.g., to facilitate and engage social interaction). These questions could create a purpose for interaction between students who do not know each other, by encouraging them to share similarities and differences in perceptions about a shared experience via social networking (e.g., in this case, the use of technology in their classrooms).

In this project, the social networking site, Facebook, was chosen as the virtual environment for the telecollaboration as it was identified as a site that virtually all students could access easily (e.g., without having to navigate different universities' logon systems, or go through complex access processes). It was also identified as a site with which many students would have some familiarity due to the popularity of the use of Facebook for personal contacts (Hew, 2011). It was believed that previous familiarity could minimize the possible interference of the technology itself on interactions (e.g., the navigation of the system would be less problematic than having to learn a new system). In addition, based on the findings of Woodman and Kazoullis (2007), specific tasks were designed to encourage interaction between the two groups of participants, and to engage discussion on a specific topic (e.g., ICT in the language teaching classroom).

Purpose

This paper explores how teachers, who are also graduate students in Australia and Greece, perceive similarities and differences in access and use of technologies in their classrooms, to identify any country-specific similarities and differences. It is part of a larger study which examined whether targetted discussions on the use of ICT in language classrooms would encourage social networking on a Facebook site between language teachers enroled in Masters of Education programs in Australia and Greece, who were from diverse cultural and linguistic backgrounds. During the period of the study, both groups of students were enrolled in graduate courses which were specifically focussed on the use of technology for language teaching.

Data collection

A Facebook page was specially created for the project, and within the Page a specific discussion group called "Scenario Discussions" was created. Weekly scenario questions were posted to

stimulate discussion between the graduate students in Australia and Greece on issues in the use of technology for teaching languages via social networking to explore shared experiences: to discuss, share and interact with each other. Because participants shared a common profession (e.g., as language teachers), but did not know each other 'offline', discussion questions included issues which might be common to teachers in different countries such as access and use of technology in the classroom, and problem-solving via discussion of real-life issues facing teachers in different countries.To ensure participants' privacy, access to both the Facebook page and the specific "Scenario Discussion" group within the Facebook page were controlled by the authors (who were also the course instructors). Only participants in the study could access and participate in activities. Approximately once a week, a new "Discussion Question" was posted and participants were invited to comment. All participants had 24/7 access to the site, so they were able to participate at their convenience. The study ran for approximately three months, which included the academic semesters of both institutions.

Subjects

Participants in the study included nineteen (19) pre- and in-service teachers studying in Masters of Education in Australia and Greece, and their two (2) academic lecturers. Twelve (12) of the students were studying in Greece, and seven (7) were studying at the Australian university. While all of the participants from Greece were ethnically Greek, the 'Australian' group included two students from China, one student from Malaysia, one student from the Philippines, one student for Korea, one student from Saudi Arabia, and one Australian student. In total, there were five (5) male participants and sixteen (16) female participants.

Analysis

Data in the larger study was analyzed in two ways. First, overall tendencies were observed in terms of number of participants, number and types of postings, number and types of postings/participant, etc. Second, 'target' postings – or those which triggered responses from participants – were identified and classified into four main categories: discussion questions, online questionnaires, resources, and other (Hew, 2011).

In this paper, analysis focussed on forum postings on Facebook in terms of (1) types of activities; (2) types of users; and (3) content of responses. These responses were compared based on country of origin/teaching context.

Results

Each section will describe and provide examples of each category of response. All quotes are provided as written by participants, without correction.

Access to technology

The issue of access to ICT resources and/or the internet was a subject which generated the most discussion between participants. This result is perhaps not surprising, since they shared backgrounds as language teachers, and they were studying in courses on the use of technology for language teaching. However, responses to Questions 1 and 2 suggest that while most participants had some access in schools, access for students in school (e.g., during the school day) varied considerably, sometimes even within the same country. Because of the impact of access to technology on their day to day work, the shared experience (and frustration) appears to have been a 'bonding' experience for many participants, reinforcing their professional identities as language teachers who faced shared difficulties and challenges, regardless of country or culture – and the ability to identify ways to circumvent some of these challenges, and creating a sense of community in the online context (e.g., Hew, 2011; Stafford et al., 1993).

