CREATING A COMMUNITY OF LEARNERS USING NING.COM

A STUDY INTO THE PEDAGOGICAL-EDUCATIONAL VALUE OF
SOCIAL NETWORKING IN A LARGE MULTI-SECTION INTRODUCTORY
MEDIA ARTS AND SCIENCE COURSE AT IUPUI

Eric Chilton Esterline

Accepted by the Faculty of Indiana University, in partial
fulfillment of the requirements for the degree of Master of Science.

_____
Richard L. Edwards, Ph. D., Chair

_____
Franklin D. Giles, Ph. D.

Master's Thesis
Committee

_____
Mark Alexander
M.A. Educational Technology

DEDICATION

Dedicated to my loving wife, Maria, and our two children for allowing me the time

and giving me the energy to complete this journey.

ACKNOWLEDGEMENTS

It is a pleasure to thank those that made this thesis possible. To complete a project of this magnitude requires a network of support, and I am indebted to many people. I am most especially grateful to Dr. Richard Edwards, whose encouragement, guidance and support from the beginning to the final level enabled me to develop a better understanding and vision of this thesis. I would like to thank my committee members, Mark Alexander and Dr. Franklin Giles for their valuable time and guidance. I would also like to thank Mexhid Ferati for his help and expertise. Finally, I would like to thank the IUPUI School of Informatics.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. Introduction

> The educational role of the worldwide web has been cast in a new light by the emergence of so-called 'web 2.0' technologies and, in particular, 'social software' where users are connected to and collaborate with each other in a variety of group interactions (Shirky 2003).

Current research indicates that social networking has the potential to bring individuals together into new relationships and friendships, into new communicative flows, and even perhaps into communities of their choosing. Can social networking tools, integrated into the requirements and learning objectives of a course, offer some benefits towards meeting the needs of students? The average Indiana University Purdue University-Indianapolis student experience can vary greatly when compared to campus life at a traditional, four-year residency college or university because the student body is comprised of an assorted group of learners: commuting students, older adult students, online students, on-campus students, and first-generation college students. These students come from a range of diverse backgrounds. Using N100: Introduction to Digital Media Principles as my primary case study, I assess the implementation and development of social media tools, specifically the use of a closed Ning network, in this diverse college classroom environment. This paper evaluates the use of social networking tools to enhance student learning and improve student engagement as well as comparing social networking software to other types of learning managements systems such as Indiana University's Oncourse CL.

II. Literature Review

The methodology and research of this thesis engages with the latest developments in social networking in the 21st century. A relatively young phenomenon, only a few years old, social networking has already had a tremendous impact on the ways we communicate and share information in online environments. In order to fully appreciate the impact of social networking, I will review LMSs, Web 2.0, Social Networks, Latest Innovations of Social Networking in Education, The Social Media Classroom, Social Networking Tools and the Role of Community in Education.

A. Learning Management Systems

A Learning Management System (LMS) is a software application for the administration, documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content (Wikipedia 2010). Some of the options that are available for learning institutions are: ANGEL, Blackboard, Moodle, Sakai, JoomlaLMS, Pearson Learning Studio, Scholar 360, KEWL and SharePointLMS. There are many others out there that are being used and developed. The current industry leader in LMS is Blackboard, which is used by over 3,700 learning institutions in more than 60 countries. Its main focus is to add online elements to courses traditionally delivered face-to-face and to develop completely online courses with few or no face-to-face meetings. Though Blackboard software is closed source, the company provides an open architecture, called Building Blocks, which can be used to extend the functionality of Blackboard products (Wikipedia 2010). One of the other industry leaders is Moodle, which is a free and open-source

e-learning software platform. It has a significant user base with 45,721 registered and verified sites, containing 32 million users in 3 million courses, but Moodle is not restricted to just educational institutions as many business and health care facilities use it as a professional development platform (Wikipedia 2010). Indiana University and its other campuses around the state of Indiana, including IUPUI, use Oncourse Collaboration and Learning for its learning management system. Oncourse CL evolved from the Sakai Project, which was funded by a grant from the Melon Foundation. The early versions of the Sakai Project software were based on existing tools created by the founding institutions (Indiana University, Massachusetts Institute of Technology, Stanford University, University of Michigan, Polytechnic University of Valencia, uPortal and the Open Knowledge Initiative), with the largest piece coming from the University of Michigan. Now these founding members as well as other members are able to share costs of development and maintenance while making use of software capabilities developed by other institutions.

Each institution retains local control over how they implement their own software, while continuing to evolve to meet the needs of students, faculty, and staff. Specifically for Indiana University and its other campuses Oncourse CL offers a straightforward way to create a web site for every course offered at the university. Using Oncourse CL, students and faculty can access course syllabi and grades; communicate via course mail, chat rooms, and discussion forums; and access online quizzes and surveys. Oncourse CL also provides individuals 1GB of file storage space (Services 2009). Currently the social networking tools that exist within Oncourse CL are the message, chat, forum discussions, wiki and groups features. A beta version of a blog feature is also available to instructors.

3

Oncourse CL is course specific, so each course is essentially a home page for the student user. An Oncourse CL student user cannot customize a profile page or upload pictures and video in a manner with which they are familiar with, as in a social network. Not to mention a student user cannot join groups, friend other students or add third party widgets and plug-ins. Oncourse CL is not a social network and it does not completely leverage the latest Web 2.0 technologies that are widely available.

B. Web 2.0

About a decade after the public availability of the World Wide Web, the first browsers, and the dot.com era, over the last five to six years, the web has been undergoing a transformation that has led to social networking becoming a household term known as Web 2.0. But first, if you have Web 2.0, it must have been preceded by Web 1.0 which began with the release of the WWW to the public in 1991, and is the general term that has been created to describe the Web before the bursting of the Dot-com bubble in 2001, which is seen by many as a turning point for the Internet. So then, what is Web 2.0? So many definitions have been bandied about over time. Encyclopedia Britannica has this definition: *next envisioned iteration of the World Wide Web, in which the 2.0 appellation is used in analogy with common computer software naming conventions to indicate a new, improved version* (Encyclopædia, Britannica et al. 2010). Some refer to Web 2.0 as the social web or the smart web. Web 1.0 was the era when people could think that Netscape (a software company) was the contender for the computer industry crown; Web 2.0 is the era when people are recognizing that leadership in the computer industry has passed from traditional software

companies to a new kind of internet service company (Bray 2005). Tim O'Reilly, along with Dale Daugherty, pioneered the term Web 2.0 during a conference brainstorming session. O'Reilly devised seven core competencies for a Web 2.0 business that may better help explain: (1) Services, not packaged software, with cost-effective scalability, (2) Control over unique, hard-to-recreate data sources that get richer as more people use them, (3) Trusting users as co-developers, (4) Harnessing collective intelligence, (5) Leveraging the long tail through customer self-service, (6) Software above the level of a single device, (7) Lightweight user interfaces, development models, AND business models (O'Reilly 2005). No matter how you define Web 2.0 it can be agreed upon that there is something qualitatively different about today's web. Terry Flew, in his 3rd Edition of *New Media* described what he believed to characterize the differences between Web 1.0 and Web 2.0 as such: "…move from personal websites to blogs and blog site aggregation, from publishing to participation, from web content as the outcome of large up-front investment to an ongoing and interactive process, and from content management systems to links based on tagging (folksonomy)" (Flew 2003). The Web 2.0 architecture of participation is what created the foundation for social networking.

C. Social Networks

In February, 2004, Harvard student Mark Zuckerberg launched a web site called 'thefacebook' as a service to help Harvard students network with each other (Yadav 2006). The name was taken from sheets of paper profiling students and staff that were distributed to new students (Phillips 2007). Harvard has a reputation as close-knit community, and the networking someone does is just as

important as the learning. Soon, a thousand people had signed up, and in just over a month nearly the entire Harvard student body had a profile. The service soon spread to other Ivy League schools, Stanford and Yale, and was eventually offered to schools across the United States. The name was shortened to 'Facebook' in 2005 and a phenomenon began.

Facebook was not the first social networking site. That distinguished honor arguably belongs to Friendster or Tribes. Arguments can also be made by two entities even before Friendster and Tribes. The Well, launched by Stuart Brand in 1985 and The Globe, a community launched in 1994 by Cornell students Stephan Paternot and Todd Krizelman. Friendster boasted the largest amount of users, but soon they would flock elsewhere. MySpace became the next in line to grab the attention of those seeking to network and join online communities. MySpace became the most popular social networking site in the United States in June 2006. After the 2002 launch of Friendster, several employees with Friendster accounts saw its potential and decided to mimic the more popular features of the social networking website, in August 2003. Within 10 days, the first version of MySpace was ready for launch (Wikipedia 2010). MySpace was the brainchild of Brad Greenspan, Chris DeWolfe, Josh Berman, Tom Anderson (MySpace's recognizable executive), and a team of programmers. Most Friendster users migrated to MySpace because MySpace supported fully customizable pages and media, which led to millions of teenagers and young adults learning basic HTML.

Now, Facebook allows anyone over the age of 13 with a valid e-mail address to become a Facebook user. Users can add friends, send messages, and update their personal profiles to notify friends about themselves. Users can join networks organized by cities, workplaces, schools or colleges. Facebook now reports 350 million monthly active users, with 175 million of those users logging into Facebook every day. The social network more than doubled in users from January of 2009 to January of 2010 worldwide (Parfeni 2010).

So, by the time Facebook came along, the idea of connecting people through the use of profiles, status updates, and forums was well established. Social networking's genesis was not with Facebook, but Facebook to date has recorded the most users and most profit. Facebook was defined, in its early years, by its exclusivity, which most would argue is a primary reason why it garnered so much initial attention. People without a university email address were not permitted to join. Membership was restricted to students, staff and alumni. And with this early success, Facebook has continued to grow. In September of 2009, Facebook claimed to have turned cash flow positive for the first time and is now worth an estimated eleven billion dollars (Bertoni 2010). Successful social networking has its roots in education and has led to experimentation and creative innovations within education.

D. Latest Innovations of Social Networking in Education

Universities, colleges, schools as well as professors, instructors and teachers

around the world are experimenting with social networking in the classroom. But

at the same time many educational institutions discourage or even go to the

extent of blocking or banning social networking sites. One of the early adopters of

traditional social networking in the classroom is Purdue University, where they

have created Hotseat.

> …the application allows students to comment on the class
> and then enables other participants--including professors,
> students, and teaching assistants--to view those
> messages. Students either use their Twitter, Facebook or
> MySpace accounts to post the messages or log in to the
> Hotseat Web site to send text messages. The application
> resides on the Web; there is no software for professors or
> students to install (McCrea 2009).

Feedback has been mostly positive with the teaching staff using Hotseat in

multiple ways including encouraging collaboration and course feedback. A few

select courses were chosen for the pilot program for Hotseat, which included

close to 600 students. Although the use of Hotseat was not mandatory, 73

percent of those 600 students were participating (Dybwad 2009). Many

institutions are attempting to use Facebook as a vehicle to connect with students

for a particular course or department with multiple benefits and drawbacks.

> Benefits include responding to environments, which are
> already incorporated into students' daily routines, and the
> potential of social networking services to support digital
> literacy and social engagement. Drawbacks include the
> lack of the independent commercial services'
> accountability to the education provider, and the difficult
> territory of student–teacher "friending" – adding people to
> your friends list within the service (Ellison 2007).

Another innovative example of successful use of social networking in education

resides in the United Kingdom. Two Universities, New Castle and Durham,

participated in a cross-site team software development project. What they found was that success in the project was often determined by the students' communication strategies and use of available technology. Students often abandoned the technologies provided and adopted Web 2.0 technologies such as Facebook instead. Based on those findings they developed a tool called CommonGround, designed to run on the Facebook platform, which harnesses the students' engagement with the service. CommonGround couples the communication and social awareness features inherent in the Facebook platform with basic meeting, schedule and project planning facilities (Charlton 2009). For professors, social networking can be a frightful thought or a practical tool. As in Sara Lipka's article for the *Chronicle of Higher Education* states: "For all its pitfalls, Facebook can prompt meaningful exchanges. Some professors look up students who e-mail them with questions or are scheduled to come to office hours. What the professors learn, they say, makes them better advisers. Comments that students have posted -- concern over a bad class presentation, for example -- can provoke a thoughtful conversation. One professor knew to go easy on a student when he saw his status change from "in a relationship" to "single." Modern times have dealt the teacher-student relationship many challenges: sexual harassment, political correctness. "It's harder to have an earnest, and still professional, but personalized relationship with students," says Ian Bogost, an assistant professor at the Georgia Institute of Technology. A modern tool may complicate that relationship further. Or, with its quirky brand of humanity, help recover it." (Lipka 2007)

The University of California, Berkley, was the first to make full course lectures freely available through YouTube. It runs its own channel as a YouTube partner and provides over 300 hours of programming (University, of et al. 2006). There are countless examples of students using social networking services within peer networks to coordinate activities, events and gatherings. Furthermore, many institutions are turning to social networking to provide information about the university and act as a meeting place for current, prospective and past students. Other platforms are beginning to take hold in the classroom such as Twitter, Second Life, Voice Thread and many more.

And while there are a lot of great experiments and innovations occurring, we are still lacking studies and assessments of the actual practices of social networking in higher education. While Bogost indicates there should be educational benefits and social benefits, the evidence tends to be more anecdotal rather than analytical.

E. The Social Media Classroom

One of the early innovators of social networking in the classroom is Howard Rheingold. As one of the pioneers of virtual communities Rheingold truly embraces the pedagogical potential of social networking tools in higher education. Through a grant from the MacArthur Foundation's Digital Media and Learning competition he has developed, along with others, a free and open source social media classroom.

