

Exploring Facebook and Whatsapp As Supporting Social Network Applications For English Learning In Higher Education

Adhi Susilo

Abstract

Facebook (FB) and Whatsapp (WA) have become the “communication portal” for social networking, which has rapidly transformed the way people communicate. It attempts to shed light on an information-sharing activity conducted via online discussion using FB and WA groups. This study investigated students’ participation in the online discussion and their feedback on the use of FB’sand WA’s groups as the platform for the activity. It explores ten domestic workers’ use of FB and WA as students in their English course at the Open University of Indonesia (UT). Drawing on virtual ethnography this article relies on qualitative data that shows there are potential positive benefits to using FB and WA for teaching and learning, particularly for the development of educational portable-communities. It is concluded that a FB’sand WA’s group has the potential to be used as online tutorial complements. They have pedagogical, social and technological affordances, which allow putting up announcements, sharing ideas and resources, and implementing online discussions. Using a FB’sand WA’s group as an online tutorial complement, however, has certain constraints. Participation of tutors and the role of admin of FB’s and WA’s group are crucial to realize its potential.

Keywords: Facebook, Whatsapp, domestic workers’ student, social networking site

Introduction

Mobile phones have become a crucial part of our daily life nowadays. Everyone has a personal cell phone of their own. Mobile phones have been developing very fast since 1995 (Chowdhury, 2012). They are used not only for making calls and messaging, but also for play a music, watch a movie; access internet and a variety of applications. To give more functionalities in mobile phones, many operating systems are developed such as Windows Mobile, IOS, Symbian and Android. Android is grabbing more and more user attention and thousands of Android applications are currently being developed. The applications are WhatsApp (WA), Skype and GO SMS Pro, which are also, the most popular messenger applications among the college students (Jadhav, Bhutkar, & Mehta, 2013).

According to Ludlow and Duff (2009), the Internet has had a more dramatic influence on education than any previous technological innovation because it has allowed individuals of all ages to access education and training programs. However, the most dramatic changes have come most recently with the introduction of Web 2.0. Web 2.0 is a set of web-based applications that are fluid in nature (Lorenzetti, 2009). Its basic elements are communication and collaborative technologies that involve voice, video, social networking, and content sharing; the direction and content of these applications are established by their users. Web 2.0 technologies add a new dimension to online teaching and learning and provide opportunities for instructor-to-student as well as student-to-student real-time and time-delayed collaboration. These technologies have shifted the role of instructors from deliverers of instruction to that of facilitators of learning and have made learners the center of attention (Askov & Bixler, 1998; Beldarrain, 2006; Gunga & Ricketts, 2008). Falvo and Johnson (2007) note that Web 2.0 technologies are viewed as tools that will elevate teaching and learning from the structured and linear learning management system (LMS) environment to a dynamic, multi-dimensional environment.

Social networking sites (SNSs) have become increasingly popular with the rise of Web 2.0, providing increased collaboration and sharing among users through applications like wikis, blogs, podcasts, and RSS feeds. SNSs such as MySpace, Friendster and, most recently, Facebook (FB), are used by a great variety of people, both for social and professional purposes; youth, in particular, use these new technologies to communicate and stay connected (Castells, 2007). This popularity should help SNSs act as natural supports for educational activities if they are used effectively.

The study focused on use of the FB as a social networking site and Whatsapp for distance education at an Indonesian distance university, the Open University of Indonesia (Universitas Terbuka or UT). It investigated students' participation in online discussions and their feedback on the use of FB and Whatsapp groups as the platform for the activity. Its subjects were Indonesian domestic workers living and working overseas, individuals that can benefit significantly from education but are challenging to engage and sustain in their learning efforts. The overall purpose of the study was to add to our understanding of the potential and challenges of educational applications that involve FB and Whatsapp-supported information sharing.

Background

Distance Education at Universitas Terbuka

UT is a state university for Indonesia dedicated to open and distance learning. UT provides online tutorials as an alternative to face-to-face tutorials, particularly for students who have access to the Internet; the tutorials motivate students to be self-directed and independent learners. Online tutorials facilitate two-way asynchronous communication and offer interactive human contact to distance learners (Suparman, 2007). Online tutorials at UT are mandatory for graduate students but voluntary for undergraduate students.

UT's online tutorials are delivered through a learning management system (LMS), which is a software application used to plan, implement, and assess a specific learning process (Techtarget, 2005). An LMS consists of a wide range of Internet-based pedagogical and course administration tools integrated within a single platform. WebCT, Blackboard, Desire to Learn, E-College, Moodle, and Sakai are some of the more popular LMS platforms. Typically, an LMS provides a tutor with a way to create and deliver content, monitor student participation, and assess student performance (Techtarget, 2005).

UT currently uses Moodle as its LMS. Although Moodle has the capacity for synchronous and asynchronous online discussions in chat rooms and discussion boards, students seldom use these features because of a lack of tutor presence and because of inconvenient aspects of the Moodle platform. The more that students access the platform, the slower the system becomes, which can be troublesome for students trying to take quizzes, submit assignments, or just simply access the course content. The website can also shut down on occasion, blocking students from accessing course materials. As an alternative, UT students sometimes choose to use FB as a communication channel to support learning in online tutorials.

UT is a distance educational service provider within the Indonesian distance education system and relies heavily on a solid synergy with various parties, including the country's Foreign Ministry. This cooperation has an important strategic role in providing access to higher education for all Indonesian citizens, including those who live abroad. On February 7, 2012, UT signed a Memorandum of Understanding (MOU) with the Ministry of Foreign Affairs to provide education for Indonesian domestic workers who work overseas. This effort is also intended to empower Indonesian citizens abroad, especially Indonesian workers. As a result of this MOU, UT is developing mechanisms including online tutorials to help overseas Indonesian workers succeed in their studies.

This study focused on the FB social networking site at UT, with particular reference to possible applications for teaching and learning at a distance for UT students who work as domestic workers in Hong Kong. The students take bachelor degree in English Translation study program. They need the degree to upgrade their skill particularly for speaking with their supervisors.

