# Western University Scholarship@Western

**Digitized Theses** 

**Digitized Special Collections** 

2011

# A CASE STUDY OF FANSHAWE COLLEGE STUDENTS EXPERIENCES OF SOCIAL NETWORKING SERVICES

Linda Jean Young

Follow this and additional works at: https://ir.lib.uwo.ca/digitizedtheses

#### **Recommended Citation**

Young, Linda Jean, "A CASE STUDY OF FANSHAWE COLLEGE STUDENTS EXPERIENCES OF SOCIAL NETWORKING SERVICES" (2011). *Digitized Theses*. 3663. https://ir.lib.uwo.ca/digitizedtheses/3663

This Thesis is brought to you for free and open access by the Digitized Special Collections at Scholarship@Western. It has been accepted for inclusion in Digitized Theses by an authorized administrator of Scholarship@Western. For more information, please contact wlswadmin@uwo.ca.

# A CASE STUDY OF FANSHAWE COLLEGE STUDENTS EXPERIENCES OF SOCIAL NETWORKING SERVICES

(Spine title: Case Study: Fanshawe College Students' Experiences of SNS's)

(Thesis format: Monograph)

By

Linda J. Young

Graduate Program in Education

1

A thesis submitted in partial fulfillment

of the requirements for the degree of

Master of Education

The School of Graduate and Postdoctoral Studies

The University of Western Ontario

London, Ontario, Canada

© Linda J. Young 2010

THE UNIVERISTY OF WESTERN ONTARIO School of Graduate and Postdoctoral Studies

# **CERTIFICATE OF EXAMINATION**

**Supervisor** 

Examiners

Signature on File Dr. Ronald Hansen

Supervisory Committee

Signature on File\_\_\_\_\_ Dr. Kathryn Hibbert

Dr. David Spencer

<u>Signature on File</u> Dr. George Gadanidis

Signature on File

<u>Signature on File</u> Dr. Rosamund Stooke

The Thesis by

Linda Jean Young

entitled

# A Case Study of Fanshawe College Students' Experiences of Social Networking Services

is accepted in partial fulfillment of the requirements for the degree of Master of Education

Date August 10, 2010

<u>Signature on File</u> Chair of the Thesis Examination Board

## ABSTRACT

Social Networking Sites (SNS), like Facebook are very popular among college students and are used for social activities like communicating with friends and posting photos. The Learning Management System (LMS) has also become popular on campus and is used academic related purposes like checking grades and submitting assignments. The purpose of this study was to better understand the usage of SNSs at Fanshawe College. The guiding question for this study was: What are the perceptions of students regarding the need for social networking services? A case study approach using mixed methods was selected for this research.

The research indicates students have four main perceptions regarding the need for SNS services: 1) students' online social and academic lives are to be kept separate 2) students' personal information needs to be protected 3) the LMS is for teaching and learning 4) students need to stay connected to their social networks 24/7.

Keywords: Social Networking Sites, Facebook, Social Networking Services, Student's Experiences Using Social Networking Services.

To Iris Young My mother, friend and advisor from day one.

# Acknowledgements

I want to thank the following individuals for their support and guidance throughout my academic journey.

Dr. Ronald Hansen, Associate Professor, Faculty of Education,

University of Western Ontario

Dr. Kathryn Hibbert, Assistant Professor, Faculty of Education

University of Western Ontario

Dr. Roger Fisher, Applied Research, Innovation and University Partnerships, Fanshawe College

Robert Beatty, Chief Information Officer, Information Technology Services Fanshawe College

Catherine Spence, Assistant to the Manager, Learning System Service Fanshawe College

# TABLE OF CONTENTS

Title Page	i
Certificate of Examination	ii
Abstract	iii
Dedication	V
Acknowledgements	vi
Table of Contents	vii
List of Tables	viii
1. Introduction	1
1.1 Purpose of the Study	2
1.1 Background of the Study	4
1.2 Organization of the Study	8
2. The Evolution of Two Online Systems	9
2.1 Origins of Social Networking Sites (SNS)	9
2.2 Emerging Social Networks	15
2.3 Origins of Learning Management Systems (LMS)	17
3. Literature Review	
4. Methods	37
4.1 Methodology	37
4.2 Research Design	38
4.3 Research Participants	40
5. Results	
5.1 Demographic Profile	42

5.2 Facebook Usage	45
5.3 FanshaweOnline Usage	50
5.4 Qualitative Data	51
6. Discussion of Key Findings	
6.1 Separation of Academic and Social Lives	57
6.2 Protect Student Data and Information	60
6.3 Augment with the Learning Management System (LMS)	63
6.4 Facebook as a Communications Platform	67
6.5 Limitations of the Study	69
6.6 Conclusions	70
Bibliography	73
Appendix A – Letter of Information	81
Appendix B- Research Instrument	83
Appendix C- Twitter	90
Appendix D- Emerging Social Networks	91
Appendix E- Glossary	93
Vita, Linda J. Young	95

# List of Tables

1.	Table 1- Facebook Friends	47
2.	Table 2- Information Shared on Facebook	49
3.	Table 3- FanshaweOnline Usage	51

## 1. INTRODUCTION

1

Chris a first year student at Fanshawe College in London, Ontario wakes up and logs in to Facebook (FB) to see how many new wall posting, status update, pictures and videos have been posted while he slept over night. Clearly visible on the screen are a dozen new wall posting, several status updates and photos from a house party on Saturday night. Chris also has 5 new friend requests, 3 event notifications and 1 email message waiting for him. Chris looks at the pictures from the house party and laughs out loud (LOL) a couple of times. He then has a quick shower and returns to Facebook to accept the friend requests and read the event notifications.

Chris then logs into FanshaweOnline (FOL) to see if his marks have been posted in the grade book for his accounting assignment. A note on the class calendar reminds him that he has an English test on Tuesday and a study group scheduled for Thursday night. His FOL email box has 34 new messages however he decides not to read them because is running behind schedule. As he rides the bus to school he sends a text message to his friend letting her know he will be late for his marketing class. Chris arrives on campus and as he heads to his class his cell phone rings and it is his mother wondering if he will be home for the long weekend. While speaking to his mother he enters the lecture hall and takes a seat at the back of the class. He continues to speak to his mother for the next few minutes making plans for the long weekend. During his class he logs into his laptop and switches back and forth between Facebook and the online game he is playing.

After class Chris goes to the library because he is unable to locate an online resource that he needs to complete a project. In the three years Chris has attended college he has only visited the library twice, however he frequently logs into the virtual library to locate resources. Chris finds navigating his way around the library very cumbersome and he is annoyed when he learns the resource he is looking for is located on the second floor. After locating the book he returns to the first floor of the library to check-out the book. Chris is asked by the employee at the check-out counter for his student card which needs to be swiped into the library system in order to sign out the book. The library employee explained to Chris the only way he could sign out a book was with a valid student card and no other identification card would work. Chris leaves the library without the book he needed to complete his assignment.

On his way home he stops at a local eatery and logs into his laptop to review the accounting assignments his professor posted on FanshaweOnline. When his order arrives he decides to work on the assignment while eating his meal. After finishing his meal he heads homes and listens to a new song on his iPod. Later that evening he participates in an online study group on Facebook and at 11:55 p.m. he completes his marketing assignment which he submits electronically using FanshaweOnline. Before going to bed Chris logs into Facebook to see who is hosting the party on Thursday night.

### 1.1 Purpose of Study

The above vignette describes a typical day in the life of a student at Fanshawe College where I am employed as the Manager of Learning System Services (LSS). This profile is based on anecdotal information about how our students are using Facebook.

The purpose of this study is to better understand the usage of social networking sites at Fanshawe College. The need for Information Technology planning is critical to program and policy success in higher education institutions. Traditionally the planning process has focused on supporting the technological infrastructure for the teaching and learning environment. The impact of social networking services until recently has not been part of the planning process. The guiding question for this study is: What are the perceptions of students regarding the need for social networking services at Fanshawe College? The focus of this research will be on Facebook because it is contemporary and relevant to education. According to Nielsens Media Research (2009) "Facebook is the No. 1 global social networking destination and had 206.9 million unique visitors in December 2009" (p. 1). Boyd and Ellison (2007) define a social networking site as the following:

A web-based service that allows individuals to (1) construct a public or semipublic 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. The nature and nomenclature of these connections may vary from site to site. (p. 211)

A recent study by Borreson-Caruso and Salaway (2008) for the Educause Center for Applied Research (ECAR) suggests that social networking sites, especially Facebook, have become main stream for post-secondary students.

Overall 82.5% of the students are now using SNS. In fact, ECAR longitudinal data about SNS usage from the 2006 to 2008 survey shows that the 44 institutions that participated in all three years of the survey the percentage of students who use SNS has increased 74.8% to 88.8%. But the striking change is in how many students now use SNS on daily basis, up from 32.8% in 2006 to 58.8% in 2008. (p. 16)

The use of SNSs, particularly Facebook, in post-secondary institutions is of special interest to me because of my role as Manager of Learning System Services (LSS) at Fanshawe College in London, Ontario. Fanshawe College is a large post-secondary institution with an annual full-time enrollment exceeding 14,500 full-time students and 25,000 part-time students.

In my role I am responsible for the educational technologies that are used by our faculty and students in the teaching and learning process, specifically FanshaweOnLine (FOL) which is the college's learning management system (LMS), FANLive the college's live e-learning system, electronic mail (email), discussion boards, online chat and the student portal. I have held this role since 2004 and prior to coming to Fanshawe College I worked in the e-learning business from 1998-2004, developing online courses and working extensively with various learning management systems including WebCT, Blackboard and Desire2Learn.

#### **1.2 Background**

Over the past few years the college has seen evidence that social networking sites like Facebook are replacing traditional forms of electronic communication like email and discussion boards. In February 2007 the college saw its first grassroots movement on Facebook; students were protesting the construction of a perimeter fence that was build around the college at the London campus. The construction of the fence blocked off a well travelled pathway used by many students living in the surrounding off-campus neighborhoods. The student population was outraged which led to the creation of two Facebook groups with a combined membership of over 1100 members. Frustrated students posted to the group on a daily basis and as result college officials met with student union representatives to discuss possible solutions. In the end a permanent opening was made for students in the fence which allowed them to access the previously blocked pathway.

In October of 2007, the Office of the Registrar sent out late fee reminder notices to over 500 students via their FanshaweOnline email accounts. A tracking system revealed that less than 10% of the students opened their emails. When asked why they did not open their emails our students indicated that "they never read email" and that "email was an old form of communication that their grandparents used." This was an early indicator to the college that it was time for the institution to explore other forms of electronic communication.

In Sept. of 2008 the Chief Information Officer (CIO) at Fanshawe College began receiving numerous requests from faculty members and some students to block access to Facebook in the home-work labs. There was concerned expressed over the availability of computers in the home-work labs to do homework, since many were being used to log into Facebook. A number of options were discussed with the faculty and representatives from the Fanshawe Student Union (FSU). A middle of the road approach was taken and Facebook was banned from the home-work labs between the hours of 8 a.m. and 5 p.m. Monday to Friday. Students could still access Facebook in the evenings and on weekends. The decision was met with a great deal of opposition and anger from students.

International students expressed concerns since they used Facebook as the primary way to communicate with their family and friends back home. Several students indicated they used Facebook as a mechanism to share information with their classmates. Other students indicated that it was a form of Internet censorships because college employees could still access Facebook from their work-stations. A Facebook group was set-up to protest the blocking of the access and it had several hundred members. The Facebook ban was removed after only two weeks due to the strong opposition registered by students. This was another clue for the college that students were turning away from the traditional forms of communication.

In 2008 a handful of faculty members banned the use of mobile devices (i.e. cell phones,) and laptops in their classroom. The most common reasons cited for the ban included: sending and receiving messages during class time, sending and receiving test answers, taking and distributing digital photos of test material, playing games, logging into Facebook and cell phones ringing or vibrating during class. Students expressed concerns over the one size fits all approach to the ban along with indicating a preference to bring their laptops to the classroom to take notes. Today the ban is still in effect in some classrooms. I feel as the use of mobile devices continues to become commonplace in the classroom we will need to explore some options to manage the issue rather than outright bans.

In 2008 our educational software vendors began to integrate elements of social networking into their learning platforms. In June 2008, Datatel, the vendor for our student information system (SIS), released Active Campus Portal (ACP). The portal provides a single point of access for everyone on campus to various resources along with several social networking tools like team sites, blogs and discussion boards. After an extensive review the college implemented Active Campus Portal for our students in May 2010. The social networking pieces were not implemented and are still under review by the college with a decision to made later in 2010.

In July of 2008 Desire2Learn (D2L) the vendor for our learning management system began integrating elements of social networking tools into their system. These elements included user profiles, blogs and user generated content. In addition Desire2Learn has also created a new product called ePortfolio which pairs social networking and self-directed learning concepts with traditional education methods. The result is a solution that enables users to shape their learning paths and share their elearning journey with peers, professors and potential employers. The college is currently exploring the feasibility of purchasing the ePortfolio product with a decision to be made in the summer of 2010.

In the fall of 2009, Elluminate our live e-learning vendor launched Learn Central, a social networking site geared towards educators. Learn Central allows educators to connect with other educators throughout the world, create peer groups, meet in real-time and share educational resources and content. The college is currently exploring possible uses for Learn Central for our faculty.

Within the past year there have been a number questions raised by senior management regarding the investment of social networking tools into the college's learning management system (FanshaweOnLine). Should faculty members use Facebook in their classroom? Are there elements of Facebook that should be integrated into the students' online learning environment? How will these elements be integrated? Are they safe to use and how does the college manage privacy issues?

This research was limited to Fanshawe College and for this reason a case research design (Merriman, 1998) was used. A web-based survey was used to collect both quantitative and qualitative data (Dillman, 2007).

#### **1.3 Organization of Study**

This thesis is organized into six chapters. This first chapter explains the overall purpose, research questions and significance of the study. Chapter 2 describes the origins of social networking sites (including emerging sites) and learning management systems and how they have evolved over the past fifteen years. In chapter 3 I will review the literature that focuses on social networking sites and learning management systems. Chapter 4 describes the methodology and the mixed method approach used for this research. It provides a rationale as to why the selected design was chosen and is the appropriate means for conducting this research. The results and analysis of the research are presented in chapter 5, which includes both quantitative and qualitative data. Finally chapter 6 includes a discussion of the key findings which include the perceptions of our students regarding the need for social networking services at Fanshawe College.