> The Social Media Classroom includes a…web service that provides teachers and learners with an integrated set of social media (tools) that each course can use for its own

purposes—integrated forum, blog, comment, wiki, chat, social bookmarking, RSS, microblogging, widgets, and video commenting are the first set of tools. The Classroom also includes curricular material: syllabi, lesson plans, resource repositories, screencasts and videos (Rheingold 2008).

Although this particular social media classroom is well suited for students who study cyber culture, its resources and student-centric pedagogy can be adapted into any classroom. Its hands-on use of online communication media can augment texts, lectures, and classroom discussion without the need of face-to-face participation. The social media classroom can also be used for classes that are taught completely online, but that is not its sole purpose. The Social Media Classroom is yet to become fully functional, and there is no actual need to adopt this software because each of the features of the software is freely available online through various platforms. Although the idea of a one-stop-shop of the Social Media Classroom is enticing, it was not deemed a viable option for the N100 course. Perhaps an even greater contribution may not be the tool that Rheingold is developing but the fact that a social media classroom can build certain skills.

Arguably, one of the more important skills today desired by employers are communications skills and more precisely collaboration skills.

> …the ability to engage with others in collaborative critical inquiry is an increasingly important skill... However, interest in constructivism, constructionism, collaborative inquiry, and student-centric learning is not new. What is new is the intersection of these modes of learning, the affordances of social media, and the laptop-carrying, always-on media practices of 21st century students (Rheingold 2008).

Constructivism and constructionism rely on learning through experiences and actively making tangible objects in the real world. This type of learning and inquiry may not be suitable for all disciplines, but in the media arts and science discipline in which this research resides, it is commonplace and vital. Furthermore, social media can extend this new mode of student learning. The classroom will continue to evolve into a socially mediated space as more and more millennials step into the classroom with experiences in Web 2.0 technologies. So what is the right type of social networking tool for specific disciplines?

F. Social Networking Tools

There are many free social networking tools available for anyone to create their own social network. Sites like; Grouply, OneSite, Me.com, Grou.ps and crowdfactory, to name a few, are all capable platforms to support a social network. Arguably the most successful of the bunch is Ning. Ning is a viable solution for many educators because it is free, scalable, and has excellent privacy settings.

Ning is an online platform for people to create their own social networks, launched in October 2005. Ning was co-founded by Marc Andreessen (best known as co-author of Mosaic, the first widely-used web browser, and founder of Netscape) and Gina Bianchini (Wikipedia 2010).

> Ning means peace in Chinese. When we heard this, we were pretty darn excited. However, it was after we'd already decided it was the exact right perfect name for us. Ning was short, sweet, and wouldn't take away from the main focus of our service: your social networks (Bianchini 2007).

Ning started development in October 2004 and launched its platform publicly in

October 2005 (Wikipedia 2010). The unique feature of Ning is that anyone can

create their own social network for a particular topic or need, catering to specific

membership bases (Wikipedia 2010).

> Ning aims to replicate the features of social-software sites
> such as Craigslist, Wikipedia and Flickr, where people can
> tag their photos and share them with others. Ning,
> however, is appealing heavily to Web developers, with the
> idea that they can help increase the number of
> customizations and available services (LaMonica 2005).

One of the greatest features that make Ning so attractive to educators is that the

Ning network administrators can select from options that govern various levels of

view ability and membership. Additionally, Ning networks are subject to the

Children's Online Privacy Protection Act regulations. Also, when a social network

is created on Ning, it is automatically free and it runs its own ads. If the

administrator so chooses, they can pay to control the advertisements, by paying

a monthly fee. More bandwidth, non-Ning URLs and extra storage are also

available along with the monthly fees.

G. The Role of Community in Education

The human being is a social being. Our society is built on sharing feelings,

happiness and sorrows with friends, relatives and others. This desire of

togetherness and belonging leads to create a community as a whole. Presently

the Internet has contributed a lot in connecting people through various

communities. Students are no different and this desire of community exists in the

classroom. Many factors are attributed to students feeling a disconnect with their

peers and instructors in the classroom, but much of this can be improved through

a sense of community. Thus, social networking has great potential for learning

and inspiring.

> Students are hungering for meaningful connections with
> one another. They want to understand if the stereotypes
> portrayed by much of the mass media are true and they
> want to connect and decide for themselves – thus
> explosive growth of sites like MySpace and YouTube. This
> ability to connect has largely been ignored and blocked by
> many in the educational community who would rather
> maintain the entrenched style of classroom that has been
> around for over a hundred years (Friedman 2005)

Not only is it important for students to learn through community in school, but

also it will be beneficial for them in the professional world down the road.

> The work world will require them to collaborate in order to
> succeed…they will be learning skills that will serve them
> well over time, even as digital economies evolve (Palfrey
> and Gasser 2008).

Ultimately it is not about the technology, it is about bonds that are created and

about a stronger pedagogical learning environment that is supported by real

world context.

III. Methodology

A. IUPUI

As of 2009, Indiana University-Purdue University Indianapolis (IUPUI) reports 28,756 students enrolled. Just over 10,000 of those students are listed as part-time students (under 9 credit hours). IUPUI is made up of a total minority student population of close to 5,000. Just over 16,000 students are classified as 24 years of age or younger while over 12,500 students are 25 years of age or older.

Nearly 700 students are enrolled in the Informatics degree program at IUPUI with 540 at the undergraduate level and 157 at the graduate level. Of the nearly 700 students, over half (365) are enrolled in the Media Arts and Science program, with 340 at the undergraduate level and 25 at the graduate level. Almost 70% of the students enrolled in the Media Arts and Science Program are full-time students, with 35% of those students in the Media Arts and Science Program at 25 years of age or older. Of the 340 undergraduate students in the Media Arts and Science program at IUPUI, 93 are part time students, 71 are a minority race and 113 are 25 years of age or older.

To summarize, the undergraduate student population at IUPUI is comprised of a heterogeneous group of learners: commuting students, older adult students, online students, on-campus students, and first-generation college students. These students come from a range of diverse backgrounds. Therefore, the average IUPUI student experience can vary greatly when compared to campus life at a traditional, four-year residency college or university.

B. N100

The course in which the research was conducted is N100, and it is an introductory course in the Media Arts and Science program under the Indiana University School of Informatics at IUPUI. It is a large lecture course that is held in a lecture hall that seats up to 200 students. The research was conducted in the N100 fall section of 2009 where 90 students were enrolled in the course with 75 of those students participating in the research. Two-thirds of the students are 21 years of age or younger and nearly a third are between the ages of 22 to 34. One student was older than 34 years of age. 72 of the students participated in live lecture once a week for two and a half hours, while 18 of the students were categorized as online students and could access the lectures online and participate in various ways via the different online options available. The N100 course aims to acquaint the students with the history, theory, and practices of digital media. More specifically, the course investigates the basic characteristics of new media, the way the industry and its professions adapt to the constant developments in new media, the legal and ethical issues raised by new media and what the future holds for new media. Furthermore, the course delves into four key characteristics of new media that operate in almost every new media project: interactivity, hypermedia, immersion and narrativity. Finally, N100 explores best practices through a variety of case studies, guest lecturers, projects, assignments and its own course specific social network.

C. N100 Ning Project

Figure 1: Image of the N100 Fall 2009 Social Network

Joining the Ning social forum is a required task within N100. The instructions for joining the Ning group are briefly reviewed the first day of live lecture but more detailed instructions and a link for registration are provided on the course LMS page through Oncourse CL. The first assignment within the network is for the students to complete their initial login, create their profile page and add a picture. The picture does not have to be of the student, but it is suggested so that students are able to put names to faces during live lecture.

Figure 2: Image of the Casual Forum within the N100 Ning

Figure 3: Image of the Course Forum within the N100 Ning

The social network is divided into two types of forums: the course forum and the

casual forum. In the course forum, the students discuss the lectures and the

reading material. In the casual forum, the students connect to classmates in

whatever manner they choose. The course is split into three sections. In each

section of the course, students are required to start at least one new forum

thread on a reading or lecture issue, and respond to another person's forum

thread on a reading or lecture issue. The students do not receive a point value

grade for these forum threads, but rather get a "++" for exemplary work, a "+" for

satisfactory work and a "-" for unsatisfactory or incomplete work. Students can

also fully participate in the casual forum to get to know each other and discover

similar interests and share ideas, but they are only evaluated on the postings in

the course forum.

FEATURES	DESCRIPTION	N100 Use
Description	This is the brief description about the classroom network	Updates and Announcements
Members	See a list of all members, plus thumbnail-sized representations of them, uploaded by both you and your students.	Easily identify others in the course and search their work
Events	Browse a list of upcoming events, tests, quizzes, class trips, and more.	Calendar of events for N100
Forum	The discussion forum allows both instructor and students to dialogue on a specific point.	Split into casual forum and course forum for discussions
Photos	Upload and view digital images pertinent to your class.	Show off work or personal images
Videos	Upload and view digital video. Students can produce videos for course assignments and they can upload those videos to the site.	Used to upload video assignments or to showcase individual work
Audio/Music	Upload and listen to MP3 audio.	Personalize own page
Text Box	Free-text, typically used for breaking news.	For news or help
Activity	Automatically added by Ning, you can monitor who is doing what on the classroom site.	See who is currently on the site
Blog	Most students use this as a journaling page, but within the course it is a section for students to post assigned reflections on the course readings.	Blog assignments were posted here as well as space for students to write on whatever they desired

Table 1: Lists the major features available on Ning

Ning has a myriad of features that are customizable by the administrator and the

individual participant. One of the initial options that an individual user has is to

customize their own page. The user can change the background theme of their

page, upload a profile picture, add applications from the My Apps library, as well

as adding social networking applications like Poll Daddy and Twitter Tracker. The

user can also manage their privacy settings through visibility, moderation and

latest activity. When viewing a member's page you can access their latest

activities, view their latest blog, post to their comment wall, along with all of the

latest photos and videos that they have uploaded. There is also a text box area

which gives the user the opportunity to add content to their own page via text,

html, videos, photos are a third party widget. At the top of the Ning webpage you

can access a navigation bar that has links to many features. First there is a link

back the main home page where students can access all of the directions,

forums, videos and other information that may pertinent to the N100 course.

There is a link to invite others to the social network. Although for N100, the

course was intended for N100 students only, it is open to the public, so anyone

with a Ning account could access the social network. Then there is a link to a

members search area that comes in very handy when searching through the

nearly 100 users that are in the N100 course. Profile pictures are included in this

section as well to help better identify other users. There is a separate photos link

on the top navigation bar where users can see the latest photos that have been

posted with clickable thumbnails. Anyone can search the photos via the keyword

search or you can file through them page by page. There are also options to view

the photos within a slideshow, tag favorites and create albums. The videos area

is nearly identical to the photos area with clickable thumbnails to view the videos,

with the ability to tag any favorites. A user can add up to 30 videos at a time, and

each video may be up to 100MB in size. Supported video formats include: .mov,

.mp4, .mpg, .avi, .wmv, .3gp, and .3g2 file formats. Videos can also be added via

Youtube, Hulu or Vimeo by embedding the code or through hyperlinks. There is

also an option to add video by way of mobile phone or email. The next section is

the group area and it can also be accessed from the top navigation bar. The

group link will take you to a separate page where students can access their

predetermined N100 group. This group section is utilized as a discussion area for

groups to engage in constructive conversation about the weeks' lecture. In each

section of the course, one member of the group must lead the discussion and

publish the major talking points of the group as an entry within the forums section

in Ning. Each group's talking points posting are worth 33 points for the individual

that posted it for that week. The group area is designed as a way for students to

collaborate outside of class time because they may not have time to discuss the

lecture in class or via a live chat. They can post to their group and their group

only, and then receive feedback from the fellow group members in a timely

manner. The group section is especially useful for the online students to

collaborate on their weekly discussions because they are not allotted class time

to do so. The next link within the top navigation toolbar is the blogs area. This

section is where students can post whatever they would like, but every five

weeks throughout the semester the students were assigned to post one blog on

various subject matter. The final link within the top navigation bar is the chat

section. This allows students to engage in real time discussions of their choosing.

Finally, in the top right section of the Ning social network is a section that allows

the user to access their inbox for messages and alerts as well as an option to

send friend requests to fellow classmates, which is nearly identical to other social

networks like Facebook and MySpace.

D. Surveys and Analytics

The students in N100 participated in two surveys. The live lecture students were

given a paper copy of each survey and they filled out the survey by hand. The

online students were sent a link to fill out a survey via Google docs. 75 surveys

were returned each time but it is not clear whether the same 75 students took

both surveys. The initial survey was created at the beginning of the N100 course.

The introductory portion of the survey included checklists regarding three

categories, which were: demographics, social media habits and technology

habits. Then the primary section of the survey contained 50 questions regarding

the N100 Ning social network and each question was placed into a specific

category for two reasons. The first reason was to stay away from students having

to answer, what they may perceive as similar questions one after another. After

the first draft of the survey was complete, each question was staggered from

other similar questions in its category to better space similar questions. Also, the

method of placing each question in a specified category would make

disseminating the information for research purposes easier when it came time to

collect the data. The first category pertained to questions regarding opinions on

social networking preferences as well as initial thoughts on the N100 Ning social

network. The second category contained questions about social networking and

its usefulness in regards to networking, collaborating and connecting with other

students with Ning the primary focus. The third category was filled with questions

about the N100 Ning social network, its usefulness and its value to the student as

an individual. The fourth category included questions about concerns and worries using the N100 Ning social network. Finally, the fifth section contained three subsections of norm questions. The first norm section contained two questions regarding the use of photos on the Ning social network. The second norm section included six questions about the N100 Ning social network's ability to build a community of students within the N100 course and using Ning as a tool. The third norm section contained three questions in regards to receiving updates from individuals that the user had friended.

The first survey was distributed three weeks into the course to give students some time to become familiar with the N100 Ning social network. The first survey began with general demographic checklists such as age range, sex and major. Students were also asked go through a checklist of various social media and new media habits. Then the students were tasked with answering the 50 questions regarding their experiences and opinions regarding the N100 Ning social network as well as social networking in general. The possible answers were placed on a five-point Likert scale from strongly disagree, disagree, neutral, agree and strongly agree.

