

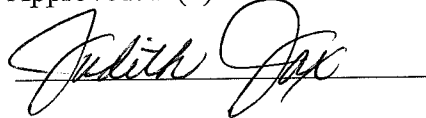
Perceptions of the Online Learning Environment Among  
College Students Who Have Never Taken  
an Online Course

by

Julia M. Buck

A Research Paper  
Submitted in Partial Fulfillment of the  
Requirements for the  
Master of Science Degree  
in  
Education

Approved: n (2) Semester Credits

A handwritten signature in cursive script, appearing to read "Judith Jax", written over a horizontal line.

Judith Jax, Ph.D.

The Graduate School  
University of Wisconsin-Stout

July 2009

**The Graduate School  
University of Wisconsin-Stout  
Menomonie, WI**

**Author:** Buck, Julia M.

**Title:** *Perceptions of the Online Learning Environment Among College Students Who Have Never Taken an Online Course*

**Graduate Degree/ Major:** MS Education

**Research Adviser:** Judith Jax, Ph.D.

**Month/Year:** July, 2009

**Number of Pages:** 72

**Style Manual Used:** American Psychological Association, 5<sup>th</sup> edition

ABSTRACT

This research study was conducted to understand the demographics and perceptions of online learning held by college students who have never taken an online course. A 15 question survey developed by the researcher was sent to current graduate and undergraduate students who were identified as not registering for a distance learning course during the spring 2009 semester. The survey was sent by email to these students using the University of Wisconsin-Stout survey tool, SelectSurvey ASP. Questions given to survey participants included multiple choice opinion and perception based questions in addition to basic demographic questions including age, gender, undergraduate or graduate level, and full-time or part-time student status. Data was collected and analyzed to determine current perceptions of online learning and statistically significant correlations between perceptions and the demographic data.

The findings of this study showed that most students would consider taking an online course in the future, but would prefer a face-to-face course when given the choice. There was a statistically significant relationship between age and perceiving technology as a weakness of online learning, age and students accessing the Internet at work, gender and accessing the Internet at a friend or relative's home, and preferences of both men and women for face-to-face courses when given a choice between online or face-to-face.

**The Graduate School**  
**University of Wisconsin Stout**  
**Menomonie, WI**  
**Acknowledgments**

Many people stand out as having made a contribution to the success of my educational goals. The support of my family, friends, and coworkers has been amazing. I would like to thank my advisor, Dr. Judith Jax, for her outstanding help and support of me during the writing of this paper. I would also like to acknowledge my children, Ben, Sarah, and Elizabeth, who have shared me with my computer on more occasions than I would like to admit. Thank you! I love each of you more than you could ever know!

## TABLE OF CONTENTS

	Page
<b>ABSTRACT</b> .....	ii
<b>List of Tables</b> .....	vii
<b>Chapter I: Introduction</b> .....	1
<i>Statement of the Problem</i> .....	4
<i>Purpose of the Study</i> .....	5
<i>Definition of Terms</i> .....	6
<i>Assumptions of the Study</i> .....	7
<i>Limitations of the Study</i> .....	7
<i>Methodology</i> .....	7
<b>Chapter II: Literature Review</b> .....	9
<i>Introduction</i> .....	9
<i>Definition and Explanation of Online Learning</i> .....	9
<i>Popularity and Growth of Online Learning</i> .....	10
<i>Educational Opportunities are Now Available for a New Population</i> .....	11
<i>Students Have Choices in Online Learning</i> .....	11
<i>Online Learning Advantages for Students</i> .....	12
<i>Online Learning Benefits for Educational Institutions</i> .....	14
<i>Disadvantages of Online Learning for Students</i> .....	15
<i>Disadvantages for the Educational Institution</i> .....	16
<i>Growth of Online Learning</i> .....	18

<i>Characteristics of the Online Population</i> .....	20
<i>Satisfaction of Online Courses versus Face-to-Face Course</i> .....	21
<i>Conclusion</i> .....	22
<b>Chapter III: Methodology</b> .....	24
<i>Introduction</i> .....	24
<i>Subject Selection and Description</i> .....	24
<i>Instrumentation</i> .....	25
<i>Data Collection Procedures</i> .....	25
<i>Data Analysis</i> .....	26
<i>Limitations</i> .....	26
<b>Chapter IV: Results</b> .....	27
<i>Item Analysis</i> .....	27
<b>Chapter V: Discussion</b> .....	54
<i>Limitations</i> .....	54
<i>Conclusions</i> .....	54
<i>Recommendations</i> .....	57
<b>References</b> .....	58
<b>Appendix A: Survey</b> .....	62
<b>Appendix B: IRB Approval</b> .....	65