The appendices will include the following: letter of information, research instrument, additional information on social networking sites and a glossary of commonly used terms.

#### 2. THE EVOLUTION OF TWO ONLINE SYSTEMS

The purpose of this chapter is twofold, the first is to provide an overview of how social networking sites like SixDegrees.com, MySpace and Facebook have evolved and changed over the past fifteen years. Along with providing a brief glimpse into some emerging social networking sites like Google Buzz. Secondly, this chapter will provide an overview of how learning management systems like WebCT, Desire2Learn and Blackboard have evolved and changed over the past fifteen years.

### 2.1 Origins of Social Networking Sites (SNS)

The first social networking site was launched in 1997 was called SixDegrees.com. The site was very basic and users could create a simple profile that included a photo and a few lines of text. The site was named after the Six Degrees of separation theory that was proposed by Stanley Milgram in the 1960s, such that any given user is at most just six personal connections away from any other person (Boyd, 2007). After a successful first year the company failed to develop a business plan and consequently closed its virtual doors in 2000. From 1997 to 2001 several other social networking sites were launched that provided various community tools for setting up profiles and searching for friends. The most popular sites included Black Planet, Asian Avenue, Live Journal and Classmates.com.

In 2001 Ryze.com a social networking site that focused on business networking was launched by Adrian Scott in the San Francisco business community. Scott introduced Ryze.com to his business associates who then created Friendster in 2002, Tribe.net in 2003 and LinkedIn in 2003. According to Chafkin (2007) "by 2005 Ryze.com never acquired mass popularity; Tribe.net grew to attract a niche market. LinkedIn became a powerful business service and Friendster became the most significant as one of the biggest disappointments in Internet history" (p. 1).

In August of 2003 Tom Anderson and Chris DeWolfe created a new social networking site called MySpace.com. MySpace was an interactive site that contained user created profiles, weblogs (as known as blogs), photos, videos and a network of friends. MySpace rapidly grew and early on it separated itself from other sites by adding new features that were based on user feedback. In 2004 teenagers began joining MySpace and rather than turning them away, the company decided to change their user policies to accept members under the age of 19. As noted by Boyd and Ellison (2007), "as the site grew, three distinct populations began to form: musicians/artists, teenagers, and the post-college urban social crowd" (p. 215).

In 2005 MySpace.com was sold to New Media Corporation for \$580 billion dollars and shortly after it began to be plagued by security and privacy issues. In 2008 MySpace underwent a massive overhaul and many of its features were re-designed including the user home page, status updates, applications, notifications and subscriptions were added in order to compete with the newest social networking site Facebook. MySpace also realized that in order to attract new users they needed to have a competitive marketing advantage over Facebook. In Sept. 2008 the company introduced a new feature called MySpace.com Music which is an online music store similar to iTunes. As reported by Nielsen Media (2009) "since the site's launch in September 2008, unique visitors to the music.myspace.com have increased 190 percent - growing from 4.2 million unique visitors to 12.1 million in June 2009" (p. 1). On February 4, 2004 Mark Zuckerberg a Harvard student launched from his dorm room a social networking site called 'The Facebook'. The site was originally restricted to members with a Harvard email address and within months it spread to other universities and colleges. In 2005 high schools were added to Facebook in order to reach a wider range of users. In 2008, Facebook overtook MySpace becoming the most popular social networking site, according to comScore, Inc. (2008) "Facebook pulled in 123.9 million unique visitors in the month of May, beating MySpace's 114.6 million, and 50.6 billion page views, compared to MySpace's 45.4 billion" (p. 1).

Since 2007, Facebook has met with controversy surrounding privacy and the open nature of the network. On January 1, 2008 a memorial group was created on Facebook that posted the identity of murdered Toronto teen Stefanie Rengel, whose family had not given Toronto police their consent to release the name to the media and the identities of her accused killers (CBC News, 2008, p. 1). I joined this Facebook group on New Year's day thinking it would be a respectful way to remember and honor Stefanie. I wasn't aware the Rengel family hadn't given their consent to release her name to the media until later in the day when I watched the 6 o'clock news. I wondered how this could be, because there was so much information posted about Stefanie, including family photos, personal stories and anecdotes. I had assumed family members and friends had posted this information. For me this was the first time I realized how powerful Facebook was in communicating information and I was surprised at how quickly the news spread.

In September 2008, Facebook launched the 'New Facebook' that included a new layout design. As part of the new design the news feed and 'Wall' were combined which exposed previously hidden information. The decision to move users to the new design

was met with a great deal of controversy from the Facebook community. Many groups were formed on Facebook opposing the decision; some had over a million members.

On May 31, 2008 the Canadian Internet Policy and Public Interest Clinic on behalf of three students filed a 35 page complaint with the Office of the Privacy Commissioner against Facebook (Visser, 2008, p. 1). The complaint alleged there were 22 breaches of the Canadian Personal Information Protection and Electronic Documents Act (PIPEA). The claims were investigated by Canadian Privacy Commissioner, Jennifer Stoddart and July 16, 2009 she released a reported that found Facebook had breached Canadian privacy laws. According to the CBC News (2009) the Office of Privacy Commissioner report found that Facebook breached PIPEDA in the following four ways:

- Facebook doesn't have enough safeguards to prevent 950,000 third-party developers around the world from getting unauthorized access to users' personal information, nor does it ensure users have given "meaningful consent" to allow their personal information to be disclosed to the developers.
- 2. Facebook keeps information from accounts deactivated by users indefinitely.
- Facebook keeps the profiles of deceased users for "memorial purposes" but does not make this clear.
- 4. Facebook allows users to provide personal information about non-users without their consent. For example, it allows them to tag photos and videos of non-users with their names, and provide Facebook with their email addresses to invite them to join the site. It keeps the addresses indefinitely. (p. 1)

Stoddart gave Facebook 30 days to tighten their procedures and as a result of the report new privacy settings were implemented on December 9, 2009. All users logging into Facebook were met with a privacy announcement informing them that they must configure their settings to the new privacy settings.

Within 24 hours of rolling out the new privacy settings, security experts like the Electronic Frontier Group (EFG) warned that using the new settings could increase the amount of publicly available information. The new privacy tool guides users through the configuration set-up and recommends that users select the default setting. If you select the default settings, the items that were previously restricted to people in your network will now be visible to everyone on the Internet. I am sure many people were surprised to learn that personal information like their name, hometown, gender, photos, place of employment were now publicly available on the Internet.

While I do disagree with the changes in the privacy settings, I can understand why Facebook is trying to expand the security permissions they collect from users to share their personal information. The more information on Facebook that is interesting will help attract new users and existing members will be able to expand their personal networks. And if more people use Facebook to define their social networks, the more valuable the membership database becomes to the owners of Facebook. In addition if there are more public status updates Facebook is in a better position to defend against competitors such as Twitter. Until the recent changes on Facebook, all updates were limited to just friends.

On January 27, 2010, in response to new public complaints about the privacy tools that were introduced in December 2009, Jennifer Stoddart launched a second investigation into Facebook. A press release from the Office of the Canadian Privacy Commissioner (2010) said: 13

The complaint focuses on a tool introduced by Facebook in mid-December 2009, which required users to review their privacy settings. The complainant alleges that the new default settings would have made his information more readily available than the settings he had previously put in place (p. 1).

At the time of this writing, the Privacy Commissioner continues to investigate this complaint and Facebook officials have declined to comment.

On April 23, 2010 Facebook without informing their users, introduced a new feature called Instant Personalization. This feature enables third party sites to gather your Facebook information when you visit them unless you decide to opt out. The Facebook community protested against the new settings and on April 28, 2010, New York Senator Charles Schumer released a letter he wrote to Facebook demanding that guidelines be established on how information is shared or disseminated to third parties (INC. 2010, p. 1). In response to Schumer's request and outrage from users, Facebook recently made changes to its privacy settings in June 2010.

As more stories surface surrounding privacy issues with Facebook and other social networking sites, I grow less confident that my personal information will be kept private and secure. To illustrate this example, I recently updated my profile to reflect my interest in photography and I also visited some photography websites. The next day I began to notice advertisements on my Facebook site for photography related merchandise and classes. I was annoyed that I had become a victim of the Instant Personalization feature on Facebook, so I decided to opt out of this feature. It took me about 10 minutes to locate and change my security settings, which I found to be a frustrating experience. Despite all of the controversy surrounding privacy issues Facebook continues to be the most popular social networking site. A recent press release from Nielsens Media (2009) says "Facebook was the No.1 global social networking site with 206.9 million visitors in December 2009" (Nielsen's, 2009, p. 1).

Twitter was created in March of 2006 by Jack Dorsey as an internal communication method for employees at a company where he worked. It quickly grew and in April of 2007 Jack Dorsey became the CEO of Twitter Inc. Twitter can be defined as "a free social networking service that allows its users to send and read other users' updates (i.e. tweets) which are text-based posts of up to 140 characters in length" (Reference.com, 2010, p. 1). Users update their profile page and these updates are delivered to other users who have signed up to receive them. The sender has the option of restricting delivery to only their network of friends or the default option which is everyone on Twitter.

As with other social networking sites, there are growing privacy concerns with Twitter for information on these concerns please Appendix C- Twitter. Despite these issues Twitter continues to grow in popularity. "Unique visitors to Twitter increased 1,382 percent year-over-year, from 475,000 unique visitors in February 2008 to 7 million in February 2009" (McGiboney, 2009, p. 1).

#### 2.2. Emerging Social Networks

Since 2005, there has been a number of new social networking sites emerge that have not yet reached mass adoption. These sites include Loopt, FourSquare and DailyBooth. For more information on these sites see Appendix D- Emerging Social Networks. Google Buzz is another emerging social network that has received the most attention of all emerging sites. Google Buzz was launched on February 9, 2010 and it is a social networking and messaging tool that interacts with the Google email system (i.e. Gmail) and the Google maps application. Members can share information, post status updates, upload photos and videos to a Google profile that is similar to Facebook. Users have the option of sharing their information publicly over the Internet or privately to a selected group of friends. There are several social networking sites integrated into the Google Buzz interface including Flickr, YouTube, Blogger, Picasa and Twitter.

Google Buzz's features have privacy concerns that are very similar in nature to Facebook. By default Google Buzz will publicly display a list of recent Gmail contacts on a member's profile. If the user does not disable this feature or is unaware of this option, sensitive information about the member and their contacts may be exposed. As a long time fan of Gmail I was anxious to try out Google Buzz and I was shocked to learn that my contacts had been revealed to everyone on my contact list. I quickly decided to disable my Google Buzz application until the issue was resolved.

On February 16, 2010 only 7 days after Google Buzz was launched a Harvard Law school student filed a class action lawsuit against Google alleging they had failed to put measures in place to protect privacy (Heussner 2010, p. 1). The next day Jennifer Stoddart, the Privacy Commissioner of Canada held a press conference and released the following statement, "we have seen a storm of protest and outrage over alleged privacy violations and my office also has questions about how Google Buzz has met the requirements of privacy law in Canada" (Hayden, 2010, p. 1). In response to this complaint and numerous other complaints, Google offered an apology and promised to make changes to their service. Stoddart was not satisfied with the changes to Google Buzz and on April 20, 2010 in partnership with nine other countries wrote a communication to Eric Schmidt, CEO of Google. A press release from the Office of Privacy Commissioner of Canada (2010) stated the following:

We are increasingly concerned that, too often, the privacy rights of the world's citizens are being forgotten as Google rolls out new technological applications. We were disturbed by your recent rollout of the Google Buzz social networking application, which betrayed a disappointing disregard for fundamental privacy norms and laws. Moreover, this was not the first time you have failed to take adequate account of privacy considerations when launching new services. (Hayden, 2010, p. 1)

At the time of this writing Eric Schmidt has not publicly commented on the letter. There also have been no changes made to privacy issues with Google Buzz.

## 2.3 Origins of the Learning Management Systems (LMS)

A learning management system (LMS) also known as a course management system (CMS) is a web-based system that enables an instructor to create and deliver content, monitors student participation, records data from students and assesses student performance (Educause, 2008). The learning management system is a fairly new term and it is often confused with other concepts like e-learning, digital learning, virtual learning and distance learning (Kritikou et al., 2008). Common features of an LMS include:

 Course Management tools: class lists/rosters, user progress, attendance trackers and content creation software.

- Collaboration and Communication tools: email, blogs, wikis, instant messaging, calendar and discussion boards.
- Measurement and Assessment tools: quizzes, drop-boxes, self assessment tools, competencies and rubrics.
- 4. Synchronous Communication: chat and video-conferencing.

The first learning management system used for educational purposes was designed by Dr. Murray Goldberg in 1995 at UBC (University of British Columbia). Dr. Goldberg was researching the effectiveness of Web-based learning environments and he felt students learning would be more effective if a face-face lecture was accompanied by a course website. To test out his theory he designed a research study that involved teaching the same course to three different groups of students. In the first group the students were taught using face-to-face teaching, the second group met in a virtual learning environment and all of their course material was delivered via the Web. This group of students never met face to face and completed all of their course work via the Web. The final group was taught using a combination of face-to-face lectures and a course website. When the course was completed Goldberg and a group of sociologists measured the learning outcomes and concluded the performance of the students in the group that used lectures and the Web was significantly better than the other two groups (Hopper, 2000).

As a result of his research and at the request of his colleagues at UBC Dr. Goldberg created a software program that was used to create course based websites, which he called World Wide Web Course Tools (WebCT). The system quickly grew and Goldberg with help of investors from UBC decided to create a company which was called "WebCT Educational Technologies Corporation and by 1999 the company served 2-3 million students in 30 countries" (Lin, 2004). In 1999 Goldberg sold the company to Universal Learning Technology (ULT) and it continued to grow and by "2002 the software was used by over 10 million students in 80 countries" (UBC Press, 2004). In 2005 WebCT announced it was merging with Blackboard Inc. and as part of the acquisition the WeBCT name was phased out.

In 1998 when John Baker was still a student at the University of Waterloo he began creating course web sites for professors. Baker quickly realized developing webenabled course sites was expensive and time consuming and he began developing a software program to automate the course creation process. After graduating in 1999 Baker created a learning management system known as Desire2Learn (D2L) and he signed on his first client the University of Guelph. In 2000 with the help of his father and angel investors he hired his first seven employees and moved into a loft in down-town Kitchener, Ontario. In 2003 Baker signed on a number of large clients including the University of Wisconsin, Arizona State University, Oklahoma State University, New Brunswick Department of Education and school board in Milwaukee and Fanshawe College in London, Ontario. In 2006 Desire2Learn continued to grow by signing on new clients like Rochester Institute of Technology and the Alabama Department of Education.