The second survey was distributed to the N100 students on the eleventh week of the course. Again, live lecture students were handed paper surveys and they filled them out by hand and online students were given a link to fill out a survey via Google docs. 75 surveys were returned again. This time the survey was shorter. The first question was in regards to frequency of use of social networks in general. That was followed by 14 questions that ranged from yes/no answers

to five-point Likert scale answers. These 14 questions were designed from the responses from the previous survey to drill further down into explanations or extend the research. A choice few of the questions were repeated questions from the previous survey to establish whether opinions about the N100 Ning social network were maintained or deviated from the previous survey answers. Finally, the follow up survey concluded with two open-ended questions regarding the student's favorite feature of the N100 Ning social network and why students chose to post personal pictures, videos or other non-related classroom material to the site.

Other methods of research and data collection regarding the N100 Ning social network include tracking the location of users and the habits of use through Google Analytics. Google Analytics allows for tracking where users log in locally, statewide, nationally and internationally. Also, Google Analytics was used to track usage throughout the week and time of day to indicate when the students were accessing the N100 Ning social network.

IV. Findings

A. Analysis and Findings of Ning Project Initial Survey

Student Age

- 34 to 44; 4%
- 22 to 34; 29%
- 21 and Under ; 67%
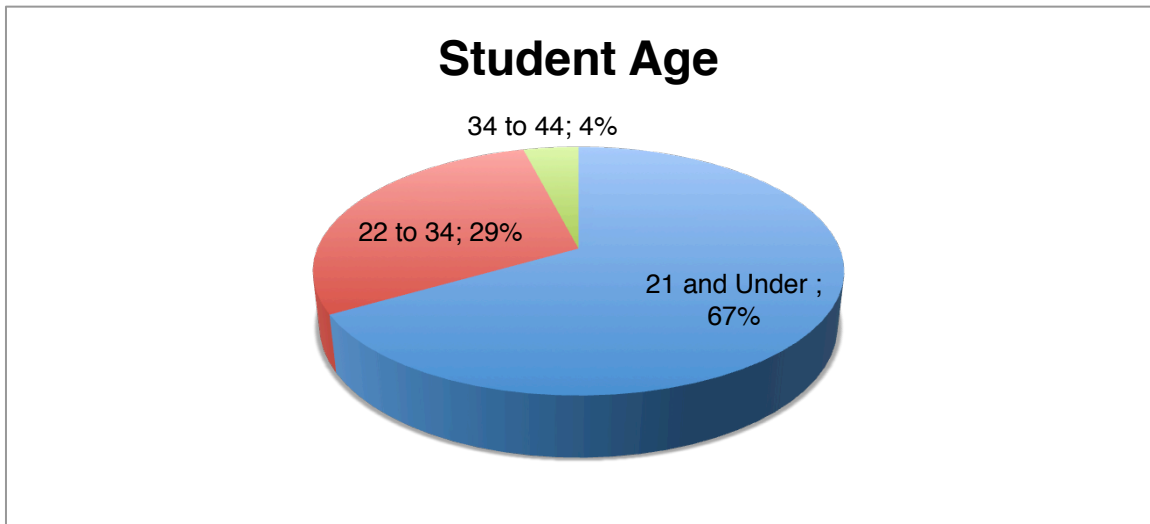
Table 2: N100 Student Age

75 students received the initial survey. 50 students were 21 years of age and under while 22 students were between the ages of 22 and 34. Three students were between the ages of 34 and 44 and 65% of all students were males. This graph indicates that one-third of the students are over the age of 21.
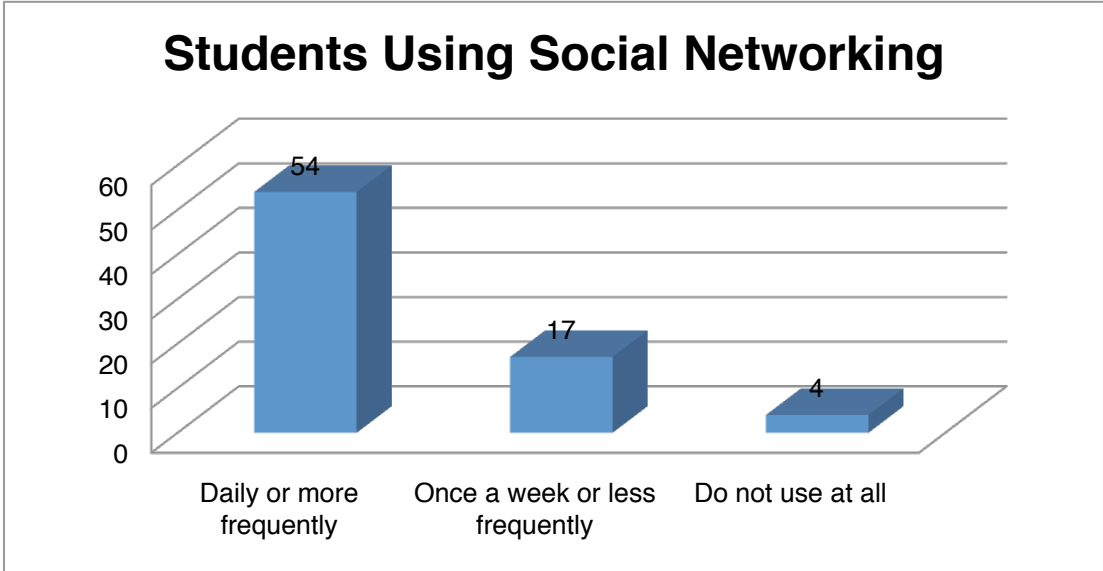
Table 3: Students Using Social Networking

The total number of subjects is 75. The graph below shows that 54 (72%)of

them are using one of the Social Networking sites (Facebook, Twitter,

LinkedIn, Plaxo, MySpace, other) daily or more frequently. Seventeen

(22.6%) of them are using one of them once a week or less frequently, and

four (5.3%) out of 75 do not use any of the social networking sites.

Facebook Use

Hourley; 11%   No account; 12%   Once a Month; 7%

More Than Three Times a Day; 28%

Every Week; 9%

Every Day; 33%
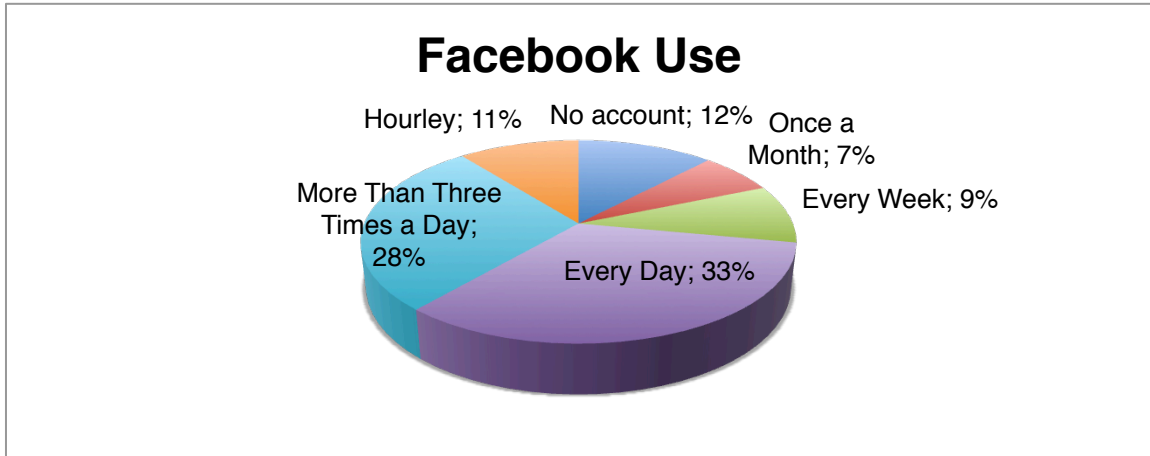
Table 4: Facebook Use

This graph indicates that 72% of all N100 students use Facebook on a daily

basis. 12% do not have a Facebook account while 16% use Facebook on a

limited level. Facebook has become the standard social networking platform for

most individuals today and this graph supports this claim. Six out of the nine

students that reported not having an account for Facebook had no account for

any social networking platform. From this graph and other information it can be

ascertained that approximately nine in ten students have experience with a social

network. Other social networks that were reported being used were: MySpace,

LinkedIn, Plaxo, Ning, Bebo, gaiaonline, blogger, last.fm, HotSchedules, World of

Warcraft, Uvi Journal, Dailybooth, myyearbook, X-Box Live, stickam, tokbox,

bundie.net, YouTube, Deviant Art, flckr and Vkontakte.

Number of friends for students using Facebook
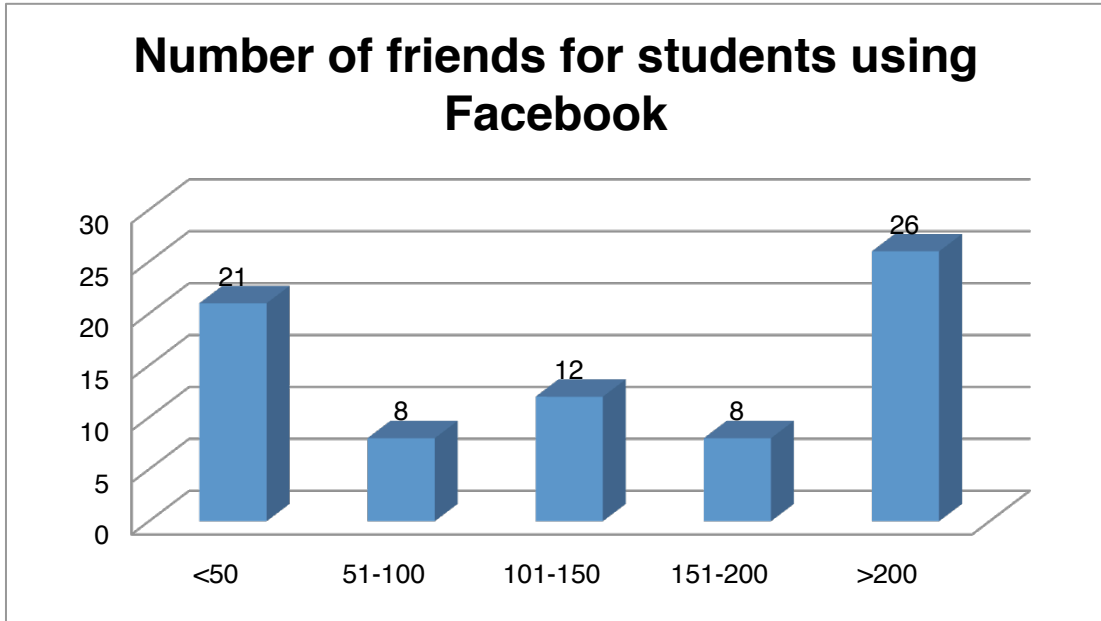
Table 5: Number of friends for students using Facebook

The graph below shows students that use Facebook and their number of friends.

For example, 21 students have 50 or less number of Facebook friends; 8 of them

have 51 to 100 friends; 12 have 101 to 150 friends; 8 have 151 to 200 friends;

and 26 students have more than 200 friends. Friending is important to those that

use Facebook and the latest numbers indicate that the average number of friends

for a Facebook user is 130 (Facebook 2010).

Number of friends and frequency of checking their Facebook
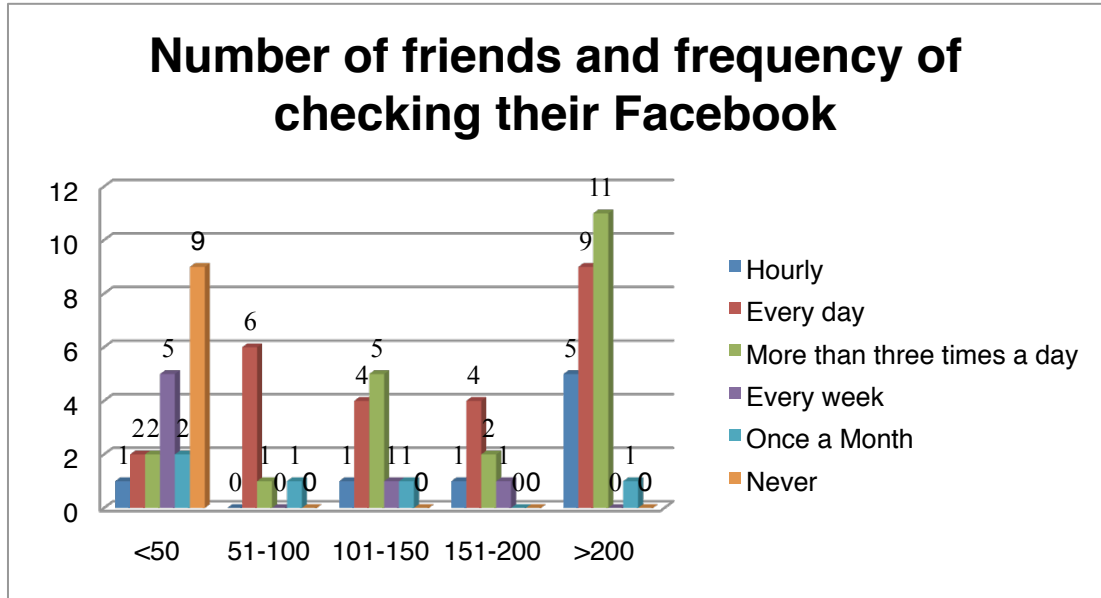
Table 6: Number of friends and frequency of checking their Facebook

A hypothesis was derived that students who use Facebook more frequently are expected to have more friends. In the graph below we present the detailed number revealing the number of friends students have and the frequency of checking their Facebook account. Although a general pattern can be seen from looking at the chart, it is hard to establish what kind of correlation exists between these two parameters (number of friends and frequency of log in). In order to establish any quantifiable finding, we had to run a correlation test. For the sake of the survey our data contains words, and correlation can be found only when we use numbers. For this matter we mapped words into numbers. To express students having 50 or less friends we approximated to 25 friends. For students having 51 to 100, we approximated to 75. Other approximations are given in Table 7:

<50	25
51-100	75
101-150	125
151-200	175
>200	225

Table 7: Friends Approximation Table

Likewise, we had to map the frequency of use into quantifiable values, and we decided to assign larger number to more frequent habits, and then going lower. Details are in the table below:

Hourly	5
Every day	4
More than three times a day	3
Every week	2
Once a Month	1
Never	0

Table 8: Frequency of use in quantifiable values

After the quantification, we came up with two columns, one representing the number of friends, and the other column representing the frequency of log in on Facebook. The correlation results show a value of 0.543765, revealing that there is a *positive* correlation between the two variables. In other words, students who have higher number of friends, also spend *more* time using Facebook. Because the value 0.543765 is not very close to 1, we cannot claim that the correlation is very strong.