Table 1 provides a summary of the responses by country of teaching context.

Table 1

Country	Social network access	Access in schools	Access for students	In-class	Extracurricular
China	Not for Facebook, Youtube or Twitter; but have analogous sites such as Renren and Kaixin	Yes	Yes	Yes	Yes
Australia	All	Some	Some	It depends	Yes
The Philippines	Some	Some	Limited	It depends	Yes
Korea	Yes	Yes	Yes	It depends	Yes
Greece	Yes	Most	Yes	Most	Yes

There was considerable similarities in access issues identified by participants. In all the countries represented in the sample, at least some access was available in schools, and all had access outside of the classroom (e.g., extracurricularly).

However, there were also some variations by country, which will be discussed below.

China

One key difference in terms of internet access was for those living in the People's Republic of China (PRC), where access to sites like Facebook, YouTube and Twitter is typically blocked. However, a number of sites with analogous functionality are available, as XZ comments

> While in China we have no access to the popular websites, ie. Facebook, Youtube, Twitter, there are other similar substitutes available. For instance, the popular social networking websites include Renren, Kaixin, where people can keep with the latest news about their friends. Youku is the website where you can upload your own videos or watch others. [XZ]

XZ also noted the raising importance of mini-blogs:

> Similar to Twitter, mini blogs are now gaining more and more popularity among people from all walks of life...All the above is accessible to our schools as well as our students by computers or mobiles.[XZ]

In general terms, therefore, access in the PRC appears similar to those in other countries for both students and teachers, with greater access outside the classroom, then in the schools.

South Korea

Similarly, according to SK, in Korea

> ..most schools have access to CMC. Also most of student can access to CMC at home easily or in the school computer labs. Sometimes, I asked my students to access special webpages to review and self-study what they'd learnt in the class. [SK]

SK also indicates how she uses ICT to help her students both in and out of class.

Greece

In Greece, according to VK, "most schools have computers and internet access. And lots of schools have interactive whiteboards". However, AG suggests "when we have such equipment, they are not used properly in class or not used at all", a perspective supported by NM and JV.

NM says

> I agree that almost all schools (at least those that I've worked to) have technological equipment that can be used for teaching but the point is that the percentage of teachers using them is dissapointingly low...[NM]

The issue of teacher use of ICT, and how this may be related to lack of teacher training, was of particular concern amongst the Greek students, although it was also echoed by others.

The Philippines

LQ notes that in the Philippines,

> ..due to limited CMC materials, students have to book for a schedule to access the comptuer in the computer laboratories provided for them and limit their usage for one hour usage for twice a day transaction. Internet cafe are also available outside the campus, but students need to pay fifteen pesos (equivalent to fifty cents AUD) per hour of usage. Lucky they are if the restaurants and coffee shops which have wifi don't have passwords [LQ]

Interestingly, LQ's observation seems to be the only example of the possible impact of a 'digital divide' where access may be limited by student income. Most other participants indicated their students had access either at home or outside of class in other ways.

Australia

KH, in her discussion of access to technology in the context of the Queensland (Australia) educational system, highlights more of the commonalities of across the various countries, citing issues related both to access, but also frustrating administrative issues, which may limit fully exploiting technology in the classroom. She states that "Queensland state schools have access to The Learning Place [an LMS] where teachers can set up Project Rooms (with poll, chat and discussion board tools) and Blackboard virtual classrooms". However, she also notes that although she has used YouTube at school, in general, "access to it is blocked for students". Similarly, she report on "example sites for educators (they had set up with) RSS feeds of 'breaking news'..in Ning..(which is) no longer freely available..(and probably can't) be accessed". This issue of school administrative processes seemingly creating roadblocks for their own goals of ICT use was noted by a number of participants in different countries, and seemed to be creating a 'artificial' or 'context-specific' digital divide. Many schools blocked students from using mobile devices in class, and in some cases, access to search sites as well.