In the summer of 2006 Desire2Learn was sued by rival Blackboard Inc. over an alleged patent infringement. Internet law professor Michael Geist (2006) wrote the following for the BBC News.

Blackboard took the academic community by surprise late last month when it announced it had been granted a broad patent in the US covering 44 claims related to learning management systems. It added that it expects similar patents to be granted in nearly a dozen locations around the world including the European Union, Canada, and Australia. On the same day that it publicly disclosed its patent, Blackboard started a patent infringement suit in a Texas court against Desire2Learn. Both the patent and the lawsuit have generated enormous anger within the academic and open source software communities. (p. 1)

John Baker announced the patent infringement lawsuit at the Desire2Learn user conference in July 2006 to a stunned audience. I was in the audience that day and I felt a great deal of anger towards Blackboard. Many of us felt that the patent should not have been granted to Blackboard Inc. and that the United States Patent and Trademark Office (USPTO) had made a serious error in judgment. The patent claims that Blackboard invented and has ownership over all learning management systems technologies, including open source systems like Moodle. If the patent was allowed to stand it could destroy the open source community by slowing new adoption and choking the efforts of entrepreneurs. In addition it would create a monopoly by suing commercial vendors who are in violation of the patent. Given that the patent was so broad this would include all commercial vendors in the marketplace.

As a Desire2Learn school I was extremely concerned of the impact this could have on our students and faculty. Throughout the remainder of the summer there was considerable speculation in the educational technology community on whether Blackboard would sue other commercial vendors. The blogosphere was full of irate postings from members of the educational technology community. On October 9, 2006, Educause a leading nonprofit association that advances the use of information technology in higher education wrote a letter to Blackboard expressing their concern.

Our community feels these actions go beyond competition to challenging the core values and interests of higher education. One of our concerns is that you may not fully appreciate the depth of the consternation this action has caused for key members of our community. Among those who have been most directly involved in the development and evolution of course management systems-customers whom Blackboard has relied upon for ideas and advice-these concerns are most pronounced. Their anger over the law suit is so intense that many are simply not communicating with Blackboard. (p. 1)

What followed was three and a half years of ligation including a re-examination of the patent by the USPTO, rejection of the patent, numerous appeals, lawsuits and charges of deceptive business practices by the open source community against Blackboard. Finally on December 15, 2009, Blackboard and Desire2Learn resolved their legal disputes over the patent issues with each licensing the other technologies and dismissing all pending lawsuits.

Moving on to the creation of Blackboard, in 1997 Stephen Gilfus and Dan Crane were developing a software product that would enable web-based courses to be scalable for wider user across the organization. Around the same time Matthew Pittinsky and Michael Chasen founded a company called Blackboard that was developing standards for online education. Both groups recognized there was an increasing demand for a costeffective and easy to use software program that could be used to deliver online courses. The two companies decided to merge and they formed Blackboard Inc. which went on to develop the Blackboard Learning Management System.

In addition to the legal issues that were outlined previously, several educational organizations, teachers and students have expressed concerns about the reliability of Blackboard. In the fall of 2009, McMaster University in Hamilton, Ontario "replaced their Blackboard system after an academic year filled with problems in trying to keep its newly updated Blackboard learning management system operational" (Schaffhauser, 2010, p. 1). Since the settlement of the patent lawsuit I am personally aware of a number of educational organizations that are considering moving away from Blackboard or have already switched learning management systems.

Moodle (Modular Object-Oriented Dynamic Learning Environment) is a free and open-source e-learning software platform that was created in 1999 by Martin Dougiamas from Curtin University in Australia. The platform continues to evolve and in March 2010 major improvements were made in accessibility and several new features like blogs and wikis were added to the platform. Moodle is viewed by some organizations as an attractive alternative to high-priced LMS's because there are no annual fees charged for licenses or system upgrades. In addition organizations are free to add as many users as they require with no costs incurred for the user or the organization.

In summary, both the learning management system and social networking sites began about fifteen years ago and were created either by university students or employees who were seeking an easier method to communicate information to large audiences. The LMS has evolved over the years from a simple way to assist a professor with the creation of course web sites to a mission critical system that the entire campus depends upon. Similarly social networking sites like Facebook have evolved from an easy way for a group of college students to share information to a communication platform that is used by millions of people every day across the world.

#### **3. LITERATURE REVIEW**

Early research on Facebook has focused on identity presentation and privacy issues. Facebook users typically create an online profile that includes personal information, interests, photos, video clips, along with joining a group of friends. The type of information shared between users varies greatly and many users believe that their personal information cannot be viewed by anyone outside of their social network. Gross and Acquisti (2005) "revealed in their study that 33% of students surveyed believed that it is either impossible or quite difficult for individuals not affiliated with a university to access the [Facebook] network of that university"( pg.13). Another study by Barnes found that there was a discrepancy between privacy concerns and actual privacy settings. Common information shared by users includes: first and last name, cell phone numbers, email addresses, photos and partial home addresses (Barnes, 2006).

This early research is one of the first studies to identify a serious problem with privacy on social networking sites. In the past year I have been involved in two separate cases of cyber-staking of our students on Facebook. In both cases they posted personal information including their email addresses and cell phone numbers online and did not use the privacy controls to protect their personal information. As an educator I am interested in understanding how the culture of freely sharing information online developed and the impact it has on our students.

The Gross and Acquisti research provides a glimpse into this culture and lays the ground-work for future studies. Since the Gross and Acquisti study was published in 2006 there have been many changes to Facebook including new privacy settings, improved user interface and a shift in the demographic population using Facebook.

24

According to Inside Facebook (2009), "overall, 45% of Facebook's 45.3 million active users in the US are now age 26 or older and nearly a quarter are over age 35" (p. 2). The amount of time an average user spends per month on Facebook has dramatically increased. According to a report released by Nielsen's Media (2009), " in June 2009 the average global visitor spend 4 hours and 33 minutes on Facebook, which is a 240% increase from June 2008" (p. 1).

A commonly held notion is that older adults are more concerned about privacy than the younger generations. I often hear from faculty members that students are completely unaware of privacy issues and they post things on Facebook that will get them into trouble. A recent study conducted by the Pew Research (2010) dispels this notion and according to the study:

Among internet users 44% of adults younger than age 30 have limited the amount of personal information available about themselves online. This compares with just 33% of internet users between ages 30-49, 25% of those ages 50-64 and 20% of that age 65 and older. Young adults who use a social network are also more

likely to change their privacy settings than are older adults with an account. (p. 1) This is very relevant to my research since it provides a different perspective on how students are using social networking sites.

In 2007 Danah Boyd and Nicole Ellison were guest editors for an article on social networking sites that was published by the *Journal of Computer-Mediated Communication*. This article represented the beginning of the debate over how the academic community studies and understands sites like Facebook. They were the first researchers to construct a history of SNSs which is relevant to my research because the timeline illustrates how quickly SNSs are developing and changing. It also provides a benchmark for comparing SNSs, along with identifying user trends and usage patterns.

Boyd and Ellison have also provided the first definition of social networking sites which I have cited earlier in this paper. The description is very broad and it can used to describe a number different technologies like YouTube, iTunes and blogs which currently are not considered social networking sites. This is relevant to my research because an exhaustive search of the print materials and the Internet reveals that there are no other definitions of a social networking site available. Without a definition it makes it very difficult to research and understand what is happening in the world of social networking.

Boyd and Ellison, along with a handful of other researchers dominate the field of social network research. They often will quote each other in articles and co-author research papers together, which can provide a very biased viewpoint. Boyd has been known to write about academic related research on her blog and many people have interpreted her postings as an actual research study. The major criticism of her work surrounds its validity. In my viewpoint people were interested in her writing because Facebook was the first social networking site to compete with MySpace. The popularity of Facebook changed the game and people wanted to discuss and write about it. And many people took to the Internet to learn and to write about this new social media called Facebook. In 2006 I was a first time blogger and I remember reading numerous blog postings about Facebook. Everyone claimed to be an expert and in my opinion the majority of posts lacked validity and real content. Boyd's postings on the other hand were thought provoking and based on some actual research, which is why I feel her work received so much attention.

Another criticism of Boyd's work is she overlooked the connection between social networking sites and capitalism. Thrift (2005) suggests that "information which is transmitted through gossip and small talk can be captured and made into opportunities for profit" (p. 6). I would agree that Boyd did overlook the connection between SNS's and capitalism in her early work. I believe this was due to the fact that early sites like MySpace and Facebook were considered to be a social utility and they were not concerned about making a profit and this was reflected in Boyd's work. When Mark Zuckerberg launched Facebook in 2004 he admitted he didn't have a business plan for the future and his focus was on growing its number of users. Seven years later Facebook's business model appears to depend on users' willingness to share information with strangers. This model has turned Facebook into a multimillion dollar business and while actual numbers are difficult to determine according to Forbes (2009) estimates for 2009 range from \$300 million to \$500 million. Boyd is now a social media researcher at the Microsoft Research (MSR) a division of Microsoft Inc. that was created in the early 90's to research issues related to computer science. Boyd (2009) researches new social technologies "from many different angles, primarily looking at everyday consumer practices, but also thinking about how this connects to technology, business, and society" (p. 2).

Kleck, Reese, Behnken, and Sundar (2007) were the first to study the relationship between the number of Facebook friends and positive social judgments by peers. The total number of Facebook friends a user has is listed in their user profile. For instance I have 56 friends listed on my Facebook profile and everyone who views my profile can see my friends. The researchers presented the participants with fake Facebook profiles that varied in the number of "friends profile owners appeared to have: 15, 82 or 261 friends" (Kleck et.al, 2007). An analyses of the results revealed the more friends you have on Facebook the more positively you are viewed by peers. "Popularity, pleasantness, heterosexual appeal, and confidence of the profile owner were greater when there were a higher number of friends on an individual's profile than when the lower coefficients were displayed" (p. 24).

This research is relevant to my study because it provides a benchmark for building a profile of the average Facebook user at Fanshawe College. Of special interest to me is the social meaning of the word friend in Facebook terms it is someone you add to your Facebook site (Kleck et.al, 2007). In my viewpoint the social meaning of the word 'friend' has changed due to the growth of social networks like Facebook. A typical Facebook user (under the age of 24) has hundreds of friends and I often wonder how can they have so many friends? My generation (i.e. over 35) would define a 'friend' as someone that a close personal relationship has been formed. The relationship normally involves considerable face-to-face communication and it implies more than just a casual acquaintance from work or school. Friendships do not occur at the click of a mouse, but instead are developed over time. When asked how many friends (in the traditional sense) my generation has the typical answer would range from 3 -20.

As a comparison I asked the younger members of my family (6 in total) how many friends they had on Facebook. The average response I received was around 200 friends. One family member who is high-school senior indicated that she had 950 friends on Facebook, which is more than the population of the small town where she lives and three times the population of the high-school she attends. When I asked how it was possible to have 950 friends, my niece indicated that she knew everyone on her Facebook site. When I asked what the word friend meant to them, my niece a first year student at university indicated it could be someone you met at a party, someone you know from school, a friend of a friend, someone who belongs to the same Facebook group or a random meeting on Facebook or in a chat room. Digging deeper I asked how many close friends they had on Facebook. They all indicated they had a few people on Facebook who would be considered a close friend. For close friends they had a different set of permissions that would allow them to view certain parts of their Facebook accounts, like pictures, videos and wall posts.

After my discussions with my family members I felt there clearly were generational differences in how we view our friendships and I feel more research is needed to understand what these differences mean. Further research could include how different generations handle the membership management of their Facebook account and the criteria used to add/delete friends, along with the type of information they share with friends. Another possible research area is how do users move away from a community like Facebook to another social networking site? Are there rituals/practices involved in the move and do they ever completely leave a community? What happens to their membership data when they leave a site? What is the relationship between online/offline friendships and social groups?

Another study that is relevant to my research is the work done by Mazer, Murphy & Simmons (2007) on student's perceptions of teachers who disclosed personal information on Facebook. The study involved 133 undergraduate students at a Midwestern university who viewed a professor's Facebook page for varying degrees of

self disclosure. The results of the study indicated that the more information the professor self-disclosed the more positive comments they would receive from the viewers of the page. The presence of faculty on Facebook is a fairly new trend and I feel this study provides some insight into the student-faculty relationship and professional ethics.

There are some major limitations to this study. The first limitation is the Facebook pages were manipulated by the researchers to show varying degrees of disclosure which meant the students were not viewing 'real' Facebook pages. The second limitation is that students viewed the Facebook pages in a controlled environment in the university computer lab and were instructed by the researchers to browse specific Facebook pages. This of course is an unnatural environment and can result in misleading results. The final limitation is that it only examined how students respond to female teachers on Facebook. By excluding male teachers the research does not provide us with a full picture of how students respond to their teachers using Facebook.

Anecdotal evidence from Fanshawe students points to mixed feelings about the faculty presence on Facebook and they generally believe that Facebook is for students. Many students feel that Facebook is their private domain and when a faculty member enters into their space it is a breach of trust and privacy. They feel the space is theirs and the rules of communication are created by them for them. Students have indicated they are concerned about the professional relationship between the professor and student. Unlike the majority of their friends on their networks, the real world relationship with their professors is not a peer relationship. The norms of social discourse are different between peers, than they are between professor and student. Students may feel imitated to

engage in an online conversation or a relationship with their professor, because they recognize that that the faculty member holds the power in the relationship.

A recent article in Wired Campus (2008) describes how students have coined the term 'creepy tree house' to describe technological innovations by faculty members that make their skin crawl. Jared Stein (2009) a student at Utah Valley University wrote on his blog that a "creepy tree house is what a professor can create by requiring his students to interact with him/her on a medium other than the class room tools (i.e.) requiring students to follow him/her on peer networking sites like Facebook" (p. 3).

I was recently speaking with a professor who is using Facebook and Twitter in his classes about the term 'creepy tree house'. He indicated that use of Facebook in his classes was unsuccessful because the majority of his students preferred that he use the college email system or the learning management system to contact them about class work. The students in his class preferred to keep their personal lives separate from their academic lives. However when the students graduated from College, the professor indicated he would receive several Facebook Friend requests from his former students.

In 2008, Christine Greenhow a researcher in learning technologies at the University of Minnesota began studying the use of social networking sites in educational contexts. In 2008 she asked a random group of students about their educational uses of Facebook over the past six months.