NOTE: If correlation value is 0, there is no correlation. If it is 1, there is positive correlation. If it is -1, there is negative correlation. Closer to 1, the correlation is stronger.

Other Uses of Social Media

Other uses of social media that was polled during the initial survey was for Twitter, YouTube, photo sharing and online gaming. 21% of those polled indicated that they had a Twitter account and were tweeting and following others. 47% of the students have posted at least one video to YouTube, while 37% of the students have posted photos to a photo-sharing site such as Flickr. Also, 73%, a total of 55 of the students polled, reported to have played online games. And of those 55 students, 45 (69%) play massively multiplayer online role-playing games (MMORPG) such as World of Warcraft.

Correlation between playing games and frequency of using Facebook

It was hypothesized that students, who play games, would spend less time using social networking sites. Students were asked to answer by "Yes" or "No" on the question whether they play games or not. To quantify this, we mapped "Yes" answers to number 1 and "No" answers to number 0. For the frequency of using Facebook, we mapped to value 0 if students used Facebook *once a week* or even less frequently, and we assigned value 1 to students who used Facebook *daily* and *hourly*. The test gave the correlation value 0.026861, which proves that there is no correlation between these two parameters, as the value is very close to 0. In other words, we cannot predict the behavior towards social networking by knowing the behavior of people playing games.

Technology Habits

Two Students (3%) reported not owning a desktop computer at their primary

residence and five students (7%) reported not owning a laptop computer. But

zero students indicated not owning either. Seven students (9%) noted that they

do not have broadband access at their primary residence. Two Students (3%)

reported not owning a cell phone, while 12 students (16%) stated they do not text

on their cell phone. 23 students (31%) indicated that they own a smart phone,

such as the iPhone or the Blackberry, while 17 students (23%) purchased the

data plan that coincides with the smart phone.

For the sake of the rest of the survey data in this section a correlation can be

found when we use numbers. For this matter we mapped words into numbers.

Table 9 describes the mapping of words into numbers. In other words, we used a

Likert scale for students to rate their responses. Strongly Agree is equivalent to

one (1) on the scale, Agree is equivalent to two (2) on the scale, Neutral is

equivalent to three (3) on the scale, Disagree is equivalent to four (4) on the

scale and Strongly Disagree is equivalent to five (5) on the scale.

Words	Numbers
Strongly Agree	1
Agree	2
Neutral	3
Disagree	4
Strongly Disagree	5

Table 9: Mapping of words to numbers

Social Networking Preferences
Results from the Social Networking Preferences portion of the survey indicated the following:

- An average response of disagree (3.85) was given in regards to the statement that social networking sites should **only** be used for family and friends, and not for educational purposes
- Students disagreed (3.92) that social networks are a waste of time, and college courses should not use them
- Students agreed (1.75) that social media is a good way to get to meet other students in their chosen major
- Students agreed (2.01) that they like being able to connect with their classmates through an online social network
- Students agreed (2.01) that social networking tools will help them collaborate with other students
- Students were agree/neutral (2.63) about posting personal information about themselves in social networks

Ning Preferences
Results from the Ning Preferences portion of the survey indicated the following:

- Students agreed (1.8) that the N100 Ning social network be a closed social network, meaning that no one from outside of the class could become a member and have the ability to post and view on the N100 Ning social network
- Students agreed (2.11) that since there are students taking the course they will never meet they like the N100 Ning social network as a method for bringing both live lecture and online students together
- Students agreed (2.12) that it is useful to see what other students in the class are doing at the N100 Ning social network

The Value of Ning
Results from the Value of Ning portion of the survey indicated the following:

- Students agreed (2.11) that they appreciate classmate's comments on their blogs at the N100 Ning social network
- Students agreed (2.29) that they expect to discover new and exciting ways to learn using the N100 Ning social network
- Students agreed (2.08) that the N100 Ning social network is a valuable communication tool for the instructor and teaching assistants to relay information to them
- Students agreed (2.01) that they like the ability to leave a comment on a "comment wall" for another student
- Students agreed (1.93) that the N100 Ning social network can be a useful tool for discussing the lecture material
- Students agreed (2.15) that they expect to be able to better collaborate with classmates due to the N100 Ning social network

Concerns with Using Ning
Results from the Concerns with Using Ning portion of the survey indicated the following:

- ➢ Students disagreed (3.73) that they are concerned the professors and the teaching assistants are reading what they are writing at the N100 Ning social network
- ➢ Students disagreed (3.89) that even though the N100 Ning social network is a closed network, they are worried about another student "phishing" around their profile
- ➢ Students disagreed (3.68) that they were worried how their information will be used at the N100 Ning social network
- ➢ Students responded neutral (3.36) to being comfortable posting personal information about themselves in an online website
- ➢ Students responded agree/neutral (2.65) to believing privacy issues in social networks are exaggerated by the media

Using Photos in Ning
Results from the Using Photos in Ning portion of the survey indicated the following:

- ➢ Students disagreed (3.99) that they **do not** like to use their actual photo, and prefer a non-realistic image to represent themselves online

Ning as a Tool
Results from the Ning as a Tool portion of the survey indicated the following:

- ➢ Students agreed (2.12) that they expect the N100 Ning social network to lead to potentially getting to know people both online and offline
- ➢ Students responded agree /neutral (2.56) that it is hard to meet other students at IUPUI, so being able to friend classmates is very useful to them
- ➢ Students agreed (2.12) that they expected the N100 Ning social network to be a tool that will allow them to meet people they don't already know
- ➢ Students disagreed (3.73) that they expect the N100 Ning social network to be a tool to only meet people they already know
- ➢ Students responded agree/neutral (2.77) that they are not on campus much due to their work and family life, and they appreciate the benefits of the N100 Ning social network for meeting classmates
- ➢ Students agreed (2.11) that they would like to use the N100 Ning social network to make better friends in the class, especially friends they will potentially meet in real life and offline

Receiving Updates in Ning

Results from the Receiving Updates in Ning portion of the survey indicated the following:

> Students responded disagree/neutral (3.39) that they never want to receive updates from individuals they have "friended" to see what they are up to

> Students responded agree/neutral (2.49) to sometimes wanting to receive updates from individuals they have "friended" to see what they are up to

B. Analysis and Findings of Ning Project Follow Up Survey
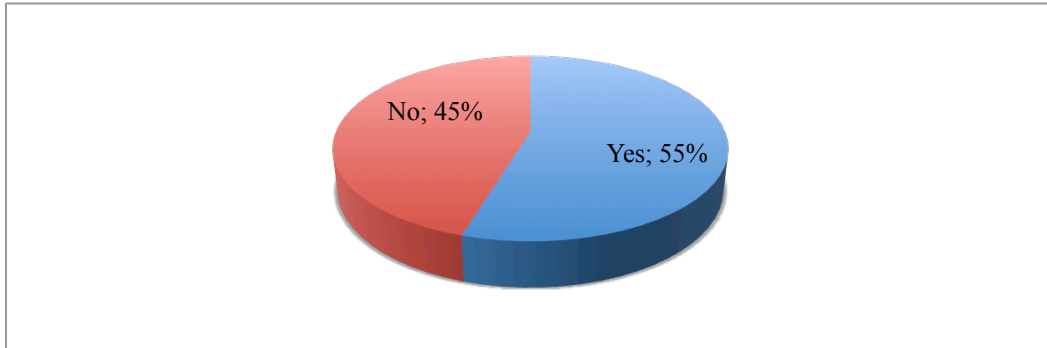
Table 10: I have met a student in N100 via the Ning group that I would not have otherwise met this semester.

This chart indicates that over half of the students surveyed have met someone

that they most likely would not have because of the Ning group. This is important

because it illustrates that the Ning group can help create connections among

students that, down the road can lead to a friendship, a study partner or even

possibly a business connection later in life.
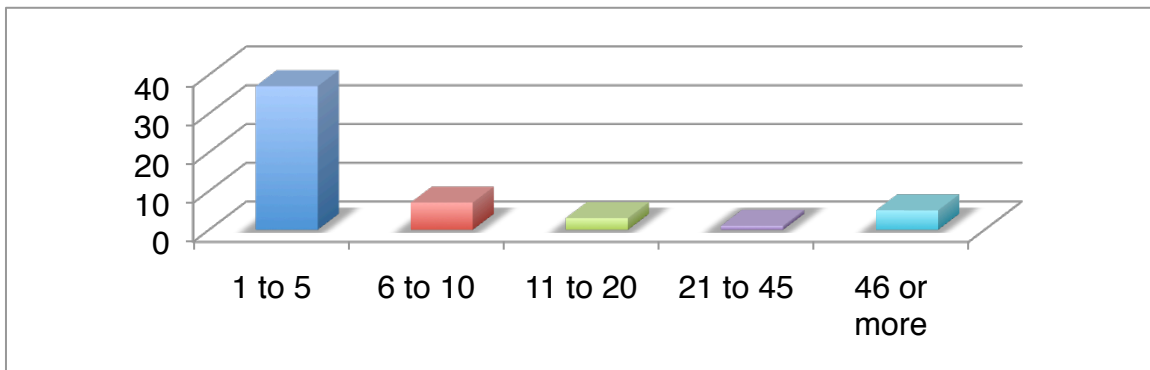
Table 11: How many times have you used the friend invite in the Ning group?

This chart indicates that most students use the friend invite, most likely, to invite

their fellow discussion group members into a friendship. It also can be noted that

some students used the friend invited to create new friendships or maintain

current friendships through the friend invite.
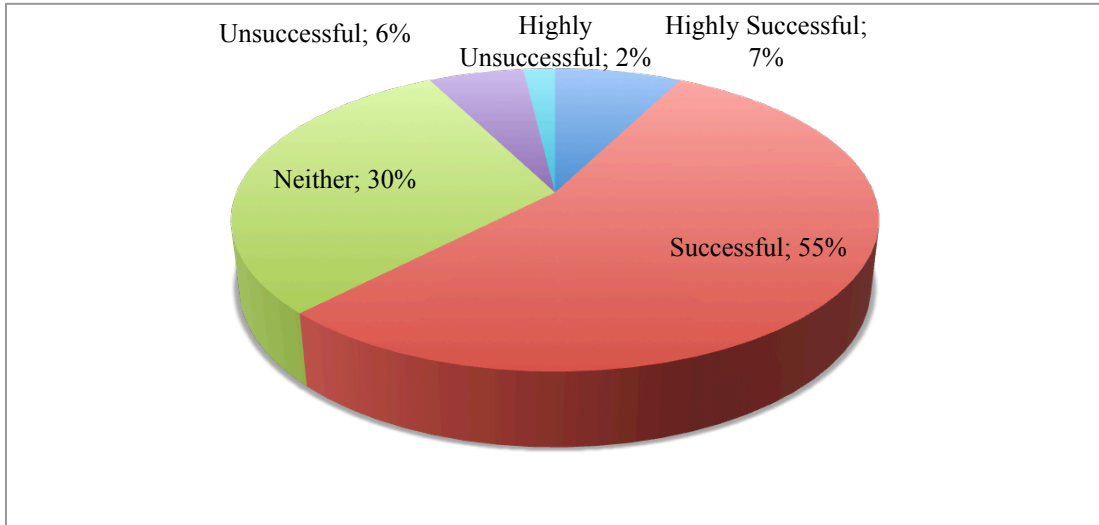
Table 12: Characterize your collaboration with students via the Ning group.

This chart indicates that 62% of the surveyed students agreed that collaboration

via the Ning group was successful. This is important because collaboration is

vital in team/group success and these collaboration and communication skills are

vital for a future employee.
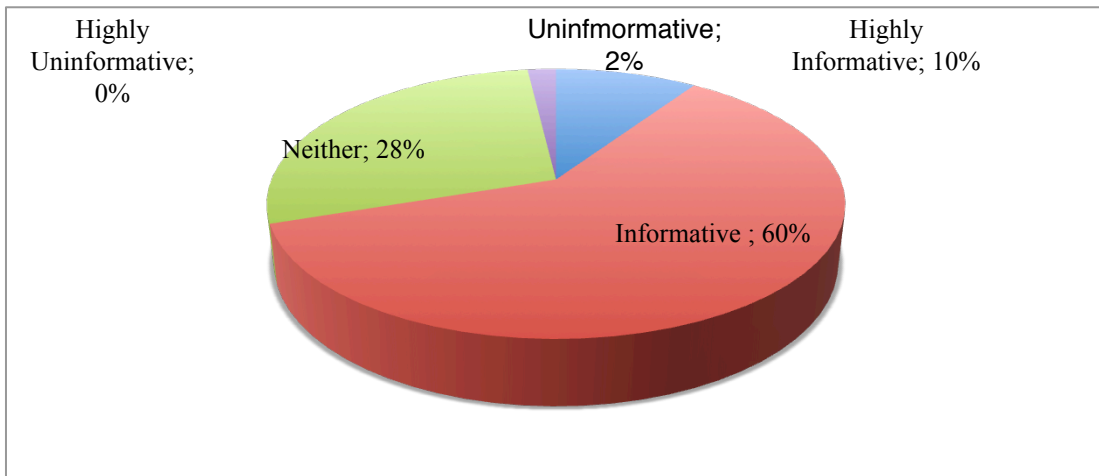
Table 13: Characterize your sense of the value of comments on yours or
someone else's post or blog.