Online Tutorials at UT

UT first provided online tutorials in 1999 using an electronic mailing list. By the end of 2002, the electronic mailing list system was replaced by the more efficient and comprehensive Manhattan Virtual Classroom (MVC) software. In September 2002, an electronic tutorial system using the MVC application software was implemented with the new title of “online tutorial.” In 2004, this MVC-based online tutorial system was replaced with an LMS based on the free open source Moodle software. In this new online tutorial system, the students can be served individually, and they can also access other learning services, such as a dry lab, an academic calendar and independent learning materials. Tutors can ask students to explore and elaborate what they learn by using available online learning resources. Tutors can give students assignments that require students to retrieve information through the Internet. Through exploring available learning resources via the Internet, students can achieve meaningful understanding about new knowledge. In order to make use of available learning materials, students have to manage their time, effort, and learning strategies. These activities in online tutorials make students more independent (Luschei, Dimiyati, & Padmo, 2008; Noviyanti & Wahyuni, 2007).

UT and other faculty involved in online education are using discussion boards in their online tutorials to increase active student participation in group-led discussions. These discussions are generally led by students, and the instructor acts as a facilitator. Moffett, Claxton, Jordan, Mercer, and Reid (2007) noted that students who are quiet in face-to-face class meetings are most often the most expressive in online discussions. Such discussions foster a pedagogy in which instructors take a back seat and are mostly responsible for the dynamics of the discussion; the bulk of content is presented and discussed by the students. Face-to-face group meetings are being replaced by online discussions that are much more convenient for students because they eliminate the need for everyone to show up at a certain location at a specific time (Christopher, Thomas, & Tallent-Runnels, 2004). Students are able to review and participate in discussion threads at their convenience. LMS and online discussion applications are also being utilized by administrators and staff personnel in higher education institutions for communication and collaboration.

UT’s students from urban areas who work overseas as domestic workers, particularly in Hong Kong, generally have the capability to master technology, since they are part of the “Net Generation.” At UT, students now rely heavily on SNSs, and the tools provide a platform to connect with other students, lecturers, and administrators.

While a number of research studies on students’ asynchronous interactions have utilized LMSs (e.g. Al-Busaidi & Al-Shihi, 2012; Black, Beck, Dawson, Jinks, & DiPietro, 2007; Cavus, 2007; Chang, 2008; Coates, James, & Baldwin, 2005; Georgouli, Skalkidis, & Guerreiro, 2008), this study focuses on FB as a platform for students’ interaction. In addition, despite a growing number of recent studies that have been conducted on the educational use of FB (e.g. Bicen & Cavus, 2011; Hew, 2011; Jodi & Christie, 2011; Mazman & Usluel, 2010; Pempek, Yermolayeva, & Calvert, 2009; Tina, 2010; Wang, Woo, Quek, Yang, & Liu, 2012), very few, if any, have looked into ESL students’ participation in an online discussion via FB groups and their perception of the use of FB groups in online tutorial complementary activities. The findings of this study, therefore, provide insights into students’ participation in and perceptions of the FB group in an information-sharing task, as well their implications for language teaching and learning.

Indonesian Domestic Workers

Domestic workers are the single largest employment category for women in Asia. According to Bhojwani (2000, p. 22), a domestic worker can be defined as a person who has entered into a contract with an employer to perform domestic duties for a specified period of time. The helper has migrated from her country to reside with the employer and his/her family, doing chores like cooking, cleaning, washing, ironing, shopping, running errands, driving, childcare, care of the disabled or aged, and pet care. These workers are largely not unionised, poorly paid, and lack holiday pay, sick leave, days off,

minimum hours, retirement benefits, occupational health and safety standards. Philippa (2010) reveals that domestic workers are often subjected to harassment and exploitation. The fact that their work is isolated and rarely recognised by governments as “work” has made it extremely difficult to organise domestic workers and collectively defend their labour rights, particularly in the education area. As new information communication technology (ICT) has become more accessible, organisations and unions have begun to tap into the potential of these modern forms of communication to mobilise and educate domestic workers. According to Wardoyo and Mahmud (2013), domestic workers see value and gain various benefits from using ICTs for their learning process, in their current role as a domestic worker and professional orientation. However, multiple barriers need to be overcome, including the negotiation of multiple roles as their family’s breadwinner, domestic worker and student

Usability Evaluation of Messenger Applications for Android Phones

According to (Jadhav et al., 2013), the usability evaluation of messenger applications on Android phones using Cognitive Walkthrough leads to the identification of several important usability problems. These problems mainly include lack of provision for multiple smiley selection, no confirmation message for file transfer, ineffective „Search“ functionality and absence of legends for sent messages. The messenger applications – WhatsApp, Skype and GOSMS Pro are popular. It is imperative to continuously improve the usefulness, usability, and user experience of these applications. In future, the awareness about identified usability problems should be increased and these problems should be resolved to improve the experience of millions of mobile users.

Research Questions

This qualitative study explored the use of FB and WA by Indonesian domestic workers who were also UT distance education students in an English translation program. In order to investigate possible FB educational applications, the study investigated students’ participation in an online discussion and their feedback on the use of FB groups as the activity platform. The research questions were:

1. How do students use FB and WA to support their online tutorials?
2. How do students’ social networks on FB and WA relate to the educational networks in their online tutorials?
3. How do students attempt to engage with tutors using FB and WA?
4. What potential does FB and WA hold for building learning communities in distance education?

Recent research on distance education students’ use of online SNSs has been located outside Indonesia. Few studies have been conducted on the use of online SNSs in South Asia, and none in Indonesia. This study attempts to provide an exploratory account of FB and WA usage in UT but does not attempt to generalize the findings. This is a pilot study which provides important findings for future research, in particular by providing insights into domestic worker students’ use of online SNSs. These may be transferable to other contexts, at least within Asia.

Literature Review

The Net Generation

Worley (2011) and others have stated that today’s higher education faculty and administrators face a challenge with their students, many of whom are part of what is known as the Net Generation (Net Gen). “Net Generation” or “Digital Natives” develop cognitively in a manner different from previous generations as a result of their living in the digital age (Evans, 1995; Rovai, Ponton, & Baker, 2008). Prensky (1995, p. 2) defines today’s students as “native speakers” of the digital language of computers, video games and the Internet.