Although only 10% of the students said they used Facebook as part of an assigned class exercise, about half had used Facebook to arrange a study group or meeting, more than half had used it to discuss classes or school work and about one-third had reported using Facebook to collaborate on assignments. (p. 17)

31

This was one of the first studies on the educational value of Facebook and I feel it is applicable to my research because it provides some evidence that students are using Facebook to set up study groups which are of educational value. The study supports the notion that students are learning 21<sup>st</sup> century skills that will help them become successful. In particular students are learning technology skills and the ability to network in virtual environments.

Another study on the educational value of social networking sites was conducted by the Babson Survey Research Group in collaboration with New Marketing Labs and Pearson Education. As reported by Kolowich (2010) this study found that "80 percent of professors, with little variance by age, have at least one account with either: Facebook, Twitter, YouTube, LinkedIn or Flickr. A majority, 52 percent, said they used at least one of them as a teaching tool" (p. 1).

To my knowledge this is the first time research on a large scale has been conducted on how faculty use social networking tools in their teaching and learning environments. This is significant to my research for two reasons. Students have used social networking sites for many years as the focal point for their social lives and a few in their academic lives. Faculty members are now beginning to follow using these sites as a way of getting to know their students and as way for sharing faculty-produced and student-produced content. Secondly, this research is one of the first studies to recognize that social networking tools and other online resources have increased opportunities for informal learning outside of the traditional classroom environment.

A criticism that I have of this study is that the research was funded by Pearsons Education Ltd. which is a global leader in education, technology and services and the survey was only administrated to Pearson's customers. I feel there could be some bias in the responses due to the relationship the respondents have with Pearson's. From experience I know on occasion there have been incentives offered by educational vendors like Pearsons to faculty members as a way to increase participation. In addition the actual survey questions and analysis were not made publicly available; instead the highlights of the survey were released via a carefully worded press release. In the spirit of academic research, I would question why the results of the survey are not publicly available.

Turning our attention to the learning management system, there are very few studies on the educational value of the LMS. The majority of studies focus on how the LMS manages the virtual learning environment within an organization and how widely deployed the LMS is across educational organizations. According to the EDUCAUSE Core Data Service: Fiscal Year 2007 Summary Report "93 percent of all campuses responding to the survey supported at least one learning management system. In fact, only 0.5 percent of respondents did not deploy and had no plans to deploy such a system" (p. 42). At Fanshawe College we have had a learning management system since 2001 and it is mandatory for all post secondary programs to use the system for posting course information sheets. We have taken an organic approach to growing the system and we are flexible in how we have set our user permissions, which provides faculty with opportunities to utilize the system based on their requirements. As a result the system is well utilized by faculty. The learning management system at Fanshawe College, not unlike other organizations is considered to be mission critical to the operation of college. When the LMS goes off online it seriously interrupts the learning of our students since

they are so dependent upon on the system for their daily learning activities. Some of these activities include assignment instructions, assignment submissions, quizzes and grades.

There are a growing number of students, professors and administrators who feel the LMS is too rigid and are seeking alternative options for their communication and collaboration needs. Many are turning towards the Web to meet their needs. In response to these demands the LMS has evolved from a simple system for managing courses to a more encompassing system that supports group discussions and social networking tools like blogs and user profiles. The pace of change on the Internet is rapid and new technologies, specifically new social networking tools are being developed every 3 to 6 months. As a result there is a great deal of pressure for learning management systems to utilize and integrate with many of the social networking tools that students use freely on the Internet and that they expect to be available to them in their virtual learning environments.

There is currently a debate about the appropriate way to integrate social networking tools into online learning environments. From an institutional standpoint, critics urge waiting until integration into the existing learning management system is available, while advocates argue that campuses should move more quickly to promote use of dedicated social networking tools. According to Craig (2007),

The growth of a dynamic open-source movement, a wealth of innovative technology tools and the explosion of interest in social networking sites among a new generation of students suggests that our current LCMS model may be situated not at the center, but on the margins of a profound revolution in web-based applications (p. 152).

In my role I see evidence on a regular basis that the LMS is moving from the center of the online teaching and learning environment to a location closer to the edge. For example students are posting homework assignments on YouTube, professors are creating podcasts using open source software and the College is communicating to students using Facebook and Twitter.

Minocha (2009) recently completed a study that examined how educators and students use social networking software in their academic environments. The study was done over a six month period using multiple case studies that were from 25 universities across the United Kingdom. The study suggests there are educational goals for deploying social networking sites such as supporting peer-to-peer learning, enhancing reflective learning, creating community and providing students with transferable skills (Minocha, 2009). This study is relevant to my research since it is one of the first large scale studies to examine the educational uses of social media tools. A major limitation to this study is that all the data gathered was qualitative and the interpretation of the data can be subject to researcher bias.

It is difficult to determine the potential impact of social networking tools on higher education because the tools are in a constant state of change. However, I feel it is only a matter of time before the collaboration aspects of social networking will become an instructional tool. Some instructors have already begun to use Facebook groups to foster peer learning, conduct group projects and to communicate with their students. I am unsure how these tools will be integrated into the student's academic environment. Will there be an academic version of Facebook? Will they it be integrated into the traditional learning management system? Will there be another system that combines the communication and social tools with the academic tools of the learning management system?

In summary it appears social networking sites can come and go very quickly and are very vulnerable to the next big thing. The average life span of social networking sites appears to be 3 to 4 years which would suggest that it is a passing fad. All new technologies undergo numerous changes before they stabilize and are adopted into society. As the literature review revealed there are only a handful of valid research studies on educational value of social networking sites. In addition there are very few studies on the educational value of the LMS, instead the studies focus on how widely deployed the LMS are across the organization. To my knowledge there have been no studies published on the similarities between the LMS and social networking sites.

36

### 4. METHODS

The goal of this research is not to prove or disprove a specific hypothesis nor is it to derive theories which may be used for predictive purposes. The goal is to develop an understanding of student perceptions and opinions regarding their usage of social networking sites. The overarching research question was, 'What are the perceptions of students regarding the need for social networking services at Fanshawe College?' To explore this question, sub-questions were investigated and grouped into the following three categories:

- Demographics: Who is using Facebook? Are there differences by age, gender, program of study, year of study and ethnic backgrounds? Do students use Facebook differently if they live on-campus as opposed to off-campus?
- 2. Facebook Usage: How often do students log into Facebook? How are students using Facebook? How many Facebook friends do they have? How many are close friends? How long are students spending online? Are students replacing the traditional forms of communication used by the college such as emails, FanshaweOnline etc, with the communication tools in Facebook?
- 3. Information Disclosure & Privacy: What types of information do students disclose on Facebook? Do they use the privacy controls provided by Facebook? Are students concerned about privacy issues while online? Are there common student practices on Facebook that would be a concern to the college?

## 4.1 Methodology

A case study approach using mixed methods' was selected for this research. The case study will provide me with an understanding of student perceptions and experiences

regarding their usage of social networking sites. This descriptive study will retrieve and corroborate the following data:

1. A literature review and a review of other relevant studies.

2. A quantitative web-based survey of Fanshawe College students who were enrolled in full-time or part-time studies in the fall 2009 academic term.

3. Analysis of the responses to the open ended questions in the survey.

Using triangulation (Matheson, 1988) I will cross reference the data to ensure the behaviours of the students surveyed is an accurate description across the sample and can be used as a base from which to move forward with program and service planning in our Information Technology Services (ITS) department at Fanshawe College.

### 4.2 Research Design

The case-study approach offers the potential to gather and explore data that will enable opinions to be drawn out concerning the need for and the feasibility of successful information and communication technology use (Merriam, 1998). The proposed method will involve: survey data, literature analysis and anecdotal data analysis. The employment of triangulation will help to minimize the biases inherent in data sources, methodologies and researchers (Matheson, 1988).

Given that the purpose of this study is to gain a better understanding of student perceptions and experiences, survey research is proposed as the primary source of data acquisition. There are inherent strengths and weaknesses when examining a phenomenon by means of any research methodology. The strengths of this study include multiple data sources, high response rate from a large population, emerging literature and the potential for significant contribution to the field of educational technology. My understanding of information and communication technology in a college environment allowed me to develop the right set of questions and to collect data that enable the creation of a meaningful database of student behaviour.

As a researcher it is impossible not to have biases and preconceived expectations. These biases and expectations are outlined in the final chapter to give the reader a shared lens with the researcher (Cohen, Manion, & Morrison, 2007). This study is exploratory and emergent in nature. The methods proposed are the most suitable to yield data that is descriptive and will convey the actual experiences of participants.

The research instrument selected was an online survey that was delivered via the Internet and self administrated by the respondents. An online survey was chosen as the data collection method, because of its low cost compared to other methods and it can be self-administrated to large populations. The online survey was developed in consultation with key stakeholders in the College and representatives from the Fanshawe College Student Union (FSU). Based on previous qualitative results and anecdotal information from Learning System Services (LSS) department, the survey made use of closed questions (Sudmann & Bradburn, 1982) whenever possible and it included two openended questions (Oppenheim, 1992).

Conditional branching (also known as skip logic) was used to change the respondent's path through the survey based on answers they gave to certain questions. To test for content validity (Oppenheim, 1992) a small user sample of students (n=approximately 5) from the London campus tested the research instrument. The sample included students on co-op terms or work study placements in various departments within the college and representatives the Fanshawe Student Union (FSU).

#### **4.3 Research Participants**

A computer generated program randomly selected participants from the student information system (SIS) for the online survey. A student, for the purposes of this research, is defined as an individual who is currently enrolled in a full-time postsecondary program or enrolled part-time in a continuing education course or certificate program. The computer program selects every third student and then generates an email distribution list which is encrypted to ensure the anonymity of the research subject. The Information System Services (ISS) department at Fanshawe College extracted the email distribution list from the student information system and imported it into the college's proprietary survey management tool (SNAP). Unique identifiers and passwords were assigned to the student information.

The research participants were selected with equal representation from each of the five academic areas at the London campus of Fanshawe College.

1. Faculty of Arts, Media & Design

2. Faculty of Business & Information

3. Faculty of Health Sciences, Nursing & Human Services

4. Faculty of Technology

5. Continuing Education

The random sample consisted of approximately 2,500 full-time London students and 2,500 part-time London students which yielded roughly 1000 participants per group. Students received an email from the Institutional Research & Planning (IRP) department inviting them to participate in an online survey about their use of social networking sites. It is important to note this email is not connected in any way to my official role at the

college or my email account. The email outlined the purpose of the survey and clearly stated that participation in the study was voluntary and that all information would remain anonymous and confidential.

Ethics approval was obtained from the Research Ethics Board of University of Western Ontario, Faculty of Education and the Research Ethics Board of Fanshawe College. The quantitative data was analyzed using PASW 19 were I used descriptive statistics like frequency tables to summarize the data and inferential statistics like chi squared to determine the differences between two categorical variables. The qualitative data was analyzed using content analysis to identify themes that emerged in the text and quasi-statistics to count the number of times a word or phrase was mentioned in the text.

### 5. RESULTS

The online survey was administrated on November, 18, 2009 and was delivered by the FanshaweOnline email system to 5670 participants. The survey was available for a two week period. Two reminder notices were sent to students via their FanshaweOnline email address. The sampling strategy yielded 818 responses for 14.4% completion rate and an overall confidence interval of approximately +/- 4.1% (nineteen times out of twenty). Of the 818 students who responded to the survey 517 (63.3%) were females and 301 (36.7%) were males. The cases were weighted during analysis to more accurately reflect the gender distribution of the Fanshawe student population (53% females; 47% males).

#### 5.1 Demographic Profile

Of the 818 students who responded 123 (15%) were under 19 years of age, 203 (24.8%) were between the ages of 20 and 24 and 91(11.1%) were between the ages of 25-29. There were 78 (9.5%) students who were in the 30-34 group and 81 (9.9%) in the 35-39 age group. Students over the age of 40 represented the largest group with 242 (29.6%). The majority of students (91.3%) reported living off-campus during the academic year and 7.5% indicated they lived on campus during the academic year. Of the students living on campus 67.2% were female and 37.3% were male and 87% were under the age of 24.

Almost half of the students (50.4%) had attended Fanshawe College for less than one year. This number is reflective of the number of first year students who attend college which is higher than the enrollments for Year 2 and 3. As anticipated 18.2% of students reported they had attended college for 2 years and 12.8% for 3 years. There was18.6 % of students reporting they had attended college for 4 or more years. This number reflects students who are enrolled in a post-graduate program after graduating or students enrolled in continuing education course(s).

Student responses were received from all the academic areas and the higher response rates were received from faculties that have higher student enrollments like the Faculty of Business & Information. Overall all the areas were fairly well represented as the data illustrates below.

1. Faculty of Arts, Media & Design-13.2%

2. Faculty of Business & Information- 30.4%

3. Faculty of Health Sciences, Nursing & Human Service- 26.9%

4. Faculty of Technology- 10.4%

5. Continuing Education-19.1%

In the Faculty of Building Trades and Technology, 84.9% of the students were male and 15.1% were female. In the Faculty of Health Science, Nursing & Human Services there was a similar finding and 75.9% were female and 24.1% were male and in Continuing Education 69.9% were female and 30.7% male. There was no statistical difference in gender in the Faculty Business & Technology or Faculty of Media, Art & Design. In the Continuing Education department 47.9% of the students were over the age of 40 and in Business and Information 35.6% of the students were over the age of 40.

To determine if there was a different use pattern for social networking sites students were asked a question about their race/ethnicity. Of the students responding 80.8% of the students indicated they were White, 5.3 percent were Hispanic or Latino, 9.1% were Asian American or Pacific Islander and 4 .3 % were Native Canadian and 11% did not respond to the question or answered other.

Overall students were very well equipped with the latest technology with 74.1% reporting they own a laptop, 66.1% owned a personal desktop computer, 74.1% owned a cell phone, 42.3% owned an iPod, 79.1% owned a digital camera, 34.5% owned an electronic game and 24.9% owned a wireless hub. There were no statistical differences found in technology ownership in age, gender or academic area.

Students were asked if they had personal emails (in addition to their college supplied mail accounts) and 98% indicated that they had a personal email account and 72% of students indicated they logged into their accounts on a daily basis. In the 24-29 age group 82.4% logged into their accounts daily, followed by 74.6% of users under the age of 19 who logged in daily. Students in the over 40 group were least likely to log into accounts on a daily basis with only 12% reporting they logged in daily. Students in the over 40 group were most likely to log into their email accounts on a weekly basis with 56% reporting they logged in weekly.