70% of the students surveyed indicated that value of comments left by peers

regarding a forum or blog post have been either informative or highly informative.

This is important because it confirms that the Ning group has validity and that

students respect their peers thoughts, criticism and critique.
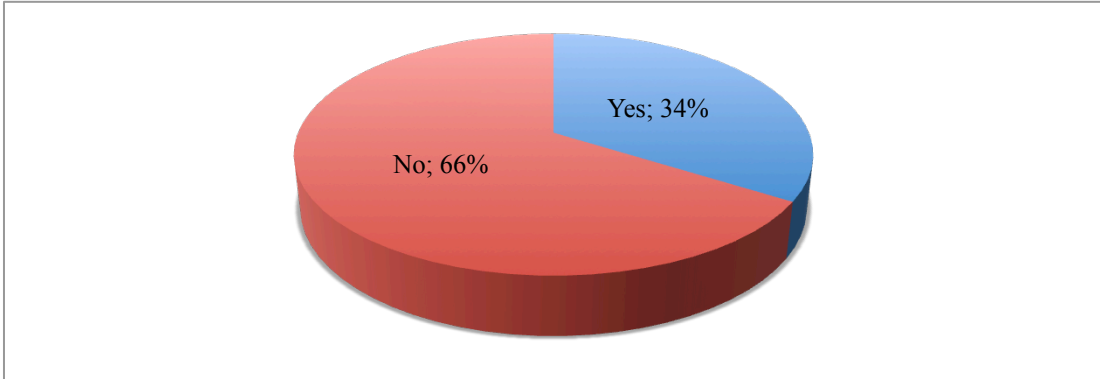
Table 14: Outside of course assignments, I have left a personal message or email for me via the Ning group.

This chart indicates that nearly two-thirds of the students are not using the

message or email tools within Ning to communicate. Other tools such as wall

postings and forum discussion are possibly being utilized.
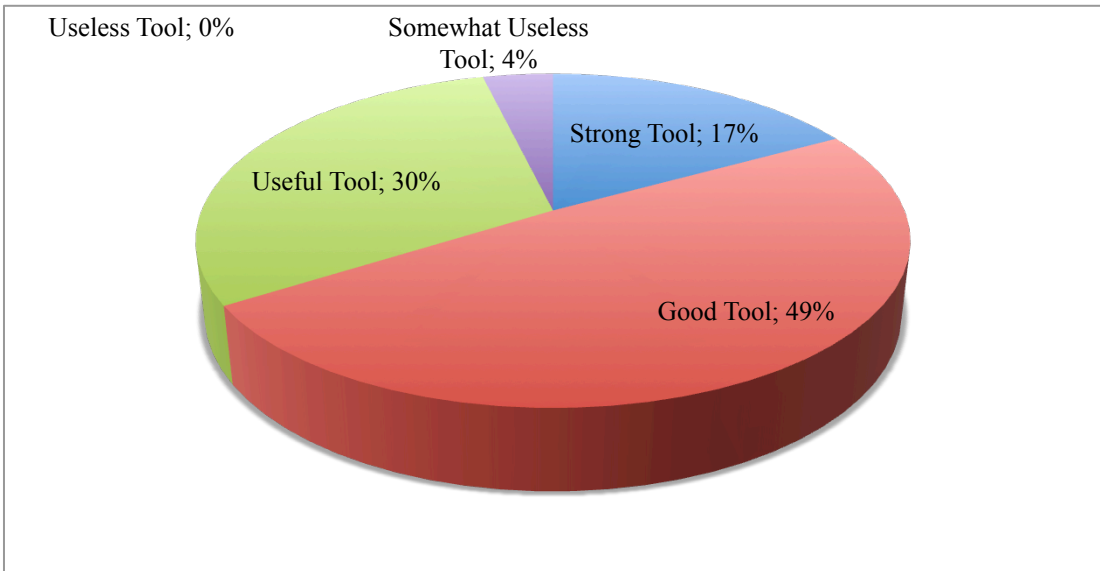
Table 15: Characterize the professor and TAs use of the Ning group to communicate with you.

This chart indicates that nearly two-thirds of the students would categorize the

professor and the teaching assistants' use of Ning as either good or strong while

30% of the students indicate that it is useful. Meaning that less than 5% find Ning

not a useful means of communication between the instructors and the students.
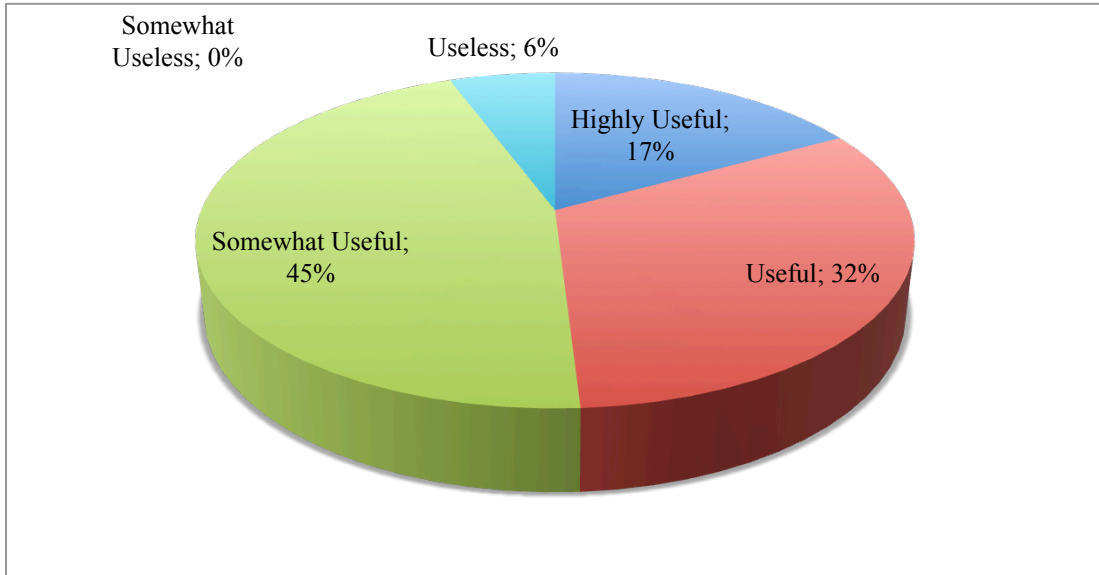
Table 16: Characterize how you have found the Ning group to be a useful tool to discuss lecture material.

This chart indicates that almost half of the students believe that Ning is a useful tool in discussing lecture materials while 45% believe it to be somewhat useful. 6% of the students did not find Ning to be useful when discussing the lecture material. This is important because it gives students a way outside of class to communicate about the lecture rather than having to meet again in person.
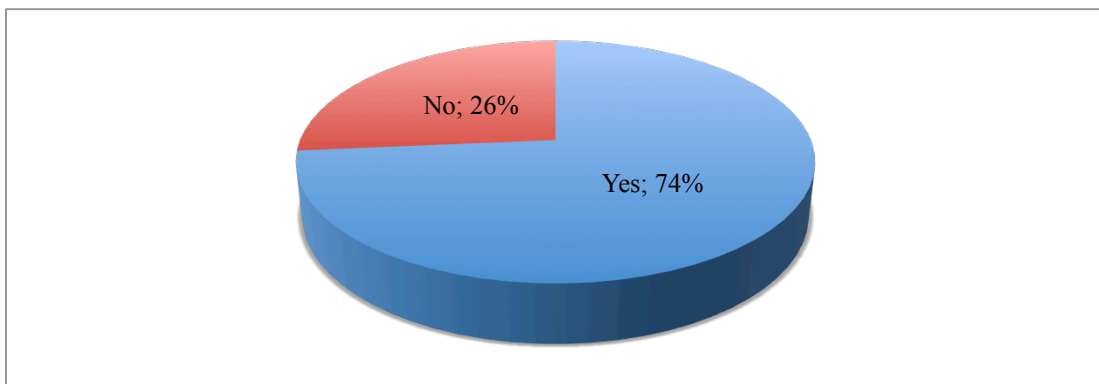
Table 17: Now that you have experienced the Ning group, would you prefer to expand this to a New Media social network?

This chart indicates that nearly three-fourths of the students would like to expand this Ning network into a department-wide network for further discussion and networking.
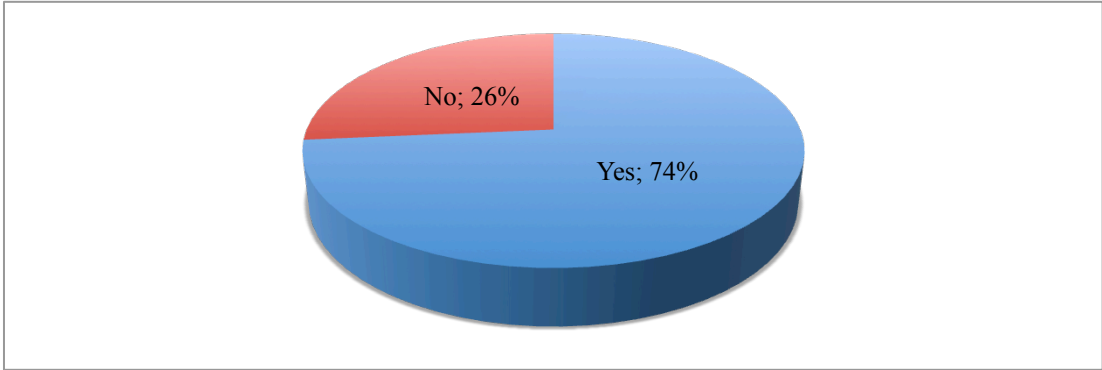
Table 18: I believe that more New Media courses should use the Ning group.

This chart indicates that nearly three-fourths of the students think that other New

Media courses within the department could benefit from using a course specific
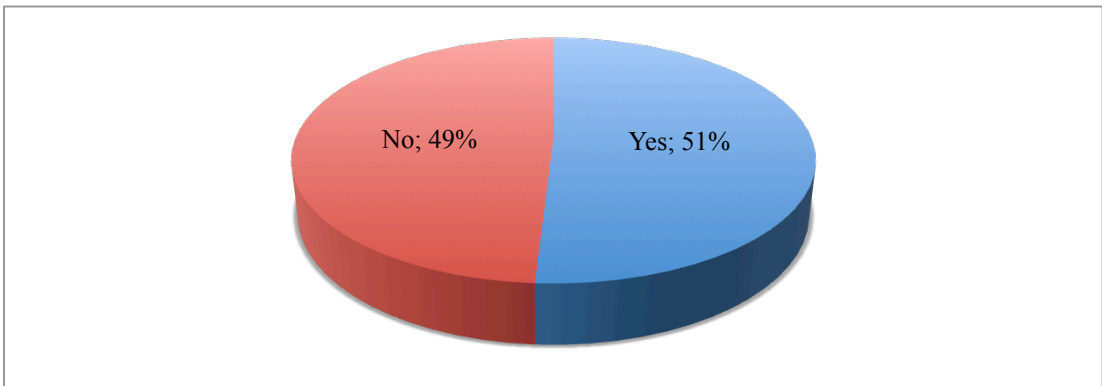
social network.

Table 19: After this semester I expect to continue to use a social network to keep in touch with N100 students.

This chart indicates that just over half of the students gained a new connection in

their network that they would like to stay in touch with either personally,

academically or both.
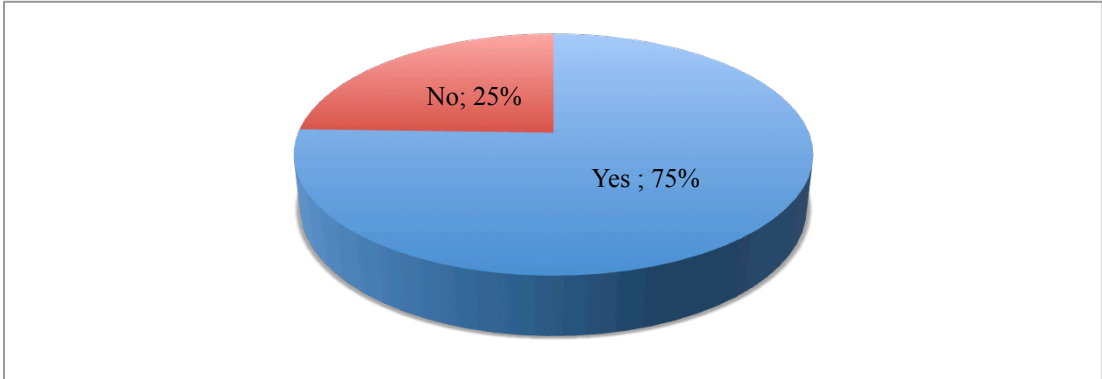
Table 20: I only use the Ning group because it is a course requirement.