International perceptions of issues in the use of ICT in the classroom

When participants were asked about key issues related to CALL or use of technology in teaching in their home countries, again more commonalities were seen than differences. As summarized in Table 2, key issues identified by the teachers from Greece, Australian and Korea related to the need for more teacher education with ICT to make teachers more confident with using ICT in the classroom. These findings are consistent with much of the literature on the use of ICT in language teaching (Godwin-Jones, 2010).

Table 2

In your opinion, what are the key issues in your country's teaching context related to CALL or use of technology in teaching?

Country	Issue	Number of citations
Greece	Lack of training for teachers	3
	Use of new software	3
	Lack of hardware	3
	Student numbers	3
	Perception of use of technology	1
	Administration/decision-making	1
Australia	Teacher confidence and skill with ICT	1
Korea	Teacher education/confidence with ICT	1

Within the Greek context, MM suggests “the teachers need immediate training on the use of ict. Some of them have to start from ‘...and this is how the computer turns on’”, while NM adds that most teachers in Greece think “that technology is used only in Informatics [e.g., IT] and not in other fields [e.g., education]”. NM also emphasizes that large class sizes also make teaching with ICT more challenging. Finally, NP expresses the frustration of many educators, noting “every time when somebody new governs this place (it) all starts (again) from the beginning!”

Similarly, KH believes that “in Queensland [Australia], teachers’ levels of confidence and skill with technology and the availability of suitable resources within schools seem to be the main issues”.

And SK agrees, stating

> Korea has similar problem. Technology for teaching has been progressed a lot and so quickly but the teachers can’t really follow it up. There are some teacher training programs but teachers don’t really use them much as they normally like to use something that is already familiar with them

Other issues identified by participants included issues related to lack of hardware and difficulties keeping up with new software.

Discussion

Findings support the use of Facebook for telecollaboration in teacher education and for research into ICT and language teaching. For example, results of the analysis of Question 3 provide support for use of Facebook discussion groups to encourage frank and open discussions of critical issues of interest to participants, including opportunities for constructive problem-solving by sharing and networking based on expertise. Results also illustrate similarities and differences in international issues related to the use of technology in the classrooms, and provide support for the use of Facebook for both tele-collaboration between teachers and/or graduate students, but also for data collection in research on teacher perceptions of issues related to the use of technology.

The majority of partipicants were active on the Facebook site during the study, posting a number of times over the three month period. There were almost no questions about how to use the site itself, implying that participants had prior experience with social networking, and specifically Facebook, and it’s functionality. Even students from the PRC, who only had had access to Facebook while studying in Australia, appear to have had little difficulty adapting to Facebook, since they were familiar with the format and functions from their experience with the Chinese equivalent social networking sites. These findings support the use of Facebook for both the purposes of research, and for the pedagogical use in faciliating discussions about issues in language teaching amongst graduate students from different institutions and cultural backgrounds. Further, creating a specific place (e.g., Scenario discussions) for the discussions appears to have allowed participants to access and post on specific issues asynchronously (e.g., at different times) without the confusion of other issues in Facebook functionality (e.g., timeline, updates).

Second, the use of specific or targetted Discussion Questions (or ‘trigger questions’) was also supported. Analysis of the types of questions which generated the post postings indicated that having specific issues which were personal and relevant motivated the most participants to contribute. In this context, Discussion Questions which focussed on cross-cultural or international differences in education and technology were the most popular. These findings underline the importance of engaging in-service graduate students *as teachers* (e.g., as experts) on issues related to their personal experience in their own cultural contexts and own classrooms. Issues such as the impact of differential access to ICT and internet in different teaching contexts, and suggestions from participants about how to address challenges such as lack of training for teachers in ICT, imply a high level of engagement in the key issues of the courses, and a level of analysis and problem-solving appropriate to graduate level students. The questions which led to the highest response rates were those that allowed the participants to demonstrate their expertise in their identities as ‘teacher/experts’, not simply as ‘grad students/learners’: issues of ICT access in their teaching contexts; key issues in ICT in their countries; how funding for ICT could be best spent in their teaching contexts. The types of questions, focussing discussion on common issues in diverse teaching contexts, did appear

successful in creating an online community of teachers, discussing 'real world', or authentic, problems.