On campus 14.5% of students connect to the Internet using college broadband and 13.8% connect using the college operated wireless service. Off campus students are well connected to the Internet with 30.9% connecting via a commercial wireless service, 22.1% use commercial high-speed and 7% connect using a mobile connection device like Rogers Rocket stick. It appears there is still a demand for dial-up service with 10.6% of students reporting this is their main method of accessing the Internet. This is mostly likely due to students who reside in rural areas where high speed or wireless connections are not available.

#### 5.2 Facebook Usage

Overall 78.2% of the students reported having a Facebook account and females represent 63.2% of users and males account for 36.8%. Students under the age of 19 represented the largest group of Facebook users with 94% of this group having an account. Students between the ages of 20-24 represented the second largest group of users with 91% of group having an account. Students between the ages of 25 and 29 represented the third largest group of users with 85% having an account. Within the 35-39 group 70% have Facebook accounts and 59% in the over 40 group have a Facebook account.

Within the academic areas 91.7% of the students in the Faculty of Arts, Media and Design reported having a Facebook account, 82.6% in the Faculty of Technology, 75.4% in Faculty of Business & Information, 80% within the Faculty of Health Sciences, Nursing and Human Services and 69.9% in Continuing Education.

While Facebook is a popular social networking site, 29% of students indicated they were members of more than one site. The most popular site was MySpace.com with 15% of students indicating they were members followed by Friendster with 10% of students having a membership on this site. Of the students who were members of another social networking site 33.9% of Asian Americans belonged to Friendster and 19.4% of Hispanic or Latino belonged to MySpace.com.

Overall 63.5% of students log into their Facebook account on a daily basis followed by 15.6% of students who log in on a weekly basis. Of note the log in frequency is lower than I anticipated however I speculate it may be due to the large percentage of students over the age of 40 who responded to the survey. The students least likely to log into their accounts on a daily basis are students over 40 with 21.6% logging in daily. Students under the age of 24 had the highest log in frequency with 88.6% logging in daily.

To determine the usage of Facebook students were asked on average how many hours per day they spent on Facebook, 48.8% indicated they spent less than 1 hour online, followed by 13.2% who are online for 2 hours, 3.4% are online for 3 hours and 2 % are online for 4 or more hours per day. And 17.9% are online for more than 6 hours per day. A large number of students 14.7% % indicated they had no response when asked how many hours per day they logged into Facebook.

When asked about their activities on Facebook 63.2% indicated they used Facebook to keep in touch with close friends and family. And 57.3% indicated they used Facebook as a way to stay in touch with family and friends on an infrequent basis. In addition students indicated they also used Facebook for following activities;

Communicating about course related topics with classmates- 23.2%

Posting photos and videos – 45.8%

Planning events- 32.2%

Study groups- 2.7%

Communicating with students about course related topics – 64.3%

Communicating with professors about course related topics- 1.8%

Students were asked how many friends they had on Facebook and there was considerable variation with some students reporting they had more 350 friends and other students reporting they had less than 20 friends. For more information on the number of Facebook friends see: Table 1 Facebook Friends.

## Table 1

F	ace	eboo	k	Friend	S

Friends	Percent	
1-50	16.6%	
51-100	10%	
101-150	9.4%	
151-200	9.4%	
201-250	5.5%	
251-300	5.1%	
301-350	4.6%	
350 +	13.8%	

Within the age groups 37.1% of students between the ages of 20 and 24 reported having 350 or more friends on Facebook and 54.7% of students who are over the age of 40 reported having between 1- 50 friends. Overall the average Fanshawe College student has 105 Facebook friends.

When asked how many close friends they had on Facebook, 9.4% indicated they had no close friends on Facebook, 13.8% indicated they had 1-5, followed by 13.3% who indicated they had 6-10 close friends, 8.3% had 11-15 close friends, 11.6% had 15-20 close friends. Female students reported having the largest number of close friends on Facebook with 49.2% with more than 20 close friends on Facebook. Males reported having the least amount of close friends on Facebook with 58% reporting they have less than 5 close friends on Facebook.

A popular activity on Facebook is to belong to a group and 57% of students reported that they belonged to one of more Facebook groups. Students between the ages of 30-39 belonged to the most groups on Facebook with 68% reporting they belonged to 6 -10 Facebook groups. When asked if any of the groups they belonged to were study groups, 24.3% indicated they did belong to a study group. The students most likely to belong to a study group were between the ages of 20-24 with 41.4% reporting they belonged to belonged to a study group.

When asked if they were concerned about privacy issues with Facebook 52.1% indicated they were concerned about privacy. A large percentage of females in the over 40 age group (80%) indicated they had concerns about privacy.

Students were asked if they limited access to their online profiles and 68.2% of students indicated that they did limit access to their profiles. Female students are more likely to limit access to their online profiles with 72.3% reporting they limit access. Students who are between the ages of 25-29 are most likely to limit access with 81.3% reporting they restricted access to their profiles and 80.3% of students between the ages of 20-24 restrict access. Students over the age of 40 are least likely to limit their Facebook access with 50.1% reporting they limit access. Students in the Faculty of Business and Information are most likely to limit access to their profiles. Students in Continuing Education are least likely to limit access to their profiles with 41% reporting they limit access.

Students were asked about the types of information they shared on their Facebook profiles and they reporting sharing the following information. See Table 2- Information Shared in Profiles

### Table 2

## Information Shared on Facebook

Information	Percent	
Last Name	69.7%	
E-mail address	50.6 %	
Phone number	12.5%	
Address	3.8%	
Date of birth	52.4%	
Photos and videos	60%	
Class schedules	5.3%	
Relationship status	48.3%	
Home town	45.1%	

Statistical findings within these results include 52.4% of students provide their date of birth. Female students in the Faculty of Health Sciences, Nursing and Human Sciences are most likely to provide their date of birth (80.8%) and male students in the Faculty of Building Technology are least likely to provide their date of birth (28.8%). Students who are between the ages of 20 -24 are most likely to provide their date of birth (48.5%). Students who are least likely to share their date of birth are between the ages of 35 and 39 with only 2.3% of this group sharing this information.

Another statistical finding is that 48.4% of students indicate their relationship status on Facebook and within this group 50.1% females post their status and 54.5% of males post their status. Students who range in age from 30-39 are least likely to indicate

their relationships with only 29% in indicating their relationship status. Students in the Faculty of Art, Media & Design are most likely to post their relationship status (61.9%) and the students least likely to post their status are students in Continuing Education (12.1%).

### 5.3 FanshaweOnline Usage

Students reported that 89.6% of their courses use the LMS which is commonly known as FanshaweOnline (FOL). To determine the types of learning technologies used in their FanshaweOnline courses students were asked a question about the technologies used by their professors. The responses were very mixed and the most popular technology used in FOL was PowerPoint with 59.9% of professors using this in their FOL courses. Students also reported that 4.8% of their professors use social networking sites like Facebook and LinkedIn in their courses, in addition 4.4% reported using Wikis and 3.8% reported using Podcasts in their courses.

When asked about their log in frequency to FanshaweOnline, 72.4% of the students indicated they logged in daily, 7% logged in hourly and 18.1% logged in on a weekly basis. The students from the Faculty of Business and Information log into to FOL most frequently with 70% of students reporting that they log in on a daily basis. This is followed by students in the Faculty of Health Sciences with 65% logging on a daily basis. The students least likely to log into FOL on a daily basis are CE students with 38% logging in daily. This is an expected result since most CE students are usually on campus once per week. As excepted 75.4% of this groups logs in on a weekly basis.

Students were asked how they use FanshaweOnline in their courses; see Table 3-FanshaweOnline usage.

#### Table 3

FanshaweOnline Usage

Activity	Percent
Check Grades	87.7%
Submit Assignments	78.5%
Review Lecture Notes	71.1%
Communicate with Professors	79.6%
Participate in discussion groups	42.4%

Students were asked how many hours they typically spend online during the week doing Fanshawe related course work see. Students under the age of 19 spend the most time online doing Fanshawe related course work with 33% online for more than 15 hours. This was closely followed by students in the 20-24 age groups with 30.1% online for 10-15 hours. Students who spent the least amount of time online doing course-work were between the ages of 35 and 40 with 40.7% spending less than 1 hour per week online.

When asked which method of communication they would prefer to receive important information from the college (ex. "snow day"), student reactions were generally mixed- 52.1% selected FOL's email system, 41.7% Fanshawe College website, 32.4% the portal message board, 35.3 % indicated the local media (i.e. radio, television) and 20.8% selected electronic communication (i.e. text messaging, MSN, Facebook).

## 5.4 Qualitative Data

Students were asked three opened questions about their use of social networking sites. The first question asked students if they were concerned about privacy issues with Facebook and if they answered 'yes' they were asked to specify their concerns. The

second question was for students who indicated they didn't use social networking sites and they were asked their reasons for not using them. The third question asked students if there was anything else they would like to tell us about Facebook. In response to the open ended questions there were 526 comments and some were very long and included several paragraphs. The number of comments I received was very surprising to me since I didn't except to have so many students respond to my survey let alone take the time to write a comment (which is usually not the norm of our students). I interpreted this to mean that students were interested in my research topic (which is a good thing).

The qualitative data was analyzed using quasi statistics to count the number of times a word or phrase appeared in the text and I used content analysis to identify themes that emerged from the text. In addition I also cross-referenced the comments with the respondent's age and gender. I than combined the data from my analysis and created logical categories.

The quasi-analysis of the content reveled there were four common words, seven common phrases that consistently appear in the text which were the following;

- 1. Employer (N=78)
- 2. Professor (N=72)
- 3. FanshaweOnline or FOL (N=103)

4. Creepy (N=67)

- 5. Privacy concerns or issues (N=98)
- 6. Facebook owns your content (N=18)
- 7. People accessing my account (N=15)

8. Stalk or spy on another person (N=67)

9. Facebook is scary (N=20)

10. Personal life separate from school (N=101)

11. Groups created by students (N=61)

The content analysis in combination with the common words, symbols and phrases was used to create the following four categories.

### **Category 1- Privacy Management**

In analyzing the content students indicated they were concerned about keeping their personal information private from other Facebook users, Internet users in general, third party advertisers and Facebook (the company). A student wrote "I am concerned about people accessing my account and information without my permission". Another student wrote "One morning I logged into Facebook and there was a photo of me at the party I had attended the night before. I wasn't very happy to see my picture posted all over the Internet for everyone to see". The majority of comments about unauthorized viewing of Facebook content came from students under the age of 29 with a total of 86 comments.

### **Category 2- Cyber harassment**

Students felt that Facebook was a breeding ground for stalkers, because it provides an opportunity for users to create drama, romance and re-kindle old friends, at the same time opening the door for stalkers. For the purposes of this research cyberharassment can be defined as "a crime in which the attacker harasses a victim using electronic communications. A cyber-stalker relies upon the anonymity of the Internet to allow them to stalk their victim without being detected" (Security.com, 2007). Cyberharassment can take many forms including posting derogatory messages on a users Facebook account, circulating false rumors about someone via social networking sites, posting unflattering pictures of another user and sending threatening emails to another user via a social networking site. These acts can potentially inflict a great amount of emotional and psychological pain for another individual, with very little consequences for the person who has committed the act of harassment.

A Fanshawe College student wrote "I don't want other people using my account to use personal information, to know my whereabouts, relationships, know who I hang out with." And more troubling for me was the admission from 3 students who admitted that they had used Facebook to stalk or spy on another person. I was very troubled by the following admission from a Fanshawe College student.

I will often stalk someone online without the person knowing; I will read their wall postings, view their photos and check their status. When I go to a party I may meet them or see them, which is the worst because I've seen them on Facebook. I know everything about them, who they date, where they live, but I have to pretend that I know nothing about them.

In total there were 52 comments about cyberharassment and 48 of the comments were from females students who were over the age of 40.

### **Category 4 - Reputation Management**

Reputation management refers to how an individual tries to influence the perception of their image to other people or groups of people. Within this category I identified two sub-categories which are future employers and faculty members. Starting with future employer's students expressed a great of concern that potential employers

could view their profiles and it could affect their chance of future employment. A concerned student wrote "potential employers now think they have the right to search through our profiles and judge us by what we do during our personal time rather than on our qualifications". Certainly this is a very relevant concern since many employers (including myself) have taken to Facebook and other social networking sites to check-up on potential new hires. Students also expressed a concern that their friends may also influence an employer decision to hire them. A student wrote "when looking for a job, I hope friends do not write anything an employer may look at negatively".

The second sub-category that students expressed a concern about was faculty members viewing their Facebook sites without their consent or knowledge. A student wrote "I don't want my teachers knowing what I did on the weekend and receiving poor grades on my assignments, because of something they think I may have done". Another student said "I want to keep my personal life separate from my school, many of my Professors are on Facebook and I choose not to add them, for me it is way to creepy".

In total there was a 102 comments relating to reputation management and 93 of these comments were from students under the age of 29 and there was no significant differences in gender.

## Category 4- Facebook and the Learning Management System (FanshaweOnline)

Students had several comments about the value of using Facebook as an academic tool. And the role that FanshaweOnline plays in their academic lives. Within this group I identified two sub-groups which were educational value of Facebook and the integration of social networking services into the learning management system. Starting with the educational value of Facebook a student wrote "School work does not belong on

Facebook! I don't understand the value of placing it there". Another student with a stronger viewpoint wrote "If the college requires us to use Facebook for school work, I will quit!! I don't see any educational value in using Facebook. It's a major time-waster". The general consensus among students was that Facebook should not be used for academic related purposes and that FanshaweOnline should be used for learning. There were 102 comments in this sub-group and 2 students were in favor of using Facebook as an academic tool.

While students didn't feel that Facebook should be used for academic purposes they did identify in the second sub-group some social networking features that could be integrated into their online learning environments. Of particular interest was the following statement by a student "I would like to see some Facebook like features in FOL, like student generated groups and content." Another student wrote "I hate that I can't see the content of my FOL course once it has ended". Several students echoed these viewpoints and also indicated they would like the ability to create student generated groups for the purposes of sharing information with peers. Other students indicated that they wanted to have online profiles (similar to Facebook) available in FanshaweOnline. The use of online profiles as one student indicated "would help new students feel more comfortable with their classmates and teachers". With regards to online profiles another student wrote the following "won't it be nice to see the profiles of our classmates and professors that aren't all cluttered up Facebook junk". I interpreted 'Facebook junk' to mean wall postings, photos and status updates.