This chart indicates that the students still view the Ning group as a requirement

for the course and would not otherwise use it.
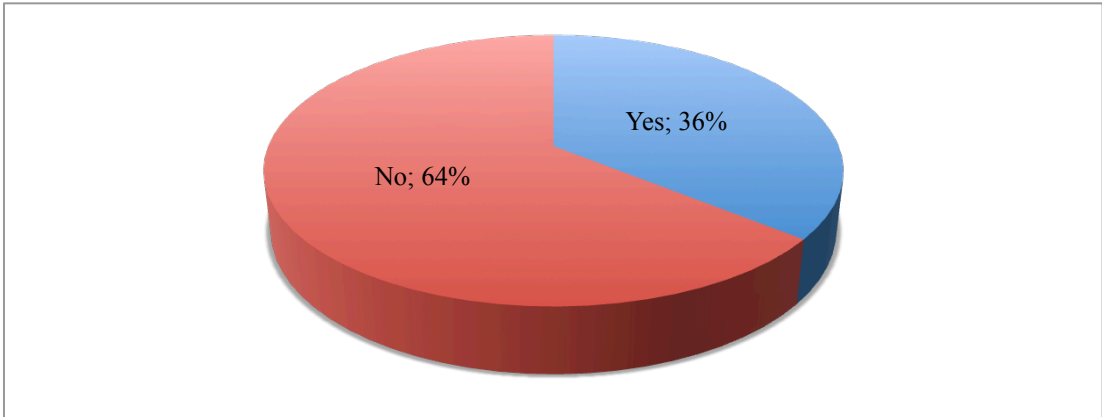
Table 21: I would prefer all of the Ning activities on Oncourse CL.

This chart indicates that over one-third of the students surveyed believe that all of

the assignments and work that are completed using Ning should be completed

within Oncourse CL.
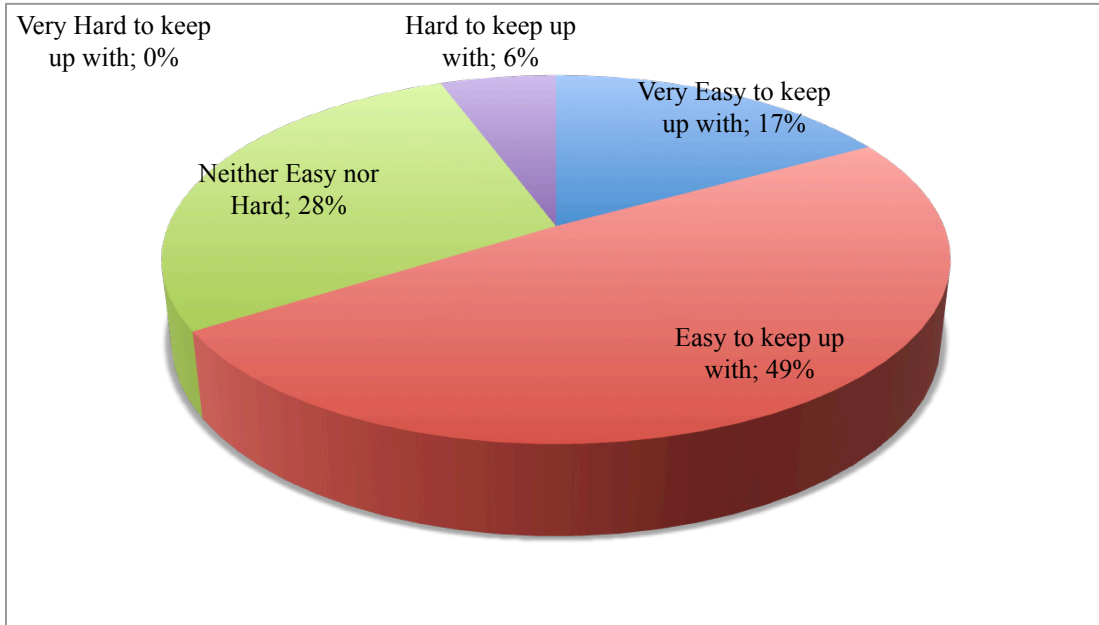
Table 22: Characterize how you feel about all the new information each day at the Ning group.

This chart indicates that two-thirds of the students believe that all of the

information within Ning is easy to keep up while another 28% found it neither

easy nor hard to keep up with. This indicates that the current structure and

design that is in place for the N100 Ning social network is working, but not

perfect.

Categories of Forum Posting
The forums section within Ning is the most active area with the most participation among the students. This is for two reasons:

> One is because students are required once every five weeks, as a part of their discussion group, to post a summary of the groups' discussion on a live lecture within the forums.
> The other reason is the casual forums section. This is an area for students to post on topics of their choosing. The topics can be broken up into seven types of subjects.
   o Getting to Know Other Students
   o Media and Tech Discussions
   o Events and Get-Togethers
   o Request for Help from Other Students
   o Job and Work Discussions
   o Conversations About Other Courses
   o Sharing Creative Works
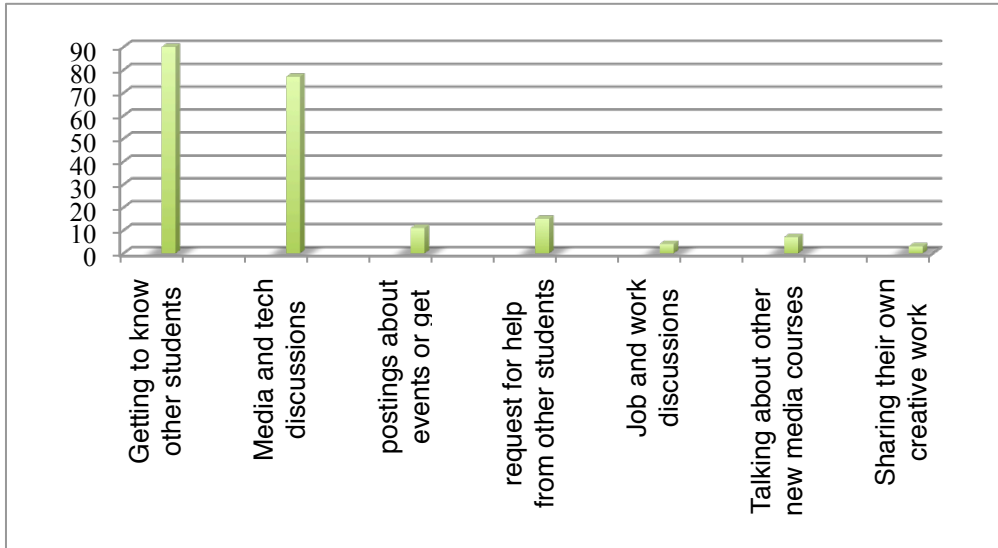
Table 23: Types of Discussion within Casual Forum

There are two of the types of discussions that are the most common and those

are: "Getting to Know Other Students" and "Media and Tech Discussions". Within

the Fall N100 Ning Social Network, there were over 200 posts and over 150 of

those posts were in regards to those two sections. 90 posts were categorized as

"Getting to Know Other Students" and 77 were categorized as "Media and Tech

Discussions". This indicates that students truly do want to make connections with

others. The "Media and Tech Discussions" were also centered around the

"Getting to Know You" subject matter with forum postings such as: "What is your

favorite movie of all time?" or "Are there any World of Warcraft players out

there?" Students were testing the waters to see if there are other students out

there with similar interests.

Number of Postings

The Fall N100 Ning Social Network had over 200 different discussions started

within the casual forums sections. But how much was each individual student

participating in the discussions? To break it down into totals, there were 1,558

unique participations within the network from 89 students. That averages to 17.5 posts per student, which translates to over one post per week per student. The highest individual student post count was 62 and the lowest individual student post count was three. As compared to two previous sections of the N100 course, the Spring 2009 section had an average of 11.5 posts per student with the highest being 34 posts and lowest being three posts, while the Spring 2008 section 18.9 posts per student with the highest at 91posts and the lowest at three posts.

C. Google Analytics
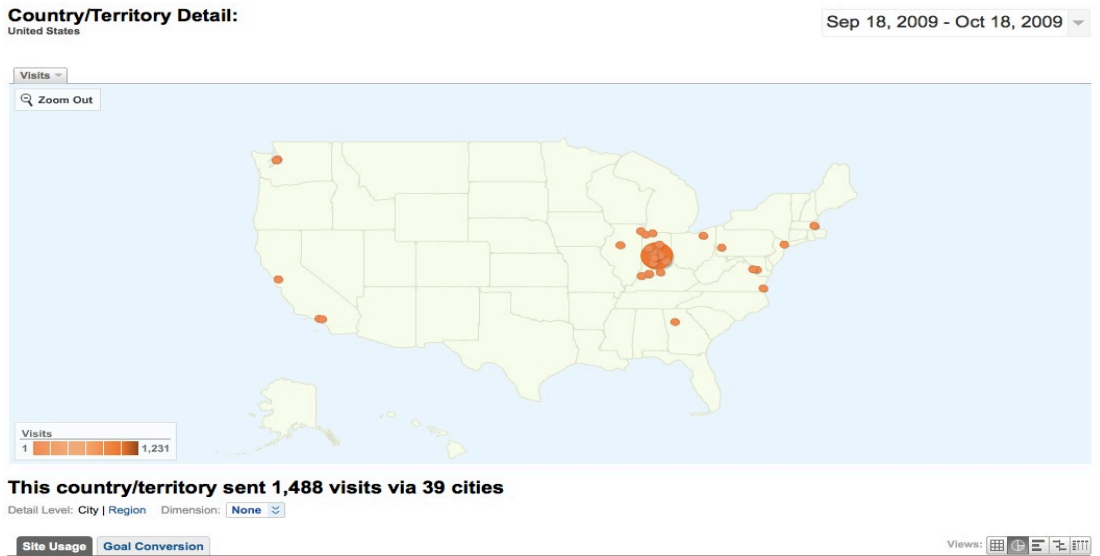
Figure 4: Geographic Disbursement of N100 Ning Access Nationally
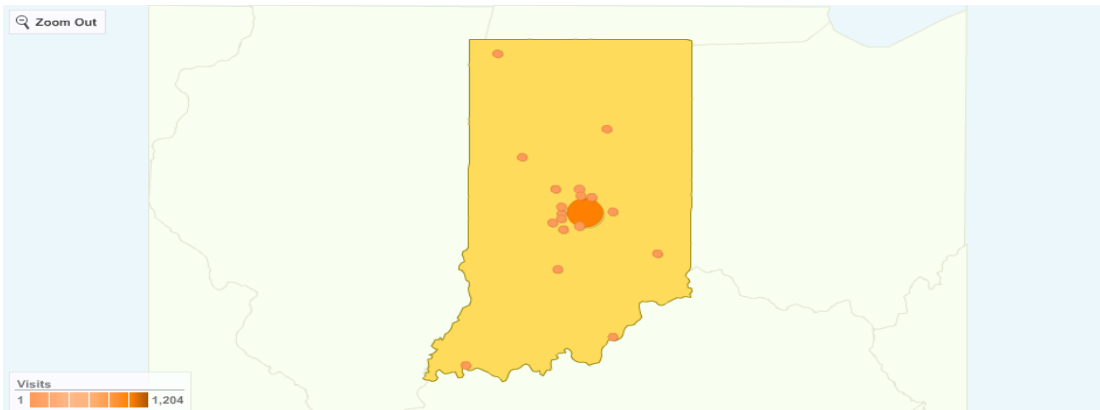
Figure 5: Geographic Disbursement of N100 Ning Access Locally

As you can see from the two charts above, the geographic disbursement as to where students are logging on from are concentrated in central Indiana and the IUPUI campus, but there is a variety. There are students from outer-lying areas in Indiana that are either taking the course online or are from these areas. Also, it can be concluded that students are accessing the Ning site while on vacation or while traveling. It is not indicated in either of the two charts, but there was one

student that was taking the N100 course while serving in the military in Iraq at

Camp Victory. The Ning group was vital for this student.

Always on Education
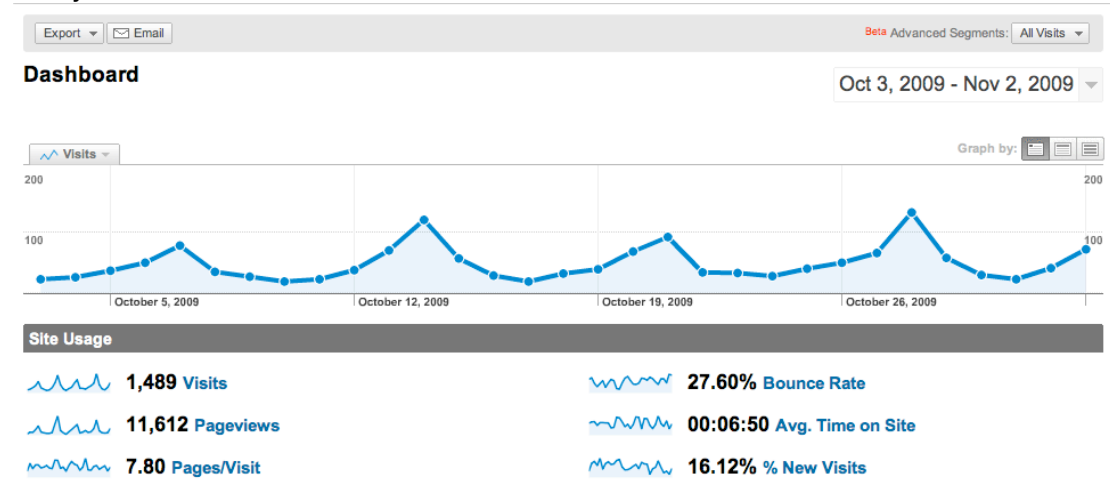
Figure 6: Monthly Ning Site Usage

This chart indicates the amount of traffic that the Ning site received over a one

month period. The peaks are Wednesdays, which were the live lecture days.

The interesting information that can be ascertained from this chart is that the site

was receiving constant traffic no matter what day of the week it was. There was

never a time when the traffic hit zero and the traffic increased towards live lecture

and then fell off.

V. Discussion of Findings

Returning to the original research question, it can definitively be stated that

through the findings, there is a positive relationship between the students of

N100 and the N100 Ning social network, thus enhancing student collaboration,

student learning and student engagement.