## List of Tables

Table 1: Survey Respondents.....	28
Table 2: Demographic Data of Survey Respondents.....	29
Table 3: Access to the Internet.....	31
Table 4: Statistical Data for Accessing the Internet at Work and Age.....	32
Table 5: Comfort with Computer-Related Applications.....	33
Table 6: Concerns Regarding Online Courses.....	34
Table 7: Comfort with Computer-Related Applications.....	36
Table 8: Statistical Data for Gender and Comfort Using the Internet.....	37
Table 9: Choice of Online or Face-to-Face Format.....	38
Table 10: Statistical Data for Gender and Choice of Future Course Format.....	39
Table 11: Reason for Choosing Face-to-Face or Online Format.....	41
Table 12: Willingness to Take a Future Online Course.....	43
Table 13: Statistical Data for Gender and Consideration of Future Online Course.....	44
Table 14: Likelihood of Online Course Enrollment Within One Year.....	45
Table 15: Statistical Data for Gender and Likelihood of Taking an Online Course Within One Year.....	46
Table 16: Perception of Online Course Difficulty in Comparison to Face-to-Face Courses.....	47
Table 17: Perceived Strengths of Online Courses.....	49
Table 18: Statistical Data for Gender and Perceived Strength of Independence.....	50
Table 19: Perceived Weaknesses of Online Courses.....	52
Table 20: Statistical Data for Age and Perceived Weakness of Technology.....	53

## Chapter I: Introduction

Online learning is in a period of immense growth at all academic levels and avenues as “educational technology keeps advancing and can be expected to continue advancing indefinitely” (Sweller, 2008, p. 32). The National Center on Education Statistics (NCES) reports that:

During the 12 month 2000-2001 academic year, 56% of all 2 year and 4 year Title IV eligible, degree granting institutions offered distance education courses for any level or audience, 90% of public 2 year and 89% of public 4 year institutions offered distance education courses in 2000-2001, and college-level, credit-granting distance education courses at either the undergraduate or graduate/first-professional level were offered by 55 percent of all 2-year and 4-year institutions. (National Center for Education Statistics, 2003).

Observing current trends, it is clear that online learning is becoming an extremely popular option for those students who may be seeking a convenient alternative to traditional learning scenarios.

As this area of growth continues, educational institutions must understand existing and current trends, educational quality concerns and satisfaction of their students. Understanding the reason that students choose online learning versus traditional classroom education is imperative if colleges are to offer online courses that appeal to students. In addition, schools must ensure a quality learning experience that is consistent with their philosophies. “Higher education institutions face a tremendous challenge of designing effective and sustainable online courses” (Rodriquez, Ooms, & Montanez, 2008, p.106). A lot of research has been done in the area of online learning, particularly regarding the comparison of online courses to traditional face-to-face courses. However, there are many other aspects of online learning that need to be

investigated further, such as the advantages and disadvantages for both students and the institutions, quality of instruction, use of technology, and development of sustainable programs.

This research paper will explore a unique facet of the online learning community, those who have not yet entered into it. It will specifically explore the factors that influence students' decisions to eschew online courses in favor of traditional face-to-face coursework. With the exploding growth of the distance learning market, along with educators wondering how to best serve this population in terms of quality, technology, and convenience, it is important to investigate the population that is not involved and explore the reasons that keep these students in traditional classrooms. More specifically, this research paper will look at what kind of perceptions students who choose to remain only in the traditional classroom may have about online learning courses. These students may not be progressing in the realms of technology.

By identifying perceptions of online learning held by college students who have never taken an online course, educators can gain a better understanding of this group and address their needs. Identifying perceptions may be able to offer some helpful insight into the construction and delivery of online courses. Perhaps even more importantly, it may allow institutions to develop better marketing plans, tailored to addressing those perceptions, both good and bad. This may allow institutions to accommodate an even larger population, a more diverse range of students or address and resolve concerns that may have been overlooked.

There are numerous advantages and disadvantages to the online learning environment for both the student and the institution. Advantages include numerous conveniences such as the ability to work around employment and family demands as well as closing the distance gap. While advantages have propelled this instructional avenue into a high level of growth, disadvantages keep a population of students in traditional classrooms. Often identified as

disadvantages are the lack of student-teacher interaction, student-to-student interaction, and technology. Another disadvantage may be that only some of a student's required courses may be offered online.

Students that take online courses have the ability to choose their hours of study. No longer are they limited by classroom and time availability. Online classrooms are available 24 hours a day, seven days a week. Students now have the option of continuing their education while maintaining their employment. Another benefit is that online learning now offers students the opportunity to study at universities and colleges that are far away without having to leave their hometown or family.

College students are often technologically savvy. "Today, the Internet and its prevalence allow almost anyone to become a distance learner through online course offerings" (Hollomann & Warren, 2008, p.148). "The majority of households have personal computers and Internet access. In 2003, 70 million American households, or 62 percent, had one or more computers, up from 56 percent in 2001" (United States Census, 2003). In addition "among adult students, 85 percent said they used a computer at school, and 66 percent used the Internet there." (United States Census, 2003). According to a study done by Horrigan in 2008, "55% of American adults now have high speed Internet access" (Horrigan, 2008, p. 3). With the popularity of home computers and Internet usage, online course offerings have become a viable alternative for almost all students.