## 6. DISCUSSION OF KEY FINDINGS

As a recap the purpose of this study was to better understand the usage of social networking sites, specifically Facebook at Fanshawe College. The guiding question for this study was: What are the perceptions of students regarding the need for social networking services at Fanshawe College? The research reveals there are four main perceptions that students have regarding the need for social networking services at Fanshawe College. These perceptions were derived by analyzing the results of the quantitative online survey and the analysis of the responses to the open ended questions that were in the survey.

### 6.1 Separation of Academic and Social Lives

The traditional activities the student uses within the LMS like checking grades, submitting assignments, reviewing lecture notes and checking email are well utilized as the data illustrates. The use of FanshaweOnline (FOL) for these activities has become part of our student's daily routine along with managing resources that are important for their formal learning. As the data revealed 72.4% of students log in to FanshaweOnline on a daily basis which clearly indicates the system has become critical part of their academic lives. In fact it has become so critical our students become very upset when the system is unavailable and our Helpdesk is flooded by calls, emails and students demanding that we resolve the issue.

Turning to the student's social lives, Facebook has become very popular on campus with 78.2% of student reporting they have a Facebook account with 53.5% of the student population logging in on a daily basis. As the data illustrates students use Facebook primarily for social or personal activities like communicating with family and friends, posting photos, playing games and planning social events. A very small percentage of students reported they use Facebook for academic related activities and only 1.8% reported they use Facebook to communicate with their professors about course related activities. This finding supports the research done by Greenhow in 2008 that a small percentage of students use Facebook to communicate academic related information. The survey data illustrates that use Facebook for communication with classmates occurs less frequently than communication with family and friends.

As the data shows FanshaweOnline and Facebook are two online systems that play an important role in the lives of our students. There appears to be a conscious decision on the part of the students to separate their social spaces on the Web from their educational spaces and it is clear from the student's perspective that we should not mix the two together. As one student said "I think that as much as I love Facebook if it was used for school purposes it would just be another more easily accessible distraction from my school work".

Another indicator that points to keeping the academic and social lives separate is students feel it is not necessary for them to add their professors as 'friends' (in the Facebook terms) in order to share and communicate information. There may be some students who are comfortable allowing professors to view the personal details of their private profiles. However as the qualitative data illustrates this is very rare. Students generally do not feel comfortable sharing personal information about themselves with their professors nor are they comfortable when a faculty member self-disclosures personal information. As one student indicated "it is creepy when I know everything my professor did the night before (I don't want to know)". The notion that students don't want to add their professors as 'friends' contradicts the previous research done by J.P Mazer et.al (2007) who concluded the more information a professor self-disclosed, the more positive comments they would receive from people who viewed their Facebook pages. The separation of the students social space on the Web can also extend to the students professional lives because they do not want employers (or potential employers) viewing their profiles.

From an academic perspective I can understand why some faculty members would be interested in using Facebook as an instructional tool. The use of social media is a part of the everyday lives of our students and reaching students using a medium they are comfortable with could foster learning. In fact computer technologies like the learning management system have already made it necessary for faculty to modify or transfer their traditional modes of teaching to an online environment. The use of Facebook for educational purposes is seen by some faculty as the natural progression from the learning management system.

While there are many similarities between Facebook and the learning management system, simply put, Facebook was not designed for instructional purposes. And the very nature of Facebook encourages interactions that blur the boundaries between the conventional student-teacher relationships such as sharing personal information and the sharing of photos and videos. I feel this interaction can lead to discomfort for students and faculty members. In addition like any unfamiliar technology it can create anxiety for students who are concerned about their grades and classroom and lab assignments. This in turn can lead to a failure to track and record the learning that has taken place in Facebook. If the learning is not tracked and recorded properly it can have serious consequences on the student's academic record. Students know that their formal learning must be tracked and recorded in an organized manner that reflects their academic achievements and they know this cannot occur in Facebook because there is no mechanism for tracking learning.

Based on the results of my research and this discussion I would conclude that students expect that social networking services will be kept separate from their online learning environments, specifically FanshaweOnline. As one student said "Facebook is a great social network that gets me connected and organized, much like a personal assistant. However I am not on board with mixing my social life with school or work".

# 6.2 Protect Student Data and Information

While Facebook remains very popular on campus with 78.2% of our students reporting they have a Facebook account privacy concerns have also been expressed by students. More than half of our students (52.1%) report that they have privacy concerns with Facebook and 80% of the females over the age of 40 indicate they have concerns. A great deal has been written in the media about the privacy issues with Facebook and the majority of these issues I have covered in chapter 2 of this paper.

The concerns expressed by our student as the qualitative data illustrates are very similar to the concerns expressed in general by Facebook users. Students are concerned about the unauthorized viewing of their personal profile information by other Facebook users who are not their friends (in Facebook terms), professors and future employers. These concerns are directly related to the privacy settings which users must set in order to protect their personal information.

As the qualitative data revealed students have expressed concerns that other individuals are viewing their personal information without their consent. A user can prevent this from happening by limiting access to their profiles by setting them as private so that only family and friends can view their information. However, the privacy settings are very complicated and difficult to set which can lead to confusion among users which in turn leads to personal information being exposed. This information is usually exposed without the knowledge of the users.

A common perception of the college is that younger students are careless with their Facebook settings and often reveal information that has the potential to damage their character, the reputation of the college and in extreme cases cause psychological or physical harm to themselves or others. We also believe that students are normally savvy when it comes to new technologies however they aren't necessarily aware of the issues that come with them. As the data reveals this viewpoint is not founded on actual fact, since students who are under the age of 29 are more likely to limit access to their profiles than students who are over the age of 40. This finding supports the recent study conducted by Pew Research that found young adults aged 18 to 29 are more likely to monitor their online reputations by changing settings and deleting items on social networks (Pew, 2010).

This is a significant finding because it changes the way we view how our younger students are using Facebook and their need for privacy. This is not to say that our older students are not concerned about privacy issues, I believe they are even more concerned, however they may not be as technically savvy as the younger generation, preventing them from taking full advantage of the privacy settings. In addition they also may not be aware their personal information is being viewed by others and take don't measure to protect their information.

While it is true our students are concerned with privacy issues some of their online behaviors do not reflect this concern. Specifically they post potentially risky information in their online profiles with 52.4% of students providing their full date of birth, 48.4% of students indicate their relationship status and 12.5% post personal phone numbers. The majority of students who post this type of information are under the age of 29. Students could be posting this information for the purposes of dating or for socialization purposes. Certainly Facebook is a very social place and it is part of their everyday lives, so it would natural for them to post this type of information in their online profiles. I know from talking with students they feel their personal information is only being viewed by their circle of friends and why would someone else want to view this information.

I think it is safe to say another perception our students have for social networking services is that the college needs to keep their personal information private and respect that Facebook is their part of our student's social landscape.

Moving on to the second part of the students concerns, there are students who have expressed a concern over cyberharassment or stalking. While stalking behaviors have existed for many years the electronic form of this behavior is relevantly new and victims are not usually aware they are at risk. The majority of students who expressed concern were female students over the age of 40. As I reflected upon this I realized Facebook's privacy settings, combined with the sheer volume of personal information people include on their profiles have made it easy for people to stalk other people. I

62

would speculate that in most cases the intentions of the "Facebook" stalker is harmless and more inclined towards curiosity and loneliness. However, some Facebook stalkers may have dangerous intentions and given that a number of students mentioned this, it is something that the college needs to pay attention to.

From the perspective of our students any social networking service that is provided or endorsed by the college needs to take measures to protect the safety of the student. Just as campus security protects students in the physical environment we need to protect out students in their virtual environments. And in fact we take many security measures to protect students from harassment in their online learning environments like FanshaweOnline. I feel we need to take similar measures if we implement or endorse social networking services. If the necessary measures are not taken there can be serious consequences for our students, employees and the College.

## 6.3 Augment the Learning Management System

The use of social media to engage students in their learning (just not there online learning) is an emerging field and the data illustrates our students are using social networking sites like Facebook as part of their daily social routines. And students are also using FanshaweOnline as part of their daily academic routines. The data illustrates that both systems are well used by our students and there is a clear delineation between the systems from the student's perspective. Facebook is used for social aspects and FanshaweOnline is for academic purposes. While Facebook and other social networking systems were not designed for instructional purposes there are some overlaps in the services they offer with the learning management system. Students identified some social networking services that could be embedded into their online learning environments, specifically online user profiles, student generated groups and access to course content after a course has ended.

Facebook users can create personal profiles that include interests, photos and depending on their privacy settings anyone who can view a user's profile can also view the user's wall and status updates. Taking this social networking approach to learning and applying it to FanshaweOnline, a user would create a central profile where they list their learning objectives, contacts, resources and tools. The system could use an Open Application Programming (API) interface, which means that any third party application could write to it. In essence this allows any application to become a learning tool. For example I could use Google Docs, a popular word processing software, to write my learning objectives rather than using the standard text editor that is provided in FanshaweOnline. User profiles can be created for everyone who interacts with the students including professors, academic advisors etc. The profiles would be available on FanshaweOnline and users would have the option of making their profiles publicly available to their classmates, professors and other members of the Fanshawe College community.

The technology to create a basic student profile is currently available in FOL and it is used in a limited capacity by our students. The basic profile includes contact information, interests and hobbies and the ability to upload an image that can be used as a profile picture. The profile is available by default in the courses the student is enrolled in and it can be viewed by clicking the students name on the class list. The creation of a more robust user profile that is connected to the students learning in my viewpoint would increase the student's connection to their peers; build community and increase student

64

success and retention. This viewpoint is supported by the recent study by Minocha (2009) that found social software has many benefits like increasing student engagement and success.

Moving onto the suggestions for student generated groups and access to course content I would like to provide a brief background on what I refer to as the 'unintended consequences' of the learning management system which will provide a rational on why students are currently unable to create groups and view expired course content. FanshaweOnline like most learning management systems that have been implemented in post-secondary institutions has been integrated with the student information system (SIS). This integration enables the automatic creation of courses inside the LMS that are associated with each section in the class scheduled in a given term or semester. Every student who has officially registered into a section is automatically added to the class list in FanshaweOnline.

Prior to 2008 the enrollment process was completed manually at Fanshawe College and students on occasion would have to endure long wait times up to 2 weeks to access their online courses. The SIS integration proved to be an enormous time saver for faculty and students and it was a driving force behind the increased adoption rate of FanshaweOnline across the college. While I do feel the SIS integration is a positive and necessary feature of an online learning environment. I also believe the marriage between FanshaweOnline and the SIS has resulted in some unintended consequences for our students by placing restrictions on their ability to stay connected to each other, their content and learning resources. For example, FanshaweOnline does create interaction and community building around content within courses however the learning communities that develop are usually limited to those who are officially enrolled in the course and these communities exist only for the duration of a particular term or semester. At end of each term the courses are disabled to make room for the next terms courses. And the student loses access to the course and the learning community that was developed within the course. Imagine for a moment if we were to apply this concept to our students Facebook accounts. Their content, wall postings and photos would be removed after a designated period of time (usually four months) and they would not be given an opportunity to retrieve their information. I know there would be an outrage from our students!

Another unintended consequence is students are not able to create ad-hoc groups for purpose of sharing information with their peers. The functionality used to create groups has been a standard feature in learning management systems (including FanshaweOnline) for many years; however, the process for creating these groups is restricted because the traditional LMS is course-centric and uses a classification system that provides the framework for organizing users in the system. The classification system (also known as course taxonomy) is very much under the control of the organization and we do not always put students together in the best ways or allocate the appropriate resources.

In its simplest form the classification system consists of courses that have one or more instructors and a set of students. Within a course an instructor is granted access to course tools and assigned role-specific permissions on how to use the tools. For example, within FanshaweOnline the professor has the ability to create groups at the course level and access is limited to students who are officially enrolled into the course. When a student is enrolled into a specific group they are only able to view the discussion postings within their own group and they are normally not granted access to other groups. In addition if a student or group of students wanted to create an ad-hoc group within the course for the purpose of sharing information they are not able to do so. I believe there will always be a need to have course taxonomy for academic related purposes; however an LMS can facilitate increased learning by allowing for the creation of ad-hoc group as well.

As a starting point I feel we can provide students with more flexibility by changing the architecture of FanshaweOnline. This change would enable students to setup their own groups, blogs and other tools and invite others to join them in ad-hoc way. For example a group of students within the same program form a study group to help each other with assignments, upcoming tests and related activities. A student uses the group creation tool within FOL to form a group and invites other students to join by sending an email invitation. To join the group the receiving students click on the link that was provided in the email. A virtual workspace is provided for students to collaborate and share information with each other which is not dependent upon course enrollment and geographical location. Students also have the option of recording the session for future. This model would provide students with greater access and more flexibility to review content.

## 6.4 Facebook as a Communications Platform

Facebook provides an easy method for large groups to communicate with each other, via short postings, media sharing, wall comments and Facebook chat. Students are

very comfortable using Facebook and for many students it a part of their daily lives which has been clearly illustrated by the data. Furthermore it provides a way for students to create their online identities and express their opinions and beliefs in a public forum. Members are able to build relationships with each other, the Facebook community by joining groups and the college community. The college has a Facebook page to attract applicants and to communicate with prospective students, current students and alumni. The page is very well utilized and has become a popular channel for the college to communicate information to the college community. Students also use the page to communicate with the college regarding issues, concerns and questions. The feature the students appreciate the most is the information posted is in real-time and is available 24/7.

It is apparent our students are starting to use Facebook to communicate with the college and they do except us to communicate back to them using this medium. Putting my administrative hat on it is clear that this is an emerging area and we currently have no formal polices in place on how Facebook should be used and the expected norms. Being proactive I feel it would be prudent for the college to invest some time in developing user guidelines for appropriate use that reflect the adult user population.

Students also use Facebook to communicate with family and friends, as the data indicates students have widespread networks of friends that they stay connected to. The research identified a generation gap between younger students who are very open about their Facebook friends and older students over the age of 29 who are very selective in the process of process of acquiring friends and interacting on Facebook. On average a student has 105 Facebook friends however our younger students have upwards to 250 friends.

The higher number of friends I feel is related to the student's popularity and their age, since we know from the Kleck et.al (2007) study that student's popularity is directly connected to their online profiles.

Our students do expect that they can stay connected to their family and friends 24/7 via their Facebook accounts while on campus. This is evident from the research and also by walking around campus on any day you will see hundreds of students connected to their Facebook accounts via their laptops, cell phones, iPads, and in the computer labs. From the eyes of our students it is a given that an Internet connection will be available for both academic and social purposes.