Finally, the postings reveal more similarities between the situations and perceptions of the participants from the different countries than differences. Although these results could reflect the origins and size of the sample, most participants indicated that while they and their students had access in general to computers and the internet,they did not necessarily have this access in the classroom. Even when technologies were available in schools, participants identified a critical need for professional development to increase teachers' use of ICT. These findings are relevant to educators and policy development as teacher training in the use of ICT is necessary for implementation of ICT or social networking in the language classroom.

Recommendations and conclusions

This study supports the use of Facebook for telecollaboration in teacher education, as well as an opportunity to collect data on teacher perceptions of ICT and language teaching. Postings reveal many similarities between the situations and perceptions of the participants from the different countries, suggesting that school systems around the world deal with the use of technology in the classroom in similar ways. Most participants indicated that while they and their students had general access to computers and the internet, they did not necessarily have this access in the classroom. Given the rising importance of e-literacy to the global economy, access to computers in the classroom needs to be addressed internationally.

Increasing access to computer-based functionality in the classroom could be accomplished by increased use to mLearning technologies (e.g., making use of smart phones, tablets and laptops), in pedagogically appropriate ways. For example, smart phones can provide individual access to the internet for task-based searches, dictionary and reference use, or access for specific learning sites. Smart phones can also replace the need to book video or audio recorders, literally putting a whole A/V department into students' and teachers' hands.

Similarly, participants identified a critical need for professional development to increase teachers' use of ICT. The implications for adminstrators and governments is the need to provide specific and targetted professional development such as curriculum and pedagogical task specifically developed to use mLearning devices if they want maximal use of technologies in the classroom. There may also be a need to change perceptions of devices such as smart phones, so that they are seen not just as for entertainment, but as, "personal learning devices".

In conclusion, the findings of this study are relevant to educators and policy development in terms of implementation of ICT or social networking in the language classroom.

References:

Attia, A., Aziz, N., Friedman, B., and Elhusseiny, M. (2011) 'Commentary: The impact of social networking tools on political change in Egypt's 'Revolution 2.0', *Electronic Commerce Research and Applications*,10, 369-374.

Belz, J. (2002) 'Social dimensions of telecollaborative foreign language study', *Language learning and technology,* 6, 1, 60-81

Carpenter, J., Green, M., and LaFlam, J. (2011) 'People or profiles: Individual differences in online social networking use', *Personality and Individual Differences*, 50, 538-541.

Ellison, N., Steinfield, C., and Lampe, C. (2007) 'The benefits of Facebook 'friends': Social capital and college students' use of online social network sites', *Journal of Computer-Mediated Communication*, 12, 1143-1168.

Eysenbach, G. (2008) 'Medicine 2.0: Social networking, collaboration, participation, apomediation, and openness', *Journal of Medical Internet Research*, 10(3), e22.

Gangadharbatla, H. (2010) 'Facebook me: Collective self-esteem, need to belong, and internet self-efficacy as predictors of the attitudes toward social networking sites', *Journal of Interactive Adverstising*, 8(2), 5-15.

Glynn, C., Huge, M., and Hoffman, L. (2012) 'All the news that's fit to post: A profile of news use on social networking sites', *Computers in Human Behavior*, 28, 113-119.

Godwin-Jones, R. (2010) 'Emerging technologies: Literacies and technologies revisited', *Language Learning and Technology*, 14(3), 2-9.

Goodband, J., Solomon, Y., Samuels, P., Lawson, D., and Bhakta, R. (2011) 'Limits and potentials of social networking in academia: Case study of the evolution of a mathematics Facebook community', *Learning, Media and Technology*, 1-17.

Gosling, S., Augustine, A., Vazire, S., Holtzman, N., and Gaddis, S. (2011) 'Manifestations of personality in online social networks: Self-reported Facebook-related behaviours and observable profile information', *Cyberpsychology, Behavior, and Social Networking,* 14(9), 483-488.

Harrison, R. and Thomas, M. (2009) 'Identity in online communities: Social networking sites and language learning', *International Journal of Emerging Technologies and Society*, 7(2), 109-124.