One of the greatest challenges for Net Gen learning will be in the area of technology in education. As students become more technologically advanced, faculty must be technologically ready to meet student needs, but many university faculty and administrators are from earlier generations and are more

familiar with learning and teaching styles that are different from those of the Net Generation. In addition, the life experiences, expectations, and technological expertise of many faculty and the students they are to teach are significantly different. Traditional methods of instruction will no longer work in a society that has encountered "a paradigm shift from emphasizing teaching to emphasizing learning" (Wilson, 2004, p. 59). In the new learning paradigm, the mission and purpose of education is to produce learning, not to deliver instruction. The role of faculty is to design learning methods and environments, rather than to be primarily lecturers.

Faculty must be aware of these differences, and must prepare to adjust their teaching philosophies and practices for a new breed of learners (Worley, 2011). According to Jeff and Zane (2008), Net Gen students possess certain key traits that translate into processes for learning in school. They prefer working collaboratively, do not respond well to the lecture, often do not communicate effectively by traditional standards, require information individually tailored to them, and require readily available technology. Wilson (2004) recommends active learning for enhancing teaching effectiveness for Net Gen students. Using active learning strategies such as discussions, reflection activities, group projects and cooperative problem-solving can deepen students' understanding of course material and their ability to apply new ideas. Since Net Geners have a team orientation, they should benefit greatly from active learning opportunities.

New Tools for Distance Learning

Beldarrain (2006) predicted that the use of new tools by online educators would foster learning environments that will produce global collaborations among students and make them lifelong learners. That is exactly what is now taking place in the field of distance education. Faculty members are using asynchronous and synchronous collaboration tools, including text, audio and video conferencing, to help create a borderless learning environment in which students are encouraged to think critically and learn collaboratively through global partnerships. Gunga and Ricketts (2008) found that use of these tools in e-learning can compete with face-to-face learning in terms of psychosocial and emotional flexibility. They added, however, that there is a need to enhance LMS audio-visual and interactive capabilities to compensate for the sensory and emotional loss. Asynchronous tools bring the online experience a step closer to being face to face. According to Palloff and Pratt (2007), recent enhancements in synchronous technology highlight the usefulness of this technology in community building and delivery of online courses. However, Newman's (2007) study indicated that there was no significant difference in online communication, online learning, or online community when a synchronous communication tool was added to an online course. Newman investigated 221 potential preservice teacher education students who enrolled in the College of Education at the University of Nevada, Reno (UNR). His study describes the effects of adding a synchronous communication tool to online courses.

Using mobile instant messaging to leverage learner participation and transform pedagogy

One of the most complicated academic endeavours in transmission pedagogies is to generate democratic participation of all students and public expression of silenced voices. While the potential of mobile phones, particularly mobile instant messaging (MIM), to trigger broadened academic participation is increasingly acknowledged in literature, integrating MIM into classrooms and out-of-the-classroom tasks has often been confronted with academic resistance. Academic uncertainty about MIM is often predicated on its perceived distractive nature and potential to trigger off-task social behaviours (Rambe & Bere, 2013). WhatsApp was adopted for an information technology course at a South African university with a view to heighten lecturer-student and peer-based participation, and enhance pedagogical delivery and inclusive learning in formal (lectures) and informal spaces. Rambe and Bere (2013) suggested heightened student participation, the fostering of learning communities for knowledge creation and progressive shifts in the lecturer's mode of pedagogical delivery. However, the concomitant challenge of using MIM included mature adults' resentment of the merging of academic and

familylife occasioned by WhatsApp consultations after hours. Students also expressed ambivalenceabout MIM's wide-scale roll-out in different academic programmes.

Social Networking and FB

Boyd and Ellison (2007, p. 2) define social networks as “web-based services that allow individuals to: (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.” FB is the most current and widely used social network. FB was originally designed for college students, but is now open to anyone 13 years of age or older. FB users can create and customize their own profiles with photos, videos, and information about themselves (Conole, 2010).

Facebook (FB) was created in 2004 by Mark Zuckerberg at Harvard University. The name for FB came from the publications that some colleges pass out to students at the beginning of the year to help students get to know each other better.FB, synonymous with social media among school and university students, could be described as the most popular social networking tool in history (Omar, Embi, & Yunus, 2012). It has the highest number of visitors among all the social networking tools available in Web 2.0, with approximately a billion active users worldwide(Facebook, 2012). Like most online social networking sites, FB's mission is to make the world more open and connected. People use FB to stay connected with friends and family, to discover what's going on in the world, and to share and express what matters to them (Bosch, 2009).

Students, particularly female students, may be inherently motivated to feel connected to others within a virtual environment (Cheung & Lee, 2011). Creating a virtual community of students is therefore likely to improve their intention to use the online learning technology. Cheung and Lee also found that attitude of female students has the strongest direct effect on their behavioral intention to use an Internet-based learning medium. They concluded that perceived enjoyment influences attitude more strongly for female students than it influences male students.

Teaching and Learning with FB

FB has potential for teaching and learning because of its unique built-in functions that offer pedagogical, social and technological affordances (Wang, 2008; Wang & Woo, 2007; Wang et al., 2012). Wang et al. (2012) explored the function of a FB group as an LMS and the students' perceptions of using it in their courses. In this study, the FB group was used in two courses at a teacher education institute in Singapore as a learning management system for posting announcements, sharing resources, organizing weekly tutorials and conducting online discussions. Wang et al. revealed that students were basically satisfied with the pedagogical, social and technological affordances of FB, as the fundamental functions of an LMS could be easily implemented in the FB group. However, using the FB group as an LMS had certain limitations. It did not support directly uploading files in some formats, and the discussion was not organized in a threaded structure. Also, the students did not feel safe and comfortable as their privacy might be compromised.