A. The social benefits of building communities and networking through

Ning

> Mark Zuckerberg, creator of Facebook: "In order for us to be
> successful in this century, we're going to need to be more
> connected and we're going to need to have a better sense of
> understanding of where people are coming from and just greater
> sense of like, we're all connected."(Tapscott 2008)

The results presented show that the N100 students can benefit in a variety of

ways from the availability of a course specific social networking system, the most

prominent being the social benefits. The N100 Ning social network was utilized in

this course not solely for posting assignments or reviewing lecture materials, but

to also better connect the students with each other. The undergraduate student

populace at IUPUI consists of assorted types of learners: commuting students,

older adult students, online students, on-campus students, and first-generation

college students. This range of diverse backgrounds further complicates

communication, collaboration and most importantly learning in a large

introductory lecture course. Ning was put in place as a social tool for students to

meet and learn more about each other as well as collaborate. For courses with a

smaller amount of students or with students that do not have quite as a diverse

background as those previously discussed at IUPUI, establishing effective

avenues for collaboration may not be a problem. But finding effective ways to

share knowledge and collaborate in a large lecture course similar to N100 is not as easy, although it is vital to the learning outcomes. Oncourse allows the students many powerful tools that are very effective for collecting and storing information. But creating an online social network where students assemble for conversations and knowledge exchange, ads something valuable to the mix. The N100 Ning social network provided a venue for conversations, storytelling and even showcasing projects that could influence other students greatly.

> "One of the most intriguing aspects of N-Fluence networks is the capacity to build trusted relationships with people outside traditional social circles. As our social networks grow, so does the universe of people we rely upon to help us make decisions, and growing number of these influencers come from nontraditional sources."(Tapscott 2008)

More importantly, the opportunity to meet other students with similar interests, or working on similar projects and assignments creates relationships that can speed up the process of figuring out where they fit in or who to ask questions to about a specific interest or problem. According to one student, "(Ning) is a great place to further thought and to find people to collaborate with."

Students early on in their educational careers who should be talking to each other because their interests interconnect often do not communicate because they are unaware or maybe to timid to communicate verbally. The introverted students who may never have something to contribute in a face to face meeting, given time to compose their thoughts, can influence discussions they might not have joined before. For example, one student in the N100 course posed the question within the casual forum about what kind of laptop would be the best option to purchase as a "New Media" student. This sparked a debate about the

Apple Macbook and the Sony Vaio between various students and this discussion led the student to choose a Macbook.

Having a space like the N100 Ning social network makes it possible for students to share experiences with each other, about which new software they are using or which websites are useful. One person may know something that others need to know. Exchange of useful knowledge should not be confined to one class, one lecture or bumping into someone in the hallway. When a culture of collaboration is established in a classroom, it will not only build student learning, it will craft a more active student participant.

> "…participatory cyberspace presents great opportunities for Digital Natives to learn how to create and enjoy new expressive works. This process of creating happens with others, often not in the home or the school but in networked publics online. Digital Natives are learning these lessons every day. And they are open to teaching the rest of us…"(Palfrey and Gasser 2008)

> "Schools should use digital technologies to encourage team-based learning. The school of the future will put students in digitally supported environments where they can work, and learn, in teams. Digital Natives are proving, all the time, that they can build communities around ideas, good and bad. Interaction and a sense of community are the key requests of those born digital when it comes to online learning… The work world will require them to collaborate in order to succeed…they will be learning skills that will serve them well over time, even as digital economies evolve." (Palfrey and Gasser 2008)

Career minded students also could take advantage of a course specific social network. Online discussions, especially in a forum, are structured according to interests and subjects. Within the N100 Ning social network there were four separate forums initiated by students in regards to future work and employment as well as amateur producers and artists looking for collaborators, actors and

assistants. This initial contact, that may otherwise go untapped in a traditional classroom, can kick start professional relationships and networks.

There were 18 students in N100 that were taking the course online. Online students commonly feel distant to a course, especially if there is a live lecture offered. The N100 Ning social network was a key tool for the online students. Primarily, the online students used Ning to conduct their discussion groups regarding the lecture that they would watch via streaming video. The online students would post their thoughts to the assigned discussion questions through their groups' section. Then, one person from the group each week would summarize the groups' thoughts and post that to the assigned forum. This took the place of the discussion time that students in the live lecture had the opportunity to participate in. Online students averaged an overall 19 participations on the N100 Ning site, which is just slightly above the participation average for all of the students in N100. As one online student stated, "Usually when you take an online class, you just turn the work in and get your grade. But with N100 and the Ning group, it was great to be able to participate in discussions with others in the class as well as to get to know the other online students and the live lecture students through the discussions in the forum."

B. Motivating students to stay connected to the course and their classmates: The relationship between networking and achievement

The amount of friends that you have within any social network is commonly displayed on your homepage. Many social networking participants are very proud of the amount of friends that they are able to acquire. The data collected from the

50

survey indicates though that "friending" within the N100 Ning social network is not

as commonplace. The majority of the students that used the friend invite used it

as a means to connect with their discussion group members, or a choice few

individuals that they connected with over the course of the semester. Although

friending was not overly popular within the N100 Ning social network, it does not

mean that students are not interacting. 55% of the students indicated that they

met a student in N100 via the Ning group that they would not have otherwise

met. 62% of the students surveyed indicated that their collaboration was either

highly successful or successful. It can also be noted that over 400 discussions

were started in the forums and nearly 1,600 posts were recorded in less than four

months. These types of social interactions within the course would not be as

widespread without the N100 Ning social network. In a large diverse lecture

course, it is difficult to meet other students with similar interests, thus the Ning

group allows for students to bypass the longer face-to-face social interaction and

get students to be acquainted with each other faster. It is not a new way of

meeting friends or peers, it is just a process that expedites it faster. And in a one-

semester course, this can be helpful in creating that collaborative culture that

gets students more attached and engaged in the course discussions,

conversations and projects. It can be suggested that these increased social

interactions contribute to social capital in the classroom. Social capital broadly

refers to the resources accumulated through the relationships among people

(Coleman 1988).

> For individuals, social capital allows a person to draw on resources
> from other members of the networks to which he or she belongs.
> These resources can take the form of useful information, personal
> relationships, or the capacity to organize groups. Access to
> individuals outside one's close circle provides access to non-

redundant information, resulting in benefits such as employment connections. Moreover, social capital researchers have found that various forms of social capital, including ties with friends and neighbors, are related to indices of psychological well being, such as self-esteem and satisfaction with life. (Ellison, Steinfield et al. 2007)

Thus, an increase in social capital, whether it is individually or collectively, leads to a more positive overall learning environment. Students begin to understand that learning in higher education is not a one-way street. Although, early in the childhood years in the classroom, that one-way street mentality is commonplace where students are motivated and learn mostly extrinsically. Meaning that students are taught more memorization and facts and there is less dependence on a child's ability to think and reason on their own and not allowing them the chance to develop self-determination or independent thinking. Commonly, punishments or rewards are used to control the motivation of the students. In situations where one person (the teacher) is clearly in power, extrinsic motivation though has been proven to be effective (Kohn 1993). In contrast, intrinsic learning and motivation seem to be a better fit in higher education. Intrinsic motivation and learning occurs when the activity and the environment bring out motivation in the student. Instructors and professors do not motivate students but rather create, through teaching, opportunities that can evoke learning and motivation in students. Social networking can be that opportunity for students.

Not only did the projects give the students "intentional knowledge" – knowledge the teacher intends for them to learn – they also gain the "unintentional" knowledge that comes with the experience of collaborating. "We would build relational bridges that the students of tomorrow can walk across. We've connected the technology; now it is truly time to connect the people." (Friedman 2005)

Students use the N100 Ning social network to communicate independent of course requirements. The most common area is the casual forum. Students are

made aware the first day of class that this area within the N100 Ning social network is for them to get to know each other and discuss various topics and interests. There were 205 separate threads started within the casual forum, which included 717 individual comments or responses. The use of this social network in the N100 course is grounded in social constructivist theories. Whether the students are using the Ning group for course work or for social interaction, there is learning occurring, quite possibly life-long learning.

Today's students are in constant need to update knowledge and skills, given certain personal, educational or employment-related motives. The classroom may not be the only solution for today's student. There are vast amounts of information and materials online that would take years to disseminate. Within the closed course social network students can inform and discuss with one and other to better facilitate specific learning out comes. Potential learners should also be motivated to actually use and actively contribute. But what motivates a student or participant to want to share and contribute? The Social Exchange Theory states that a participant will contribute more when there is some kind of intrinsic or extrinsic motive (or reward) involved. There are four main mechanisms to motivate and encourage participation: (1) *personal access*, or anticipated reciprocity: learner has a pre-existing expectation that he will receive actionable and useful (extra) information in return; (2) *personal reputation*: learner feels he can improve his visibility and influence to others in the network, e.g. leading to more work or status in the future; (3) *social altruism*: learner perceives the effectiveness in sharing knowledge as a 'public good', especially when contributions are seen as important, relevant, and related to outcomes; (4)

tangible rewards: learners negotiate to get some kind of more tangible asset

(financial reward) in return (Thibault and Kelley 1952). These four mechanisms

can be brought out through social networking, especially in a closed course

social network like N100. Also, while participating in a social network, students

refine and hone their communication, collaboration and new media skills.

Although it may seem like it, participating in open social networks like Facebook

and MySpace is different than participating in a closed course social network like

Ning. Some students, not all, become more professional in their communication

with others and they also learn the "do's" and "don'ts" of online communication

and collaboration through trial and error. These life-long lessons can be very

beneficial for future employment and personal communication skills.

C. Comparing LMS to Social Networking on Ning

Component	Ning™	ONCOURSE collaboration and learning
Profile Pages	√	
Friending	√	
Polls	√	
Twitter Feeds	√	
Small Worlds	√	
Drop Box		√
Gradebook		√
Tests and Quizzes		√
Upload Pictures and Video	√	√
Blog Space	√	√ (beta)
Groups	√	√
Send messages	√	√
Announcements	√	√
Chat	√	√
Forums	√	√

Table 24: Illustration of the different tools that are offered through the IUPUI Oncourse LMS and the Ning social network.
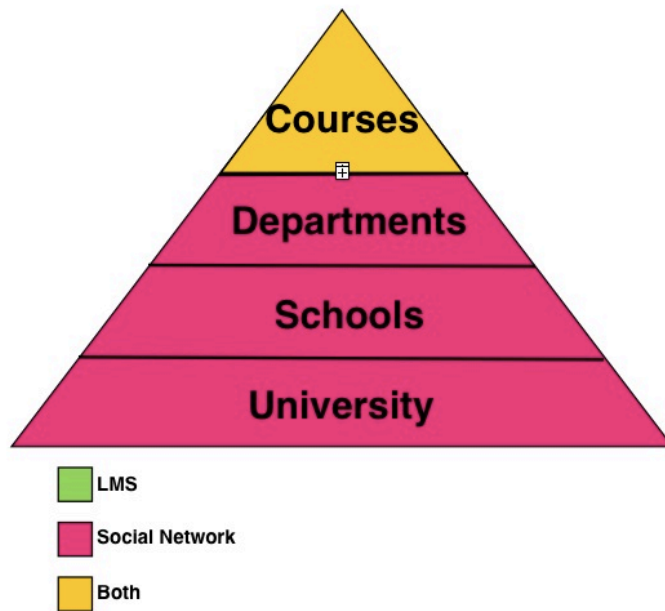
Table 25: Higher Education Structure with LMS and Social Networking

The above table illustrates the structure of the Higher Ed System. The University is at the base and the courses are at the tip. A Learning Management System generally is for course specific work, with some institutions utilizing it at the base level. But a social network can encompass all four levels allowing all to communicate and collaborate on a more personable level. Once that collaborative culture is engrained in the employees of the institution then it will ultimately filter down to the students.

This is not to say that Learning Management Systems such as Oncourse CL and Blackboard do not have their place or are not effective, because they are. But imagine a LMS that incorporates social networking to the extent that students have their own personal learning environments and are free to communicate with others that have similar interests and desires. It can be looked upon in two different ways:

Equation #1: Additive
　　　　LMS + Social Network = A Better LMS

Equation #2: Transformative
　　　　LMS + Social Network = Entirely different set of opportunities for
　　　　　　　　　　　　　　　　　　　supporting digital literacies in higher education

Equation #1 shows that adding a social network to a LMS will obviously create a

better LMS. It will be one more tool that the students, faculty and staff have at its

disposal to use how they so choose. But Equation #2 is a whole new way of

thinking about teaching and learning in higher education. It is a different mentality

that needs buy in at all levels within the institution for success to be achieved.

VI. Conclusion

Taken as a whole, the results obtained from the survey show that a significant number of the N100 students see a positive role for Ning within the N100 course as well as within the University. Ning, with certain learning objectives, is another tool that can be used to improve student learning through social connections. However it is clear that wider experimentation with social networking in other courses throughout the IUPUI campus, more specifically within the Informatics and Media Arts and Science discipline, need to take place before the full potential of a social network to support students, faculty and staff can be realized. In this respect, one of the most common pieces of feedback from students was the need to integrate Ning with the more formal learning environment provided by Oncourse CL. Indiana University and IUPUI have a unique situation within Oncourse CL that they, along with a select few other universities, develop, maintain and continue to improve their own Learning Management System. Ning was utilized in the N100 course to better engage students through something, social networking, that most of them are comfortable working with. Whether these findings can be adapted to subject areas other than the undergraduate tech-savvy Media Arts and Science students remains to be seen. There are dangers though for relying on freeware outside of University control. Recently, Ning just announced that they would become a pay only site. This now leaves many scrambling to find a free solution to their social networking needs, but there are plenty of options out there. Further research is also required to ascertain the influence of the specific institutional context of IUPUI as opposed to the many different types of higher education institutions around the world. More research is

also needed to establish and define best practices when utilizing a social network like Ning. Just having the tools available may not work or be utilized for other courses, depending on how certain instructors care to employ such a tool. It could be that the analysis is unique to IUPUI N100 students. The findings are useful in highlighting a number of issues relating to student use of social networking sites and more importantly, how they may affect student learning. Can Ning be used to improve how students use social networks for learning? Can Ning teach students to be better social networked learners? Can Ning improve grades? These are all questions that are yet to be answered, but one thing is certain from the findings in this research. The benefits far outweigh the challenges. Students felt a connection to the course through Ning. A sense of community was built and a culture of collaboration was apparent. It can be argued that allowing students to construct a social identity role and personal biography can be seen as a vital contribution to the success of a course as well as having a positive impact on student learning and engagement.