Hew. K. F. (2011) 'Students' and teachers' use of Facebook', *Computers in Human Behavior,* 27, 662-676.

Hum, N., Chamberlin, P., Hambright, B., Portwood, A., Schat, A. and Bevan, J. (2011) 'A picture is worth a thousand words: A content analysis of Facebook', *Computers in Human Behavior,* 27, 1828-1833.

Kabilan, M., Ahmad, N., and Abidan, M. (2010) 'Facebook: An online environment for learning English in institutions of higher education?', *Internet and Higher Education,* 13, 170-187.

Kaplan, A. and Haelein, M. (2010) 'Users of the world, unite! The challenges and opportunities of social media', *Business Horizons,* 53, 59-68.

Madge, C., Meek, J., Wellens, J. and Hooley, T. (2009) 'Facebook, social integration and informal learning at university: 'It is more for socializing and talking to friends about work than for actually doing work'', *Learning, Media and Technology,* 34(2), 141-155.

Maranto, G. and Barton, M. (2010) 'Paradox and promise: MySpace, Facebook, and the sociopolitics of social networking in the writing classroom', *Computers and composition,* 27, 36-47.

Nosko, A., Wood, E., and Molema, S. (2010) 'All about me: Disclosure in online social networking profiles: The case of FACEBOOK', *Computers in Human Behavior*, 26, 406-418.

Orr, E., Sisic, M., Ross, C., Simmering, M., Arseneault, J., and Orr, R. (2009) 'The influence of shyness on the use of Facebook in an undergraduate sample', *Cyberpsychology and Behavior*, 12 (3), 337-340.

Park, N., Kerk, K. and Valenzuela, S. (2009) 'Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes', *Cyberpsychology and Behavior*, 12, 729-733.

Pempek, T., Yemolayeva, Y., and Calvert, S. (2009) 'College students' social networking experiences on Facebook', *Journal of Applied Developmental Psychology*, 30, 227-238.

Qi, M. and Edgar-Nevill, D. (2011) 'Social networking searching and privacy issues', *Information Security Technical Report*, 17, 74-78.

Roblyer, M., McDaniel, M., Webb, M., Herman, J., and Vince Witty, J. (2010) '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, 134-140.

Ross, C., Orr, E., Sisic, M., Arseneault, J., Simmering, M. and Orr, R. (2009) 'Personality and motivations associated with Facebook use', *Computers in Human Behavior*, 25, 578-586.

Smith, W. and Kidder, D. (2010) 'You've been tagged! (Then again, maybe not): Employers and Facebook', *Business Horizons*, 53, 491-499.

Turkle, S. (2011) *Alone together: Why we expect more from technology and less from each other*. Basic Books: NY, NY.

Waters, R., Burnett, E., Lamm, A., and Lucas, J. (2009) 'Engaging stakeholders through social networking: How nonprofit organizations are using Facebook', *Public Relations Review*, 35, 102-106.

Weir, G., Toolan, F., and Smeed, D. (2011) 'The threats of social networking: Old wine in new bottles?' *Information Security Technical Report*, 16, 38-43.

Woodman, K. and Kourtis-Kazoullis, V. (2007) 'Cyber-Self-Reflection: Developing learner autonomy in online programs'. In *Selected Papers from the 18th International Symposium on Theoretical and Applied Linguistics.* Thessaloniki: Greece.

Woodman, K. (2009) 'Online learning and literacy development', In *Proceedings of the 42nd Linguistics Colloquium*. Rhodes: Greece.

Woodman, K. (2005) 'No borders: Virtual communities in online learning', *International Journal of the Humanities*. Volume 1, 1849-1861.

Woodman, K. (2004) 'Unlimited access: The real benefits of online learning', *International Journal of Learning*, 10, 3025-3033.

Yan Yu, Y., Wen Tian, S., Vogel, D. and Chi-Wai Kwok, R. (2010) 'Can learning be virtually boosted? An investigation of online social networking impacts', *Computers & Education*, 55, 1494-1503.