Tina (2010) investigated the use of FB for online discussions among distance learners at the Open University of Malaysia that first used FBin three courses as a platform for facilitator-learner discussions to support mobile learning via SMS (Short Message Service or text messaging). She found that FB does have the potential to be used for online academic discussions, either as an alternative to LMSs commonly used in distance education or to complement such platforms. In addition, the posts could engage learners in sustained conversations as in other online forums. She suggested that investigations into the differences between the interaction processes of FBdiscussions as compared with those in LMSs might reveal how the social networking platform maintains or changes how, for what, and why students go online for discussions.

Grainne Conole (2011) investigated English as a Second Language (ESL) learners' participation in an information-sharing task conducted via FB groups and their feedback on the use of FB groups as the platform for the activity. A group of 31 learners taking a communication course at a public university participated in the study. Thematic analysis revealed that the use of FB as a platform for the information-sharing task received very positive feedback from the participants, suggesting that it is a promising virtual tool and environment to promote interaction in English learning. The authors suggested that more activities using FB groups should be assigned for learners to practice and use communicative language. In addition, they recommended promoting awareness of available online tools and modelling effective use of the tools to help enhance learners' online interactions. The findings of Conole's study support the work of Selwyn (2009), who argued that FB use must be seen as being situated within the 'identity politics' of being a student. In particular, FB appears to provide a ready space where the 'role conflict' that students often experience in their relationships with university work, teaching staff, academic conventions, and expectations can be worked through in a relatively closed 'backstage' area.

In summary, these studies show that FB and WA have the potential: (1) for teaching and learning because of its unique built-in functions that offer pedagogical, social and technological affordances; (2) to be used for online academic discussions, either as an alternative to LMSs commonly used in distance education or to complement such platforms; and (3) to create a promising virtual tool and environment to promote interaction in English learning.

Methodology

The primary methods used for the study were virtual ethnography, online qualitative interviews, and content analysis of 10 UT students' FB and WA profiles. Virtual ethnography is the practice of ethnography, but in a virtual or online setting (Bosch, 2009). Ethnography involves "a holistic description of cultural environment" (Singer, 2009). It entails studying people within their own cultural environment through intensive fieldwork and involves in-depth investigation. The focus of research was on undergraduate students, as they are generally the heaviest FB users (Mazman & Usluel, 2010; Stutzman, 2008). The researcher contacted the students to ask for permission to do an analysis of their FB pages and to participate in an interview.

The virtual ethnography approach employed in this study identified key markers for further exploration in the online interviews. The population consists of 10 students by selecting two students in their fourth semester, four students in their second semester, and four students in their first semester. The students' contact information was provided by the UT Information Technology department. The data were collected from a threaded online discussion, links postings, friend lists, groups and networks, wall posts, and other asynchronous communication via Whatsapp. Also, several tutors were interviewed informally to validate the findings from the student interviews.

The UT students' FB group had been established about one year before the start of the study. The process of adapting FB to provide e-learning support started about six months later through a FB group created by the students and moderated by senior students. From the very beginning, the students invited other students to join their FB group to access course-related materials, which required the moderator's approval. At the time of the study there were about 272 members in the group. The FB group's wall mainly provided news about recent topics from online tutorial, some of which were related to the various course activities; via the 'home' page of FB group, the researcher was also able to learn the status of the students from time to time. The researcher was able to gain access to their FB pages because the moderator invited the researcher to join this FB group. In addition, the group members requested the researcher to accept friend requests from them. The roles of the researcher in this group were as a tutor, a learning materials provider, and a facilitator.

The interview questionnaires were pre-tested with participants to provide information on the acceptability of the language. Pre-testing reduces errors by improving survey questions (Creswell &

Plano Clark, 2011). In the pre-testing, the researcher noted the time spent and the way in which the questions were received, misunderstandings that occurred, and terms that were not understood. Field testing was conducted after the pre-testing; the field test consisted of a full test of the survey instrument and procedures, including the introduction, explaining the participant's rights based on ethics requirements, consent, conducting the interview, and closing the interview. The final version of interview instrument was used in online interviews using Skype (video conferencing software), and Evaer (audio and video recorder software).

The researcher interviewed the 10 domestic workers for approximately 30 minutes each. The questions covered internet availability, how the students used FB to support online tutorials, how students' social networks on FB related to their educational network in their online tutorials, how students attempted to engage with lecturers using FB, and what potential FB holds for building learning communities in distance education. Specifically, the researcher wished to uncover the characteristics, opinions, perceptions and usage of FB for a group of UT's students.

This study was informed by the notion that participation in a social network site leaves online 'traces' that reveal users' attitudes, social relationships and affiliations in offline networks (Gráinne Conole, 2011a). Text provides the discursive space for the presentation of self to others. The challenge in studying life online can be complicated by the interference of the researcher in the frame of the field, and by the power of the researcher in representing the culture (Markham, 2005). In this case, sites were viewed where access was not controlled by privacy settings. Despite potential ethical challenges, the virtual ethnography was essential to define the field and triangulate the findings from the interviews and surveys. Respondents' confidentiality was guaranteed, as this component of the research was intended to provide an overview of trends, with no specific references to the content on individuals' pages. This study uses the term 'virtual ethnography' quite loosely, and more accurately merely draws on the basic principles of ethnography, with the researcher employing a form of 'lurking' or 'completely unobtrusive observation' (Garcia, Standlee, Bechkoff, & Cui, 2009, p. 58) to gain an understanding of online interaction. In an attempt to counter some of the negatives associated with this methodology, nothing was actually 'harvested' (Sharf, 1999) and no posts or messages from pages viewed are cited in this article.

Results and Discussion

All of the 10 research participants were Indonesian female domestic workers. The participants often updated their status in FB. They would voluntarily share FB information with each other and become online 'friends,' often using the site to replicate classroom networks and to informally share online tutorial-related questions and discussions. It also appeared that many participants did not change their privacy settings, allowing all members of the network to view their current status.