# 6.5 Limitations of Research

A criticism of case study research is that it cannot be generalized to larger populations. However in this case the primary goal of the research is not to generalize but to better understand the students at Fanshawe College. In this instance the intention is not to generalize the study results to a larger universe.

Given my current role at the college, I may be considered an 'insider' because of my access to students. While it is true that I do work physically in the same location as the students it is highly unlikely that I would be considered an 'insider' by our students because I am not part of the student culture. Not unlike an ethnographer I do need to have an in-depth understanding of how our students are using Facebook in their natural environments. The following statement by Wolcott (1988) captures the essence of what it means to understand a culture, in this case, how students think.

To the group being studied, the ethnographer tries harder to know more about the cultural system he or she is studying than any individual who is a natural

participant in it, at once advantaged by the outsider's broad and analytical perspective but, by reason of that detachment, unlikely ever totally to comprehend the insider's point of view. (p. 189)

Another limitation of this study is that technology rapidly changes and what is popular today may not be popular tomorrow. This could be problematic if for some reason our students decided to switch to another social networking site. However, indications are that Facebook remains very popular with our students.

In addition there are disadvantages to using an online survey because a number of technical problems can occur when the respondent is filling out the survey. The respondent may not be able to complete the survey due to a browser freeze or a server crash. To minimize this risk the web-based survey was designed to be viewed screen-by-screen, rather than placing the whole survey online. Each screen has 10 questions and the respondent has the option of saving their answer at the end of each question or at the end of each page. A paper version of the survey was also available in the Fanshawe Student Union (FSU) office if the student was unable to complete the survey online.

Another common problem encountered with web-based surveys is that the researcher is not available to answer questions or trouble-shoot problems. To minimize this risk detailed instructions were provided at the beginning of the survey and pop-up windows were used when needed to provide additional help to the respondent.

# **6.6 Conclusions**

I find it hard to believe that social networking sites like Facebook are names that require no introduction or definition today, when less than fifteen years ago they were mere thoughts in the minds of the entrepreneurs who invented them. The same goes for Learning Management Systems. Today, students come to college with ideas and thoughts about how to interact with the world that would have seemed impossible a few years ago.

While the popularity of social networking sites is undeniable the educational value remains largely in question. This study demonstrates that social networking sites like Facebook are part of the everyday lives of our students and they have clear opinions on how social networking services should be provided at the college. In summary the perceptions of our students for social networking services at Fanshawe College are the following:

- Separation of Academic and Social Lives. Students have indicated that social networking services that are either implemented or endorsed by the College should be kept separate from their online learning environments, specifically FanshaweOnline.
- 2. **Protect Student Data and Information.** If social networking services are endorsed by the college, students feel their personal information and data needs to be protected by the College from un-authorized viewing by other Internet users, students (who are not their friends) and college employees. In addition students have indicated their online social environments needs to be free from cyberharassment and stalking.
- 3. Augment the Learning Management System. Students feel that FanshaweOnline is to be used for teaching and learning and not for social purposes. To supplement the learning process students would like to be able to create online profiles, ad-hoc groups for the purposes of sharing information and view expired course content.
- 4. **Facebook as a Communications Platform.** Students have a need to stay connected to their family and friends 24/7 via their Facebook accounts while on campus.

Future research would benefit from investigating the perceptions that faculty have for social networking services in their teaching and learning environments. Research into the communication and social aspects of Facebook would be beneficial to further our understanding of how students are using social networking services.

#### **BIBOLGRAPHY**

- Agee, A., & Yang, A. (2009). Top-ten IT issues for 2009. *EDUCAUSE Review*, 44(4). Retrieved June 20, 2010
- Adler, P., & Kwon, S. (2002). Social capital: Prospects for a new concept. Academy of Management Review, 1(27), 17-40. Retrieved June 17, 2010

Barnett-Ellis, P., & Charnigo, L. (2007). Information Technology and Libraries. Information Technology and Libraries, 26(1).

Barnes, R. K. (2006). A privacy paradox: Social networking in the United States. First Monday, 11(9), 1-14. Retrieved April 17, 2010, from http://firstmonday.org/issues/issue11\_9/barnes/index.html

Bellantoni, C. (2009, January 5). Obama's Twitter site hacked. *The Washington Times*. Retrieved May 10, 2010, from

http://www.washingtontimes.com/news/2009/jan/05/obamas-twitter-site- hacked

Borreson-Caruso, J., & Salaway G (2008) The ECAR Study of Undergraduates Students and Technology. 16. Retrieved January 18, 2010, from http://net.educause.edu/ir/library/pdf/ers0808/rs/ers0808w.pdf

Boyd, D. (2009, February 26). Social media is here to stay. Now what. Retrieved June 10, 2010, from http://www.danah.org/papers/talks/MSRTechFest2009.html

Boyd, D., & Donath, J. (2004). Public displays of connection. *BT Technology Journal*, *22*(4), 22-71. Retrieved from Proquest.

Boyd, D., & Ellison, N. (2007). Social network sites: Definition, history, and scholarship
[Electronic version]. Computer-Mediated Communication, 13(1), 210-230.
doi:10.1111/j.1083-6101.2007.00393.x

Brown, L. (2008, March 6). Student Faces Facebook Consequences. Toronto Star.

Retrieved June 10, 2010, from http://www.thestar.com/News/GTA/article/309855

- Cassidy, J. (2006, May 15). Me media. *The New Yorker*. Retrieved April 17, 2010, from http://www.newyorker.com/archive/2006/05/15/060515fa\_fact\_cassidy
- CBC News. (2008, January 4). Facebook phenomenon latest legal obstacle, say critics. Retrieved January 2, 2010,

fromhttp://www.cbc.ca/canada/toronto/story/2008/01/04/rengel

CBC News. (2009, July 16). Facebook breaches Canadian privacy law: commissioner. Retrieved January 16, 2010, from

http://www.cbc.ca/technology/story/2009/07/16/facebook-privacycommissioner.html

- Chafkin, M. (2007, June 17). How to kill a great idea. *INC*. Retrieved March 7, 2010, from http://www.inc.com/magazine/20070601/features-how-to-kill-a-greatidea.html
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education* (5th ed.). London, England: Routledge Falmer.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94(Supp). Retrieved March 13, 2010, from ScoAbs (S95-S120).
- Cyberstalking. (2007). In *SearchSecurity.com*. Retrieved June 2, 2010, from http://searchsecurity.techtarget.com/

Craig, E. M. (2007). Changing paradigms: Managed learning environments and Web 2.0. Campus-Wide Information Systems, 24(3), 152-161. doi:

10.1108/10650740710762185

- Dillman, D. (2007). *Mail and Internet Surveys* (2nd ed., p. 372). New Jersey: John Wiley & Sons Inc.
- Downes, S. (2005, October 17). E-learning 2.0. *E-Learning Magazine*. Retrieved January 18, 2010, from

http://www.elearnmag.org/subpage.cfm?section=articles&article=29-1

Ellison, N. (2007, December 17). Use on campus: A social capital perspective on social network sites. Retrieved January 18, 2010, from

http://www.educause.edu/ECAR/FacebookUseonCampusASocialCapi/162478

Facebook. (2010). In Webopedia. Retrieved February 18, 2010, from

http://webopedia.com

Facebook Statistics (2009, January 10). Retrieved February 18, 2010, from http://www.facebook.com/press/info.php?statistics

Geist, M. (2006, August 14). Patent battle over teaching tools. *BBC Technology News*. Retrieved April 19, 2010

Gonsalves, M. (2010, May 27). Young adults least trusting of social networks. *Information Week*. Retrieved July 4, 2010, from <http://www.informationweek.com/news/security/privacy/showArticle.jhtml?artic leID=2 25200450>.

- Gross, R., Acquisti, A. (2205) Privacy and information revelation in online social networks. In: Proceedings of the ACM CCS Workshop on Privacy in the Electronic Society. 13. Retrieved February 18, 2010
- Gross, R., Acquisti, A., & Heinz, H. J. (2005, November 7). Information revelation and privacy in online social net-works. *In Proceedings of the 2005 ACM Workshop on Privacy in the ElectronicSociety*. Retrieved February 18, 2010
- Guynn, J. (2010, February 9). Google aims to rival Facebook with new social feature called Buzz. *LA Times*. Retrieved February 18, 2010
- Hampton, K., & Wellman, B. (2005). Neighboring in netville: How the internet supports cyber. *City & Community*, 2(4), 277-311.
- Hayden, A. M. (2010, January 27). Privacy Commissioner launches new Facebook probe. Retrieved February 28, 2010, from http://www.priv.gc.ca/media/nrc/2010/nr-c 100127 e.cfm
- Hawkins, B., & Rudy, A. (2008). EDUCAUSE core data service: Fiscal year 2007 summary report. *EDUCAUSE*, 42-43. Retrieved May 12, 2010, from http://net.educause.edu/apps/coredata/reports/2007/
- Heussner, K. M. (2010, February 18). Google Buzz draws class-action suit from harvard student. ABC News. Retrieved April 19, 2010, from http://abcnews.go.com/Technology/google-buzz-draws-class-action-suit-harvardstudent/story?id=9875095
- Hewitt, A., & Forte, A. (2006, November 27). Crossing boundaries: Identity management and student/faculty relationships on Facebook. Retrieved February 28, 2010, from http://www.andreaforte.net/HewittForteCSCWPoster2006.pdf

Hopper, S. (2000, December 21). College courses taught with tailored software [Electronic version]. *New York Times*.

Inc. (2010, April 28). Privacy concerns continue to dog Facebook. Retrieved June 17, 2010, from http://www.inc.com/news/articles/2010/04/senators-move-to-regulatefacebook.html

Inside Facebook (2009, February 2). Fastest growing demographic on Facebook: women over 55. Retrieved June 18, 2010, from http://www.insidefacebook.com/2009/02/02/fastest-growing-demographic-onfacebook-women-over-55

Kleck, C. A., Reese, A., Ziegerer-Behnken, C., & Sundar, C. (2007, May 23). The company you keep and the image you project: Putting your best face forward in online social networks [Electronic version]. *New York Times*.

Kolowich, S. (2010, May 4). Professors and social media. *Inside Higher Ed*. Retrieved May 13, 2010, from

http://www.insidehighered.com/news/2010/05/04/socialmedia

- Kritikou, Y., Demestichas, P., Adamopoulou, E., Theologou, M., & Paradia, M. (2008, May 4). User profile modeling in the context of web-based learning management. *Journal of Network and Computer Applications*, 603-627.
- Lampe, N., Ellison, N., & Steinfield, C. (2009, September 22). Social network sites and society. *Trends and Future Possibilities*.
- Led by Facebook, Twitter, global time spent on social media sites up 82% year over year (2010, January 22). Retrieved July 5, 2010, from

http://blog.nielsen.com/nielsenwire/global/led-by-facebook-twitter-global-timespent-on-social-media-sites-up-82-year-over-year/

Lin, B. (2004, September 28). UBC computer scientist wins \$100,000 award for popular course software. Retrieved March 19, 2010, from http://www.estrategy.ubc.ca/news/update0409/040929-goldberg.html

Matheson, S. (1988). Why triangulate. Educational Researcher, 17(2), 13-17.

- Minocha, S. (2009). A study on the effective use of social software by further and higher education in the UK to support student learning and engagement. Bristol, UK: JISC.
- Merriman, S. B. (2009). *Qualitative research: a guide to design and implementation* (3rd ed., pp. 30-37). San Francisco: Jossey-Bass.
- McCarthy, C. (2009, January 7). Zuckerberg: new year, 150 million Facebook users. *CNET News*. Retrieved July 13, 2010, from http://news.cnet.com/8301-13577\_3-10134266-36.html
- McGiboney, M. (2009, March 18). Twitters tweet smell of success. *Nielsen Online*. Retrieved July 13, 2010, from http://news.cnet.com/8301-13577\_3-10134266-36.html
- McLean, S., & Wilson, N. (1994). *Questionnaire Design: A Practical Introduction*. Abbey: University of Ulster Press.

Morrison, K. R. (1988). *Management Theories for Educational Change* (2nd ed.). London, England: Paul Chapman Publishing.

Nielsens Media (2009). *Myspace music growing, Twitters big move*. (2009, July 17). Retrieved June 18, 2010, from <http://blog.nielsen.com/nielsenwire/online\_mobile/social-media-stats-myspacemusic-growing-twitters-big-move/>.

Nowak, P. (2010, February 17). Privacy watchdog rebukes Google for Buzz. CBC Online News. Retrieved March 19, 2010, from

http://www.cbc.ca/technology/story/2010/02/17/google-buzz-privacycommissioner.html

- Office of the Canadian Privacy Commissioner. (2010, January 27). *Privacy Commissioner launches new Facebook probe*. Retrieved February 16, 2010, from http://www.priv.gc.ca/media/nr-c/2010/nr-c\_100127\_e.cfm
- Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement*. London, England: Pinter Publishers.
- Pew Research Centre Data Bank. (2010, June 15). 44% Young adults more image cautious online. Retrieved July 12, 2010, from

http://pewresearch.org/databank/dailynumber/?NumberID=1020

- Paxton, P. (1999). Is social capital declining in the United States? A multiple indicator [Electronic version]. *American Journal of Sociology*, *105*(1), 88-127.
- Schaffhauser, D. (2010, May 5). McMaster U to move to Desire2Learn after Blackboard outages. *Campus Technology*. Retrieved June 1, 2010, from <a href="http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx</a>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx</a>">http://campustechnology.com/articles/2010/05/03/mcmaster-u-to-move-to-desire2learn-after-blackboard-outages.aspx</a>">http://campuster/dosdes
- Social Networking Site. (2010). In Webopedia. Retrieved February 18, 2010, from http://webopedia.com

Stutzman, F. (1982). An evaluation of identity-sharing behavior in social network communities. *International Digital Media and Arts Journal*, 3(1), 10-18.
Retrieved June 18, 2010, from Proquest.

Sudmann, S., & Bradbury, N. M. (1982). A practical guide to questionnaire design. San Francisco CA: Jossey-Bass Inc.

Thrift, N. (2005, May 21). Knowing capitalism [Electronic version]. SAGE Publications.