VII. Appendix A

N100 Social Networking Survey

Demographics

Age Range   Year of Birth
(optional)_____
[ ] 21 and Under
[ ] 22 to 34
[ ] 35 to 44   [ ]Male   [ ]Female
[ ] 45 to 54
[ ] 55 to 64
[ ] 65 and Over   Major_____
[ ] Decline

Social Media Habits:

Facebook: [ ]Hourly   [ ]More than 3 times a day   [ ]Every day [ ]Every Week
          [ ]Once a Month   [ ]Never

Linked In: [ ]Hourly   [ ]More than 3 times a day   [ ]Every day   [ ]Every Week
          [ ]Once a Month   [ ]Never

Plaxo: [ ]Hourly   [ ]More than 3 times a day   [ ]Every day [ ]Every Week
          [ ]Once a Month   [ ]Never

Myspace: [ ]Hourly   [ ]More than 3 times a day   [ ]Every day [ ]Every Week
          [ ]Once a Month   [ ]Never

Twitter: [ ]Hourly   [ ]More than 3 times a day   [ ]Every day   [ ]Every Week
          [ ]Once a Month   [ ]Never

Other social networks, please list:
_____

How many Facebook friends:
[ ] 50 or less
[ ] 51-100
[ ] 101-150
[ ] 151-200
[ ] More than 200

Do you follow anyone on Twitter?   Yes or No

Have you posted videos at YouTube?   Yes or No

Have you posted photos at Flickr (or a similar service?)   Yes or No

Do you play games online?   Yes or No

Do you play games online with multiple players in real time? Yes or No
Computer Habits:

Own a computer (or have easy access to a home computer): Yes or No

Own a laptop: Yes or No

Own a cell phone: Yes or No

Text on my cell phone: Yes or No

Own a smart phone: Yes or No

Pay for a data plan for my smart phone: Yes or No

Broadband access at my primary residence: Yes or No

Please Circle The Answer That Best Describes Your Agreement or Disagreement

1. Participation in social networking sites should be required of college students.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

2. Social media is a good way to get to meet other students in my chosen major.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

3. I like to share photos and videos with my classmates.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

4. I am concerned that the professors and the TAs are reading what I am writing at the Ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

5. I expect the ning group to lead to potentially getting to know people both online and offline.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

6. I would prefer if the ning group was an open network so that anyone on the web could join.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

7. If no grades were attached to the ning group, I would never voluntarily use it to social network with my classmates.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

8. I think the ning group has a lot of educational value.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

9. Even though this is a closed network in N100, I am worried about another student "phishing" around my profile in the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

10. I do not like to use my actual photo, and prefer a non-realistic image to represent me online.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

11. I haven't used social networks enough yet to have a strong opinion about whether or not social networking should be required of college students.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

12. I like being able to connect with my classmates through an online social network.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

13. I like reading the blogs of my classmates.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

14. I am very comfortable posting personal information about myself in social networks.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

15. It is hard to meet other students at IUPUI, so being able to friend classmates is very useful to me.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

16. Social networking is fun, but I don't have time to do it in my regular routines.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

17. Social networking tools will help me collaborate with other students.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

18. I appreciate classmates's comments on my blogs at the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

19. I am worried how my information will be used at the Ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

20. I expect the ning group to be a tool that will allow me to meet people I don't already know.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

21. I prefer the ning group as a "closed network" because it is being used by a course in which I am officially enrolled.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

22. I would prefer no grades were attached to social networking because I only want to use it to social network with classmates.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

23. I expect to discover new and exciting ways to learn using the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

24. I am not comfortable posting personal information about myself in an online website.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

25. I expect the ning group to be a tool to only meet people I already know.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

26. I feel the ning group is very different from other social networks like Facebook.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

27. Since there are students taking this class I will never meet, I like the ning group as a method for bringing both live lecture and online students together.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

28. The N100 Ning group is a valuable communication tool for the instructor and TAs to relay information to you?

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

29. I only like to be able to see personal information of people I have "friended" or who have "friended" me.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

30. I am not on campus much due to my work and family life, and I appreciate the benefits of the ning group for meeting classmates.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

31. Social networks are a waste of time, and college courses should not use them.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

32. It is useful to see what other students in the class are doing at the Ning site.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

33. I like the ability to leave a comment on a "comment wall" for another student.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

34. I am not worried about how my information will be used at the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

35. I would like to use the ning group to make better friends in the class, especially friends I will potentially meet in real life and offline.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

36. I would social network more if I had a better Internet connection.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

37. I would much prefer to "network" with students in a live discussion section rather than an online ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

38. The Ning group can be a useful tool for discussing the lecture material.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

39. I believe privacy issues in social networks are exaggerated by the media.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

40. I never want to receive updates from individuals I have "friended" to see what they are up to.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

41. I do not like sharing information about myself online.
Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

42. I don't think the ning group has much educational value.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

43. I sometimes want to receive updates from individuals I have "friended" to see what they are up to.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

44. Social networking sites should only be used for family and friends, and not for educational purposes.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

45. I don't expect to discover new and exciting way to learn using the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

46. I frequently want to receive updates from individuals I have "friended" to see what they are up to.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

47. I believe the ning group is very similar to Facebook.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

48. I expect to be able to better collaborate with my classmates due to the ning group.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

49. I like to use my actual photo, so others get to know me.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

50. I don't expect better collaboration with my classmates because this course uses a social network.

Strongly Agree   Agree   Neither Agree nor disagree
Disagree   Strongly Disagree

VIII. Appendix B

<u>N100 Social Networking Follow-Up Survey</u>

Please Circle The Best Answer

1. I have met another student in my chosen major via the Ning group in N100.

Yes   No   Maybe

2. During the first part of this course have you made a friendship via the Ning group?

Yes   No   Maybe

    2a. If so, how many:

    1   2-5   6-10   11-15   16 or more

3. I have successfully collaborated with students via the Ning group.

Yes   No   Maybe

4. I have left a comment or response on someone's post or blog.

Yes   No   Maybe

5. Another student has commented or responded to one of my postings or blogs.

Yes   No   Maybe

6. Outside of course assignments, someone has left a personal message or email for me via the Ning group.

Yes   No   Maybe

7. Outside of course assignments, I have left a personal message or email for someone via the Ning group.

Yes   No   Maybe

8. The professor and TAs successfully use the Ning group to communicate with you.

Yes   No   Maybe

9. You have approached assignments in a different manner because of the Ning group.

Yes   No   Maybe

10. You have found the Ning group to be a useful tool to discuss lecture material.

Yes   No   Maybe

11. Now that you have experienced the Ning group, would you prefer to expand this to an Informatics social network?

Yes   No   Maybe

Open-ended question
What is the motivation behind posting personal pictures, videos, writings on the Ning group?

VIX. References

Bertoni, S. (2010). How Much is Facebook worth? <u>Forbes</u>.

Bianchini, G. (2007). The Story Behind the Ning Name. <u>NING Blog</u>.

Bray, T. (2005). "Not 2.0?". Retrieved January 12, 2010, 2010, from http://radar.oreilly.com/archives/2005/08/not-20.html.

Charlton, T. D., Marie; Drummond, Sarah (2009). "Using "Facebook" to Improve Communication in Udergraduate Software Devlopment Teams." <u>Computer Science Education</u> **19**(4): 19.

Coleman, J. S. (1988). "Social capital in the creation of human capital." <u>American Journal of Sociology</u> **94**(Supplement): S95-S120.

Dybwad, B. (2009). "Purdue University Adds Twitter and Facebook to Class Participation." from http://mashable.com/2009/11/03/hotseat/.

Ellison, N. (2007). ECAR: Facebook as a teaching tool?

Ellison, N. B., C. Steinfield, et al. (2007). "The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites " <u>Journal of Computer-Mediated Communication</u> **12(4)**.

Encyclopædia, Britannica, et al. (2010). Web 2.0 <u>Encyclopedia Britannica</u>, Encyclopædia Britannica Online.

Facebook (2010). "Statistics." from http://www.facebook.com/press/info.php?statistics.

Flew, T. (2003). <u>New Media</u>, Oxford University Press, USA.

Friedman, T. L. (2005). <u>The World is Flat: A Brief History of the Twenty-First Century 3.0</u>, Farrar, Straus and Giroux.

Kohn, A. (1993). "Rewards verses learning: A response to Paul Chance." <u>Phi Delta Kappan</u> **74**: 783-787.

LaMonica, M. (2005). "Andreessen adds some Ning to the Web." Retrieved January 24, 2010, from http://news.cnet.com/Andreessen-adds-some-Ning-to-the-Web/2100-1032_3-5890005.html?tag=st.nl.

Lipka, S. (2007). "For Professors, "Friending" Can Be Fraught." <u>Chronicle of Higher Education</u> **54**(15).

McCrea, B. (2009). "Purdue U Brings Social Networking to the Classroom." from http://campustechnology.com/articles/2009/11/18/purdue-u-brings-social-networking-to-the-classroom.aspx.

O'Reilly, T. (2005). "What is Web 2.0: Design Patterns and Business Modles of the Next Generation of Software." from http://oreilly.com/web2/archive/what-is-web-20.html.

Palfrey, J. and U. Gasser (2008). Born Digital, Basic Books.

Parfeni, L. (2010) 175 Million People Use Facebook Every Day.

Phillips, S. (2007). "A brief history of Facebook." from http://www.guardian.co.uk/technology/2007/jul/25/media.newmedia.

Rheingold, H. (2008). "The Social Media Classroom." from http://socialmediaclassroom.com.

Services, U. I. T. (2009). "What is Oncourse CL?". from http://kb.iu.edu/data/apqd.html.

Shirky, C. (2003). "Social Software and the Politics of Groups." from www.shirky.com/writings/groups_politcs.html.

Tapscott, D. (2008). Grown Up Digital: How the Net Generation is Changing Your World, McGraw-Hill.

Thibault, J. W. and H. H. Kelley (1952). The Social Psychology of Groups. New York, John Wiley and Sons.

University, of, et al. (2006). "University of California Berkeley You Tube Channel." Retrieved February 20, 2010, from http://www.youtube.com/ucberkeley.

Wikipedia (2010). "Blackboard Inc.". Retrieved February 24, 2010.

Wikipedia (2010). "Learning managemnt system." from http://en.wikipedia.org/w/index.php?title=Learning_management_system&oldid=345488165.

Wikipedia (2010). "Moodle." Retrieved February 25, 2010, from http://en.wikipedia.org/w/index.php?title=Moodle&oldid=348646165.

Wikipedia (2010). "Myspace." Retrieved February 26, 2010, from http://en.wikipedia.org/w/index.php?title=MySpace&oldid=347575960.

Wikipedia (2010). "Ning (website)." Retrieved February 15, 2010, from http://en.wikipedia.org/w/index.php?title=Ning_(website)&oldid=344091635.

Yadav, S. (2006). "Facebook: The Complete Biography." from http://mashable.com/2006/08/25/facebook-profile/

X. Curriculum Vitae

Curriculum Vitae

Eric Esterline

EDUCATION

M.S., Media Arts and Science, Indiana University
B.S., Telecommunications, Butler University

ASSITANTSHIPS

Graduate Research and Teaching Assistantship, 2009-2010
School of Informatics, IUPUI

PUBLICATIONS

"Creating a Community of Learners Using Ning.com: A study into the Pedagogical-Educational Value of Social Networking in a Large Multi-Section Introductory Media Arts and Science Course at IUPUI"

CONFERENCES AND PRESENTATIONS

"What Social Media Does Best: Innovative Teaching and Learning Practices Using Social Networks." (with Professor Richard Edwards) iDMAa, Ball State University. November 6, 2009.

EMPLOYMENT HISTORY

Current   Westfield Washington Schools   Westfield, IN
Technology Professional Development Coordinator

- Provide technology integration resources and support to faculty and staff
- Conduct technology training sessions
- Have trained and implemented faculty and staff in: podcasting, blog creation, course management systems, promethean (smart) board usage, apple computers (iMovie, podcasting, garage band, basic usage)
- Developed an online video tutorial resource for faculty and staff for training purposes
- Developed and implemented a technology staff newsletter
- Boys Tennis Coach

August 2004-May 2008   Brownsburg High School   Brownsburg, IN
TV Broadcast/Mass Media Instructor

- Various subjects covered include: Radio/TV history, video camera and equipment operation, news reporting and writing, single and multi-camera studio production, on-air performance, audio/video editing, film production

- Extended Play Club Sponsor *(Extracurricular Audio/Visual Club)*
- Multimedia producer for Brownsburg Community School Corporation
- School Improvement Committee
- Indiana Association of School Broadcasters Member
- Boys Tennis Coach

June 2007-September 2007   ITT Technical Institute   Indianapolis, IN

Adjunct Instructor

- Instruction in Television and Film Production and Adobe Premiere Pro/ Final Cut Pro video editing
- Multimedia producer for ITT Technical Institute

August 2001-July 2003   XM Satellite Radio   Washington D.C.

NASCAR Radio

- Producer for morning and afternoon race talk show
- Sports reporter, board operator, production coordinator, station programming
- Various duties include: book show guests, screen calls, direct on-air talent, gather and edit sound, operate console board, execute and write live sports reports, produce parody pieces, produce daily NASCAR History segment