Internet Availability

The main issue surrounding the use of FB at the students' workplace (i.e., their house) was related to time availability, since they were usually allowed to access the Internet only during break times or after work. Some of the employers restricted or blocked their domestic employees' use of the Internet during work. Although the Internet was not always blocked in their houses, access was discouraged, with clear rules indicating to the employee (i.e., the domestic worker studying with UT) that access to the Internet was not allowed. Despite this, nearly all the students surveyed indicated that they accessed the Internet at home after work or during break time, with a smaller percentage indicating that they would only update their status using their mobile phones.

There was very little use of languages other than Indonesian language on students' walls, regardless of race or mother language. All communication was found to be in Indonesian, except posting in their English course group, with students considering this as the obvious choice of language for the medium. Student accessed WhatsApp through either WiFi-enabled networks or private virtual

networks. Such mobile connections often provided slower connectivity compared with home networks. Student frustration with slow networked connectivity resonates with variations in the networked access to collectively generated resources. Notwithstanding the aforementioned drawbacks, productive device usage was not exclusively network dependent as collaborative learning communities and language of discourse were deeply implicated in productive engagements, affecting intensity and persistence of online interaction.

How do students use FB and WA to support online tutorials?

In general, FB is used by a wide range of students, in terms of race, class and gender. There was no evidence that FB use in this study differed from general Internet usage patterns in Hong Kong, probably because all students have equal access to the Internet via personal computers. However, what was most interesting is that while many students in this study had friends across racial groups, most tended to have friends who were similar to them in terms of race. Students' friends were mostly family and university acquaintances, but many also had friends from primary and secondary school. As a result, the numbers of friends ranged from around 16 to over 800. Students in the study had been registered in FB for periods of one to three years. This research thus supports international studies which show that participation in online networks tends to follow cultural and linguistic lines (Boyd, 2008).

Student use of FB is quite varied, and one cannot assume that students use online social networking tools in homogenous ways. Generally, several categories of users were noted: some signed up to FB but were not daily active users; some signed up but did not actively participate, even though they often observed on the site, reading information posted by their friends; and some were active users, uploading and downloading information and using a variety of applications on the site, predominantly for social purposes. Within the latter category, there was a further divide between those who used FB for social purposes only, and those who also used FB for some kind of academic conversations, though these were usually linked to classes in which this type of participation was a course requirement. Another category of user was defined by those who did not use the site for much other than keeping friends abreast of their activities by frequently updating their status messages. Students updated their status frequently, particularly before and after a weekend, because they usually had one day off every week on Sunday.

The UT students in this study regarded FB as an academic support. It was noted that first-year students who joined UT in Hong Kong immediately signed up to join the English group in FB. UT students used FB for social networking, seeking support from peers, community building in a virtual class, and the students' notice board. This finding is consistent with research by Bosch (2009) and Tina (2010), who found that FB for social networking worked as a complement to online courses. It also confirms comments by Selwyn (2009) related to student management of identity and role conflicts. One of the student comments: "The peers' answers seemed to work quite well, my own feedback was interesting and informative, hopefully the feedback I gave was useful". One student described how she had to be strategic in her selection of activities when she was offered five different discussion boards in FB group from which to choose. She chose one of them and stuck with it, stating that many students had done the same and that she had seen the same names coming up again day after day. She found the discussion to be very stimulating and she was surprised at how much she enjoyed reading other peer's ideas in spite of the range of skill level.

WhatsApp-mediated learning's support for multiple access to learning resources impacted students' ability to engage with peers and the tutor synchronously. Smartphone personalisation and adaptation to different contexts ensured persistent supply of texts, information and learning resources, which enabled networked learning and multiple peer-based feedback. The informal, convenient context for instantaneous sharing of vital academic information activated by the "porting" of learning resources across different spaces extended learning times and augmented traditional consultation spaces.

WhatsApp's affordances for asynchronous communication also directly impacted student participation. The retrievability of messages posted when students were offline, outside network coverage or when their devices were switched off implied that they could participate any time irrespective of context. Multiple interaction modes and diverse temporal times widened opportunities for student involvement without missing conversation flows.

Students believed that WhatsApp discussion forums allowed them to reflect "deeply" on questions and queries before giving their opinions. This is potentially attributable to forums' asynchronous nature that mitigated the pressure of instant, spontaneous responses immanent in lecture interactions (Rambe & Bere, 2013).

How do students' social networks on FB relate to their educational network in their online tutorials?

Students in this study used FB in ways that are consistent with its wider use at UT. FB is widely used by the UT community for connecting members of student societies, student groups, lecturers and administrators. Many of the FB groups we observed appeared to serve the purpose of community building, keeping members of specific academic programmes in touch with one another via the website or sharing information among people who met in 'real world' environments. One example of student community building on FB was an online group set up to provide administrative and academic support to students. This group provided help and support for students who had problems in administrative and academic areas. Many others appeared to be centred on academic progress, with postings phrased along the lines of 'I am done with task one.' Clearly, FB fosters micro-communities of people who share interests or participate in similar activities, and the question is whether this kind of effective social networking might be similarly extended from the personal, into the realm of the academic.

Another use of FB at UT is the student notice board, with a range of groups set up during the academic semester. Some of these groups merely provide general information on issues such as first registration, end of registration, and how to register. A third form of social connectivity is group membership, with groups listed as being very important to students. All interviewees stated that they belonged to several groups. While the numbers of groups varied, most students observed in the study were members of at least four active groups, with some indicating membership in over 30 groups.

Students in this study adopted and used FB because their significant referents, such as friends or classmates encouraged more online interaction. For instance, classmates made use of online chat rooms and online discussion forums of the FB to foster their peers' collaboration and create a sense of community. Generally, the most common use for FB is socialising – sharing information about group meetings and social events, sharing photographs and other images, music and videos, and keeping in touch in daily work. According to Ellison, Steinfield, and Lampe (2007), friendships in virtual worlds often begin offline and then migrate to the online space. However, this is not the case in modern social networks as friendship practices on social network sites are not simply an extension of offline friendships (Boyd, 2006).

How are students attempting to engage with lecturers using FB and WA?