- UBC Press. (2004, September 29). UBC computer scientist Wins \$100,000 award for popular course software. Retrieved April 17, 2010
- Verma, G. K., & Mallick, K. (1999). Researching Education: Perspectives and Techniques. London, England: Falmer Press.
- Twitter (2010) In *Reference.com*. Retrieved January 19, 2010, from http://www.reference.com/
- Visser, J. (2008, May 21). Ottawa law students file complaint over Facebook. *CTV News*. Retrieved January 19, 2010
- Warren, J., & Vauhini, V. (2006, September 7). New Facebook features have students in an uproar. *The Wall Street Journal*. Retrieved January 8, 2010
- Wolcott, H. (1988). *Ethnographic research in education*. Complimentary methods ed. 20-185. Washington, DC: R.M. Jaeger.

## **Appendix A- Letter of Information**



Do Social Networking Sites (i.e. Facebook) have a place in Online Learning Environments?

> LETTER OF INFORMATION

My name is Linda Young and I am a Graduate Student at the Faculty of Education at the University of Western Ontario. I am also an employee of Fanshawe College, where I am employed as the Manager of Learning System Services. I am currently conducting research into your experiences using Social Networking Tools (i.e. Facebook) and would like to invite you to participate in this study. The purpose of this study is to research whether Social Networking tools should be integrated into your online learning environments.

If you agree to participate in this study you will be asked to complete an online survey. The survey will take approximately 20 minutes and asks questions about how you use social networking sites, frequency of your visits and how you share information online.

The information collected will be used for research purposes only, and neither your name nor information which could identify you will be used in any publication or presentation of the study results. All information collected for the study will be kept confidential. At no time will your name or contact information appear or be linked to any information you may provide, and Fanshawe College will not have access at any time to any personal information that could be used to identify you.

There are no known risks to participating in this study.

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on you academic status. Completion and submission of the survey indicates your consent to participate in this study.

Please print this letter if you would like to keep it for future reference.

Linda Young Masters in Education Candidate University of Western Ontario

Please click here to start the Survey

## **Appendix B- Survey Instrument**

1. How old are you? (Go to comment box)

2. What is your gender?

- a) Male
- b) Female
- c) No Response

## 3. Where is your primary residence during the academic year?

- a) On-campus
- b) Off-campus
- c) No response
- 4. During the academic year, how do you most frequently access the Internet?
  - a) Commercial dial-up (i.e. Rogers, AOL)
  - b) College operated broadband service
  - c) College operated wireless service (i.e. Fanshawe Wireless)
  - d) Commercial wireless service
  - e) Other (please specify)
  - f) Don't Know
  - g) No Response
- 5. Which of the following electronic devices do you own?
  - a) Personal digital assistant (PDA)
  - b) Smart Phone (i.e. Blackberry, Apple iPhone)
  - c) Electronic music device (i.e. iPod)
  - d) Digital camera
  - e) Electronic game
  - f) Wireless hub
  - g) Computer
  - h) Laptop
  - i) Other, specify
  - j) Don't Know
  - k) No response
- 6. Do you have a Facebook account?
  - a) Yes
  - b) No
  - c) Don't Know
  - d) No Response

7. Do you belong to other Social Networking sites besides Facebook?

- a) Yes
- b) No
- c) Don't Know

8. Which of the following Social Networking sites do you use? Please check all that apply.

- a) MySpace
- b) Bebo
- c) Friendster
- d) hi5
- e) Orkut
- f) PerfSpot
- g) Yahoo 360
- h) Zorpia
- i) Nelog
- j) Twitter
- k) Other, specify
- l) Don't Know
- m) No Response

# 9. How long have you used Facebook?

- a) One term or less
- b) Two terms
- c) One Year
- d) Two Years
- e) Three Years
- f) More than three years
- g) Don't Know

## 10. How often do you typically login to Facebook?

- a) Daily
- b) Weekly
- c) Monthly
- d) Every 2 months
- e) Every 6 months'
- f) Yearly
- g) Don't Know
- h) No Response
- 11. On average how many hours per day are you on Facebook?
  - a) None
  - b) less than 1 hour
  - c) 2 hours
  - d) 3 hours
  - e) 4 hours
  - f) 5 hours
  - g) 6 hours
  - h) More than 6 hours

i) Don't Know

j) No Response

- 12. How do you use Facebook? Check all that apply.
  - a) Keep in touch with close friends & family
  - b) Keep in touch with friends & family that you see infrequently
  - c) Meet new people
  - d) Communicate with classmates about course-related topics
  - e) Communicate with professors about course-related topics
  - f) Participate in study groups
  - g) Post photos, music, videos etc.
  - h) Plan or invite people to events
  - i) Professional networking to find a job
  - j) Use the applications, specify which ones you use
  - k) Playing games
  - 1) Other, specify
  - m) Don't Know
  - n) No Response

#### 13. How many friends do you have on Facebook?

- a) None
- b) 1-50
- c) 51-100
- d) 101-150
- e) 151-200
- f) 201-250
- g) 251-300
- h) 301-350
- i) More than 350
- j) Don't Know

14. How many close friends do you have on Facebook?

- a) None
- b) 1-5
- c) 6-10
- d) 11-15
- e) 15-20
- f) More than 20
- g) Don't Know

15. How many groups do you belong to on Facebook?

- a) None
- b) 1-5
- c) 6-10
- d) 11-20
- e) 21-30

- f) More than 3
- g) Don't Know
- h) No Response

16. How many of these groups are study groups?

- a) 1-5
- b) 6-10
- c) 11-20
- d) 21-30
- e) More than 3
- f) Don't Know
- g) No Response

17. What type of information do you share in your Facebook user profile about yourself? Please check all that apply.

- a) First name
- b) Last name
- c) E-mail address
- d) Phone number
- e) Address
- f) Date of Birth
- g) Photos and videos
- h) Class information/schedule
- i) Relationship Status
- j) Home town
- k) Other, specify
- l) Don't Know

18. How closely would you agree with the following statement...Most user profiles are over-exaggerated to make the person look better.

- a) Strongly Disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly Agree
- f) Don't Know
- g) No Response

19. Are you concerned about privacy issues on Facebook?

- a) Yes (go to comment box)
- b) No
- c) Don't know
- d) No Response
- 20. Do you limit or restrict access to your Facebook profile?
  - a) Yes

b) No

c) Don't Know

- d) No Response
- 21. Why don't you use Social Networking sites?
  - a) Do not like them
  - b) Unsure of how to use them
  - c) Not interested
  - d) Too much work involved setting up a profile
  - e) Slow internet connection
  - f) Access is blocked by my institution or Internet service provider
  - g) Privacy concerns (misuse of my personal information)
  - h) Security concerns (exposure to files with viruses, etc.)
  - i) Other, specify
  - j) Don't Know
  - k) No Response

22. On average how many hours per week do you spend online (connected to the Internet) doing Fanshawe related course work?

- a) None
- b) less than one hour
- c) 1-5 hours
- d) 5-10 hours
- e) 10-15 hours
- f) More than 15 hours
- g) Don't Know
- h) No Response

23. How closely would you agree with the following statement...Professors should use Social Networking sites like Facebook to communicate course related information to their students.

- a) Strongly Disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly Agree
- f) Don't Know
- g) No Response

24. Do your courses use FanshaweOnLine (FOL)?

- a) Yes
- b) No
- c) Don't Know
- d) No Response

25. How do you use FanshaweOnline? Check all that apply.

- a) Communicate with professors about course-related topics
- b) Communicate with classmates about course-related topics
- c) Participate in online discussion groups
- d) Check Grades
- e) Submit Assignments
- f) Access College-wide information
- g) Review lecture notes
- h) Other, specify
- i) Don't Know
- j) No Response

26. Are you using any of the following this term in your FanshaweOnline course(s)? Check all that apply.

- a) Power Point presentations
- b) Graphics software (i.e. Photoshop)
- c) Audio creation software (i.e. Garage)
- d) Video creation software (i.e. iMovie)
- e) Podcasts
- f) Blogs
- g) Social Networking Sites (i.e. Facebook, MySpace.com)
- h) Wiki's
- i) Other, specify
- j) Don't Know
- k) No Response

27. How often do you typically login to your FanshaweOnLine email account?

- a) Hourly
- b) Daily
- c) Weekly
- d) Monthly
- e) Every 2 months
- f) Every 6 months
- g) Yearly
- h) Don't Know
- i) No Response

# 28. Do you have a personal email account?

- a) Yes
- b) No
- c) Don't Know
- d) No Response

29. How often do you typically login to your personal email account?

- a) Hourly
- b) Daily
- c) Weekly

- d) Monthly
- e) Every 2 months
- f) Every 6 months
- g) Yearly
- h) Don't Know
- i) No Response

30. When Fanshawe College has important information to provide to you (i.e. "snow day"), which method of communication would you most often use to find this information?

- a) Fanshawe's website
- b) FOL's portal message board
- c) FOL's email system
- d) Other email (i.e. personal)
- e) Local media (i.e. radio, television)
- f) Electronic communication with others (i.e. text messaging,
- g) MSN, Facebook)
- h) None
- i) Other, specify
- j) Don't Know

31. How many years have you attended Fanshawe College?

- a) Less than 6 months
- b) 1 Year
- c) 2 Years
- d) 3 Years
- e) 4 Years
- f) 5 Years
- g) More than 5 Years
- h) Don't Know
- i) No Response

32. Which academic program are you currently enrolled in? (Go to comment box)

- 33. What is your race/ethnicity?
  - a) White
  - b) Black or African American
  - c) Hispanic or Latino
  - d) Asian American or Pacific Islander
  - e) Native Canadian
  - f) Other (please specify)\_\_\_\_\_
  - g) Don't Know
  - h) No Response

34. Is there anything else you would like to tell us about Facebook? (Go to comment box).

#### **Appendix C - Twitter**

As with other Social Networking Sites, there are growing privacy concerns with Twitter. A major concern is Twitters practice to collect personal information from its users and then share this information with third parties advertisers. The information shared usually includes the users tweet history which then may be quoted in their advertisements. For example I purchase a new Lexus automobile and I 'tweet' to all my friends about how much I love my new car. My tweet history then could be shared with Lexus and my tweet could end up as an advertisement.

Twitter has also been plagued with malfunctions, outages and software bugs. Bellantoni (2009), a reporter for the Washington Times wrote "On January 5, 2009, 33 high-profile Twitter accounts were compromised after a Twitter administrator's password was guessed by a dictionary attack. Several bogus tweets including sexually explicit and drug related message sent from the accounts" (p. 1). In response to the security breach Twitter quickly developed a verified account service that would allow well-known people to identify the ownership of the accounts. The verified account home pages would display a badge indicating the true owners of the accounts.

In May 2010, a technical glitch was found in Twitter that permitted users to add anyone they wanted as a follower of their tweet without the person prior approval. Individuals who took advantage of the glitch began adding famous people as their followers. For a while the celebrities did become their audience and received tweets from the people who had falsely added them as followers. It is unknown how long this technical glitch affected users and when Twitter learned of the glitch they quickly resolved the issue.

## **Appendix D - Emerging Social Networks**

Since 2005, there are a number of new social networking sites emerging that have not yet reached mass adoption. Loopt was started in 2005 in Mountain View, California as a location based Social Networking service that connects users together by visually displaying their location and availability on a local map via the user's cell phone or mobile device. As a Loopt member you can connect with friends in your area, view restaurant reviews and find events that may be of interest. Recognizing the value of these connections, a number of businesses have tapped into Loopt's location data service to offer targeted promotions.

Loopt is a permission based service and users decide who to share information with by adding them to their network. If a user wishes to turn off the location sharing information they can do so on a friend by friend basis or for all friends at once. Presently there are no reliable statistics available on usage of Loopt.

Another location-based service is FourSquare which was created by Dennis Crowley and Naveen Selvaduria in 2009. FourSquare users earn rewards known as badges for frequently checking into participating businesses. The user visit is tracked via their cell phone or mobile device and logged into a database. When the user reaches a pre-determined level (i.e. 5 visits) they will receive a reward, which could be a free meal, coffee or merchandise etc. According to FourSquare (2010) there are more than 1.4 million official Foursquare locations, and the service has awarded more than 1 million badges" (p. 1). At the time of this writing there were 12 FourSquare locations in London, Ontario, which were all located in close proximity to the down-town core. The newest addition to the world of Social Networking is DailyBooth a website that combines blogging and digital photography. Members of the site are encouraged to take a daily photo with an option of adding a caption or a few lines about the photo. The site is similar in nature to Twitter; you can follow other members and allow them to follow you. Users of the site will receive updates and photos in real time of what their friends are doing. The user base is geared towards teens. At the time of this writing there have been no reported privacy issues with DailyBooth. However, I do feel it is only a matter of time before a serious privacy issue occurs. There is nothing preventing a user from uploading illegal photos like pornographic images, crime scene photos or other images that may be distasteful to users.

## **Appendix E - Glossary of Terms**

**Cyberharassment**: Is a crime in which the attacker harasses a victim using electronic communications. A cyber-stalker relies upon the anonymity of the Internet to allow them to stalk their victim without being detected" (Security.com, 2007)

**Facebook:** The name of a social networking site (SNS) that connects people with friends and others who work, study and live around them. People use Facebook to keep in touch with friends, post photos, share links and exchange other information. Facebook users can see only the profiles of confirmed friends and the people in their networks.

(Webopedia, 2010)

**Facebook Wall:** On the Facebook, social networking site a wall is a section in your profile where others can write messages to you or leave you gifts, which are icon-like small images. The wall is a public writing space so others who view your profile can see what has been written on your wall. Once you have received a wall message, you can respond directly back to the friend who left it using the "wall-to-wall" mode. There are variations of the wall available to Facebook users by installing Facebook applications, like "Super Wall". These types of applications will offer features and options not found in the standard Facebook wall. (Webopedia, 2010)

**Learning Management System (LMS:** A learning management system (LMS) also known as a course management system (CMS) is a web-based system that enables an instructor to create and deliver content, monitors student participation, records data from students and assesses student performance (Educause, 2008).

**Social Media:** A term used to describe a variety of Web-based platforms, applications and technologies that enable people to socially interact with one another online. Some

examples of social media sites and applications include Facebook, YouTube, Twitter, Digg, blogs and other sites that have content based on user participation and usergenerated content. (Webopedia, 2010).

**Social Networking Site (SNS):** A web-based service that allows 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. The nature and nomenclature of these connections may vary from site to site (Boyd & Ellison 2007, p. 13)

**Twitter**: Is a free social networking service that allows its users to send and read other users' updates (i.e. tweets) which are text-based posts of up to 140 characters in length. (Reference.com 2010).