While UT's students were in general familiar with FB, few lecturers were registered on the network, and many of them were not active in FB. This raises several issues within the context of teaching and learning. One student, for example, responded that it was difficult to 'talk' to teachers whom she saw daily on FB. Teachers always rejected the invitation from students to be friend or group members, even if the student needed to communicate something important to them. Students assumed that the teachers routinely ignored friend requests from their students in order to keep personal information on their profiles private from students, and those teachers preferred to use the online tutorial to interact

with students. Stutzman (2008) noted that establishing FB relationships with students is risky. This may affect the perceptions students and lecturers have of each other.

Although it was found that lecturers are unwilling to ‘friend’ students, students clearly stated that they would accept friend requests from lecturers. According to Boyd (2006), the concept of ‘friending’ on online social sites is more about the performance of online identities and the formation of communities than about ‘friendship’ in the offline environment. But this study revealed that despite this understanding of friendship, UT students interpreted the display of social connections as revealing information about their own identities (Donath & Boyd, 2004). Perhaps the most important thing about FB groups and WA is the potential for students to engage with one another. Since they are already in touch via social connections this may be useful for generating peer review of their online work. In most online tutorial, student questions to the instructor are usually not answered immediately. In order to get answer quickly, the students post their question in FB groups, so their peers can respond immediately. If the answers have been answered correctly and satisfactorily, they confirm it to tutor via thread in online tutorial. This thread can be followed by other students who do not join the FB group.

What potential does FB and WA hold for building learning communities in distance education?

One common theme that was derived from the interviews was the development of learning communities using FB groups. FB’s group tool provides opportunities for students to form groups in which they can support each other. These findings are consistent with studies by Koschmann (1994), Lao and Gonzales (2005), Tharp and Gallimore (1988), and Wells and Chang-Wells (1992) that indicated that the Internet provides learning experiences and a place to build upon knowledge within a learning community. Online learning is a rich environment where learner-centered instructional techniques show opportunities for significant developments and offer new ways to learn, research, work and socialize (Bonk & King, 1998; Gráinne Conole, 2011b).

UT students who were engaged in academic FB English groups actively participated in them and welcomed the use of the online social networking tool for academic, in addition to social, purposes. In most cases FB was reported as being useful. Students reflected that they were already spending much time on FB, and they were able to check class-related material while at the same time engaging in personal communication. In general, students who used FB for various academic purposes, from the informal to the more formal mandatory participation, listed a range of benefits. Primarily, students said that their FB friends helped them to identify and find learning material on the Internet, and to answer questions about tasks in online tutorials (e.g., due dates, assignment details). Students also often used FB during weekends or break time for connecting with others to prepare face-to-face tutorials and to share lecture and study notes.

Respondents talked about how FB allowed them to learn from junior and senior students whom they had not yet met in person. It also allowed them to network with groups that had similar academic interests, even if they were in different semesters/classes. The main benefit was being able to access different learning materials instantly in an informal and ubiquitous environment.

One participant felt that FB allowed students to ask questions that they might not feel comfortable asking in a formal online tutorial, as there is a relative higher degree of anonymity in the absence of asynchronous interaction. In response to informal questioning, some online tutors indicated that tasks/discussions were more effective because student queries had already been dealt with via the FB’s group. Students used the FB group to indicate which areas of the particular material to cover or discuss, and then moved to the online tutorial LMS to answer the questions or tasks.

In many cases this kind of interaction was transferred to real face-to-face tutorial settings, as students felt their colleagues were more approachable after interacting with them online. In some ways FB could be perceived as a shared space—not controlled by them individually, but controlled by all together – thus breaking down the traditional power hierarchies among students. For example, there is no rule that the older control the younger. However, some experienced or smarter students often gave

more comments in the group. This mechanism of community control could be positive; for example, if key people were absent from a group discussion, other students would assume their roles.

Each group had an administrator to manage the group; her primary task was to invite and approve group members, and then to provide links to learning materials. The secondary role of the administrator could be replaced by other members who have similar capabilities. In the process of course design and implementation, the administrator felt that it was easy to set up a FB group and have enough control. The administrator as a creator of a FB group could enroll or remove members easily. However, the administrator noted that it was quite troublesome to add learning materials because it involved uploading files with the 'Add File' menu, then putting the links into FB or pasting them directly into the group's wall. Also, FB does not support the direct uploading of some file formats. The administrator reported that moderating online discussions in the FB group was easy and that the topics of discussion were based on the topics in the online tutorial. These findings are similar to those of Wang et al. (2012), who used the FB group as a LMS. However, these authors noted that FB had certain constraints; for example, it does not support the upload of some file formats, and discussions are not organized in a meaningful structure.

The student-tutor dialogic interactions involved the sharing of experiences, social practices and communicative repertoires, thus fostering a community of practice and learner-centred teaching approaches. For students, transformative learning played out in their critical engagement with learning resources. Students are suggesting WhatsApp's forums' potential to foster "bridging spaces"-the space for connect differences linked to interactants' interests, skills and capabilities.

Conclusions

A FB group has the potential to be used as an online tutorial complement. It has pedagogical, social and technological affordances, which allow putting up announcements, sharing ideas and resources, and implementing online discussions. Using a FB group as an informal learning environment, however, has certain constraints. The strong social connectivity of FB is not a risk-free friending network. Although it risks compromising their privacy, it does enable students to easily communicate and interact with peers. For effective use of a FB group to complement an online tutorial, many other factors such as participation of tutors and the role of FB group administrators must be successfully addressed.

There are two benefits of Whatsapp for distance learning: mobile learning and context free access to learning resources. Student appropriation of WhatsApp-enabled phones for lecturer-student and peer based consultations leveraged their participation as they redressed poor connectivity via institutional networks. Device portability coupled with affordances for anywhere anytime access to information and learning resources redressed the constraints distance, space and temporal times in access to resources.

Educating adults of the Net Generation will continue to produce challenges for teachers. The challenges should be viewed as opportunities to learn and to help students move forward in a constantly changing society. Educators should themselves embrace technology, provide active learning, change and develop new methodologies for motivating and training Net Gen students.

The results of this research point to a need for the better utilization of Facebook and WA in online tutorial and the need for UT that choose to "embrace" the increasing popularity of social media to implement tools that better ensure informal learning process.

REFERENCES

Al-Busaidi, K. A., & Al-Shihi, H. (2012). Key factors to instructors' satisfaction of learning management systems in blended learning. *Journal of Computing in Higher Education*, 24(1), 18-39. doi: 10.1007/s12528-011-9051-x

- Askov, E., & Bixler, B. (1998). Transforming adult literacy instruction through computer-assisted instruction. In D. Reinking, M. McKenna, L. Labbo & R. Kieffer (Eds.), *Handbook of literacy and technology: transformations in a post-typographic world* (pp. 167-184). Mahwah, N.J: L. Erlbaum Associates.
- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139-153.
- Bhojwani, E. N. (2000). Domestic helpers and the care of English speaking special needs children in Hong Kong Retrieved September 26, 2012, from <http://hub.hku.hk/handle/10722/36958>
- Bicen, H., & Cavus, N. (2011). Social network sites usage habits of undergraduate students: case study of Facebook. *Procedia - Social and Behavioral Sciences*, 28(Journal Article), 943-947. doi: 10.1016/j.sbspro.2011.11.174
- Black, E. W., Beck, D., Dawson, K., Jinks, S., & DiPietro, M. (2007). The other side of the LMS: Considering implementation and use in the adoption of an LMS in online and blended learning environments. *TechTrends*, 51(2), 35-39. doi: 10.1007/s11528-007-0024-x
- Bonk, C. J., & King, K. S. (1998). *Electronic collaborators: learner-centered technologies for literacy, apprenticeship, and discourse*. Mahwah, N.J: L. Erlbaum Associates.
- Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communicatio*, 35(2), 185-200. doi: 10.1080/02500160903250648
- Boyd, D. (2006). Friends, friendsters, and top 8: Writing community into being on social network sites Retrieved September 27, 2012, from <http://www.firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1418/1336>
- Boyd, D. (2008). Facebook's privacy trainwreck: Exposure, invasion, and social convergence. *Convergence*, 14(1), 13-20. doi: 10.1177/1354856507084416
- Boyd, D., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. doi: 10.1111/j.1083-6101.2007.00393.x
- Castells, M. (2007). *Mobile communication and society: A global perspective*. Cambridge, Mass. : The MIT Press.
- Cavus, N. (2007). Assessing the success rate of students using a learning management system together with a collaborative tool in web-based teaching of programming languages. *Journal of Educational Computing Research*, 36(3), 301-321. doi: 10.2190/t728-g676-4n18-6871
- Chang, C. L. (2008). *Faculty perceptions and utilization of a Learning Management System in higher education*. Ph.D. 3319031, Ohio University, United States -- Ohio. Retrieved from <http://proxy.lib.sfu.ca/login?url=http://search.proquest.com/docview/304488376?accountid=13800> ProQuest Dissertations & Theses (PQDT) database.
- Cheung, C. M. K., & Lee, M. K. O. (2011). Exploring the gender differences in student acceptance of an internet-based learning medium. In T. Teo (Ed.), *Technology Acceptance in Education: Research and Issues* (pp. 183-199). Rotterdam: Sense.
- Chowdhury, R. (2012). Evolution of mobile phones: 1995 – 2012 Retrieved May 19, 2014, from <http://www.hongkiat.com/blog/evolution-of-mobile-phones/>
- Christopher, M. M., Thomas, J. A., & Tallent-Runnels, M. K. (2004). Raising the bar: Encouraging high level thinking in online discussion forums. *Roeper Review*, 26(3), 166.
- Coates, H., James, R., & Baldwin, G. (2005). A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management*, 11(1), 19-36.
- Conole, G. (2010). Facilitating New Forms of Discourse for Learning and Teaching: Harnessing the Power of Web 2.0 Practices. *Open Learning*, 25(2), 141-151. doi: 10.1080/02680511003787438
- Conole, G. (2011). Editorial. *Research in Learning Technology* 9(3). doi: 10.3402/rlt.v9i3.12032
- Conole, G. (2011a). The evolving landscape of learning technology. *Research in Learning Technology* 10(3). doi: 10.3402/rlt.v10i3.11407
- Conole, G. (2011b). What constitutes good research in e-learning—are there lessons we can draw from the Research Assessment Exercise? *Research in Learning Technology* 15(3). doi: 10.3402/rlt.v15i3.10929

- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Los Angeles: SAGE Publications.
- Donath, J., & Boyd, D. (2004). Public displays of connection. *BT Technology Journal*, 22(4), 71-82. doi: 10.1023/B:BTTJ.0000047585.06264.cc
- Ellison, N. B., Steinfield, C., & 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(4), 1143-1168. doi: 10.1111/j.1083-6101.2007.00367.x
- Evans, T. (1995). Globalisation, post-Fordism and open and distance education. *Distance Education*, 16(2), 256-269. doi: 10.1080/0158791950160207
- Facebook. (2012). Facebook Statistics Retrieved September 24, 2012, from <http://newsroom.fb.com/content/default.aspx?NewsAreaId=22>
- Falvo, D. A., & Johnson, B. F. (2007). The use of learning management systems in the United States. *TechTrends*, 51(2), 40-45. doi: 10.1007/s11528-007-0025-9
- Garcia, A. C., Standlee, A. I., Bechkoff, J., & Cui, Y. (2009). Ethnographic approaches to the internet and computer-mediated communication. *Journal of Contemporary Ethnography*, 38(1), 52-84. doi: 10.1177/0891241607310839
- Georgouli, K., Skalkidis, I., & Guerreiro, P. (2008). A framework for adopting LMS to introduce e-learning in a traditional course. *Educational Technology & Society*, 11(2), 227.
- Gunga, S. O., & Ricketts, I. W. (2008). The prospects for e-learning revolution in education: A philosophical analysis. *Educational Philosophy and Theory*, 40(2), 294-314. doi: 10.1111/j.1469-5812.2007.00332.x
- Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27(2), 662-676. doi: 10.1016/j.chb.2010.11.020
- Jadhav, D., Bhutkar, G., & Mehta, V. (2013). *Usability evaluation of messenger applications for Android phones using cognitive walkthrough*.
- Jeff, F., & Zane, L. B. (2008). Training Generation N: how educators should approach the Net Generation. *Education + Training*, 50(6), 457-464. doi: 10.1108/00400910810901782
- Jodi, P., & Christie, B. (2011). Learning through Facebook: A Potential Tool for Educators. *Delta Kappa Gamma Bulletin*, 78(1), 38.
- Koschmann, T. D. (1994). Toward a theory of computer support for collaborative learning. *Journal of the Learning Sciences*, 3(3), 219-225. doi: 10.1207/s15327809jls0303_1
- Lao, T., & Gonzales, C. (2005). Understanding Online Learning through a Qualitative Description of Professors and Students' Experiences. *Journal of Technology and Teacher Education*, 13(3), 459-474.
- Lorenzetti, J. (2009). Web 2.0 and course management systems. *Distance Education Report*, 13(5), 1-2.
- Ludlow, B. L., & Duff, M. C. (2009). Evolution of distance education at West Virginia University: Past accomplishments, present activities, and future plans. *Rural Special Education Quarterly*, 28(3), 9.
- Luschei, T., Dimiyati, S., & Padmo, D. (2008). Maintaining e-learning while transitioning to online instruction: the case of the Open University of Indonesia. *Distance Education*, 29(2), 165-174. doi: 10.1080/01587910802154962
- Markham, A. (2005). The Methods, politics, and ethics of representation in online ethnography. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research*. Thousand Oaks: Sage Publications.
- Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. *Computers & Education*, 55(2), 444-453. doi: 10.1016/j.compedu.2010.02.008
- Moffett, D. W., Claxton, M. S., Jordan, S. L., Mercer, P. P., & Reid, B. K. (2007). *Applying asynchronous solutions to the multi-tasking realities of a teacher education faculty unit: Case study*. Paper presented at the the annual meeting of the Georgia Association of Teacher Educators, Savannah, GA.
- Newman, J. M. (2007). *The effects of synchronous voice and video tools on acceptance of online communications by students in undergraduate technology courses*. Ph.D. 3276959, University of Nevada, Reno, United States -- Nevada. Retrieved from

- <http://proxy.lib.sfu.ca/login?url=http://search.proquest.com/docview/304843110?accountid=13800> ProQuest Dissertations & Theses (PQDT) database.
- Noviyanti, M., & Wahyuni, S. (2007). Maintaining e-learning while transitioning to online instruction: the case of the Open University of Indonesia. Retrieved from http://asiapacific-odl2.oum.edu.my/ODL/index_unesco.asp
- Omar, H., Embi, M. A., & Yunus, M. M. (2012). ESL Learners' Interaction in an Online Discussion via Facebook. *Asian Social Science*, 8(11).
- Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: effective strategies for the virtual classroom*. San Francisco, CA: Jossey-Bass.
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227-238. doi: 10.1016/j.appdev.2008.12.010
- Philippa, S. (2010). The use of ICTs by domestic workers and domestic worker organisations. *Women in Action*(1), 39.
- Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology*, 44(4), 544-561. doi: 10.1111/bjet.12057
- Rovai, A. P., Ponton, M. K., & Baker, J. D. (2008). *Distance learning in higher education: a programmatic approach to planning, design, instruction, evaluation, and accreditation*. New York: Teachers College Press.
- Selwyn, N. (2009). Faceworking: exploring students' education-related use of Facebook. *Learning, Media and Technology*, 34(2), 157-174. doi: 10.1080/17439880902923622
- Sharf, B. (1999). Beyond netiquette: The ethics of doing naturalistic discourse research on the Internet. In S. Jones (Ed.), *Doing Internet research: Critical issues and methods for examining the Net*. Thousand Oaks, Calif: Sage Publications.
- Singer, J. B. (2009). Ethnography. *Journalism and Mass Communication Quarterly*, 86(1), 191-198. doi: 10.1177/107769900908600112
- Stutzman, F. (2008). The vibrancy of online social spaces. In B. Rigby (Ed.), *Mobilizing generation 2.0: a practical guide to using Web 2.0 technologies to recruit, organize, and engage youth*. San Francisco: Jossey-Bass.
- Suparman, A. (2007). The use of technology in distance education: Lessons learnt from the experience of Universitas Terbuka. *Southeast Asian Journal on Open and Distance Learning* 5(3).
- Techtarget. (2005). What is learning management system (LMS)? Retrieved June 3, 2012, from <http://searchcio.techtarget.com/definition/learning-management-system>
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: teaching, learning, and schooling in social context*. Cambridge [Cambridgeshire]: Cambridge University Press.
- Tina, L. I. M. (2010). The use of facebook for online discussions among distance learners. *The Turkish Online Journal of Distance Education*, 11(4), 72-81.
- Wang, Q. (2008). A generic model for guiding the integration of ICT into teaching and learning. *Innovations in Education and Teaching International*, 45(4), 411-419.
- Wang, Q., & Woo, H. L. (2007). Comparing asynchronous online discussions and face-to-face discussions in a classroom setting. *British Journal of Educational Technology*, 38(2), 272-286. doi: 10.1111/j.1467-8535.2006.00621.x
- Wang, Q., Woo, H. L., Quek, C. L., Yang, Y., & Liu, M. (2012). Using the Facebook group as a learning management system: An exploratory study. *British Journal of Educational Technology*, 43(3), 428-438. doi: 10.1111/j.1467-8535.2011.01195.x
- Wardoyo, R., & Mahmud, N. (2013). *Benefits and barriers of learning and using ICTs at open university: a case study of Indonesian domestic workers in Singapore*.
- Wells, C. G., & Chang-Wells, G. L. (1992). *Constructing knowledge together: classrooms as centers of inquiry and literacy*. Portsmouth, NH: Heinemann.
- Wilson, M. E. (2004). Teaching, learning, and millennial students. *New Directions for Student Services*, 2004(106), 59-71. doi: 10.1002/ss.125
- Worley, K. (2011). Educating college students of the net generation. *Adult Learning*, 22(3), 31-39.