However, it is equally important to consider the disadvantages to online learning. Ensuring student success and commitment without teacher and student ever meeting is challenging. Group projects and learning from peers becomes equally concerning. Some students may find this new type of interaction frustrating and limiting in their education.

Just as technology was recently discussed as an advantage, it can also be considered a disadvantage. Students who may not have a good knowledge of common programs such as Microsoft Word or Excel may become frustrated by having to navigate technology in order to learn the subjects.

Despite the wide range of advantages and disadvantages, online learning is becoming a popular choice for all levels and ages of students. It is also important to consider that a student may have never had the opportunity to take online courses, or perceive such courses as not interesting or purposeful to the student.

### *Statement of the Problem*

All learning institutions should have a clear and precise understanding of the perceptions of both the students who have engaged in online learning as well as those who have never taken an online course in order to provide a quality product to their students.

Many studies have explored how students perceive online learning. It is difficult to find information addressing the perception of online learning of students who have never taken an online class. Colleges and universities are currently offering numerous online or distance education opportunities for students, but availability, format, and quality vary.

By not understanding the perceptions of the population of students who do not engage in online learning, institutions are not able to fully address the needs of these students. Identifying perceptions will allow insight into potential issues, problems, or even opportunities that could improve not only online learning, but even traditional learning situations.

This research will explore the perceptions of online learning among college students who have never taken an online course. There are many current college students who have not taken an online course, and every educational institution investing in online options should be

interested in what motivates some students to stay in traditional classrooms versus the online counterparts.

### *Purpose of the Study*

A sample of students who have not taken an online course will be surveyed to identify current perceptions of online learning and of the online learning environment. In addition, basic demographic data will be collected to determine any potential correlation between nonparticipation in online courses and factors such as age, gender, undergraduate or graduate level, and part-time or full-time status. Data will be gathered using an online survey of University of Wisconsin - Stout students.

This study will look for reasons why some students are not taking online courses. It is also important to know how online learning is perceived by students who have never taken an online course. With knowledge of this specific population, school administrators will gain valuable insight as to what changes, ideas, or creative measures can be done to ease the concerns of this specific population and open the door to their use of this resource.

With that being stated, there continues to be a population that is hesitant to try the online learning approach. The literature review will address what constitutes online learning, its growth and availability, advantages and disadvantages of the topic, perceptions of the learners, and the reasons for its tremendous growth in the last several years. It will also address the idea that there is a population of students who are not taking online courses for many reasons. Identifying who these students are and the perceptions they have regarding online learning will be the main focus of this research.

Three main research questions will be explored in this study. They are:

1. What perceptions do students who have never taken an online course have about online learning?
2. What reasons do students who have never taken an online course have for not taking an online course?
3. Do students who have never taken an online course perceive learning opportunities as similar in an online classroom to a face-to-face classroom setting?

### *Definition of Terms*

*Constructivism:* “Point of view that holds that what individuals learn and understand is constructed through their mental processes and social interactions” (Bruning, Schraw, Norby, and Ronning, 2004, p. 363).

*Distance Education:* The United States Distance Learning Association defines distance learning as “the acquisition of knowledge and skills through mediated information and instruction. Distance learning encompasses all technologies and supports the pursuit of life long learning for all. Distance learning is used in all areas of education including Pre-K through grade 12, higher education, home school education, continuing education, corporate training, military and government training, and telemedicine.” (United States Distance Learning Association, 2008).

*Online:* “Connected to, served by, or available through a system and especially a computer or telecommunications system (as the Internet)” (Merriam-Webster, 2008).

*Technology:* “A manner of accomplishing a task especially using technical processes, methods, or knowledge” (Merriam-Webster, 2008).

### *Assumptions of the Study*

This study assumes that there are some students who are willing to engage in online learning, but there are reasons that prevent them from taking online courses. In doing this study, the researcher assumes that the students participating will be honest in their responses to the questions about online learning. It is assumed that students who have not taken an online course will take the survey. Because the population will be randomly selected, the researcher assumes that the students participating in the study will not complete the survey if they have taken an online course.

### *Limitations of the Study*

It is assumed that roommates, friends, and other influential persons involved in the student's life that may or may not have taken an online course at some point may have an impact on the student's perception of the study. The results of the study can also be limited by the number of years the student has attended the college. If a respondent is a first year college student, this may have an impact on the study and results as the student may not have had the opportunity to take an online course. The timing of the study, feelings toward current face-to-face classes, perceptions of the university as a whole, and the general overall college experience all may have an influencing impact on the student's perceptions of online learning. This study is limited in scope as it was done at one campus – the University of Wisconsin – Stout.

### *Methodology*

Chapter three of this research paper will address the methodology used to address the topic of online perceptions of students who have never taken an online course. The study was a quantitative study of UW-Stout students who have never taken an online course using the online survey tool, SelectSurvey ASP (Appendix A). The survey was sent via email to a random sample

of 2,541 UW-Stout students who had not registered for a spring 2009 distance learning course. This sample consisted of 2,304 undergraduate and 237 graduate students attending on both a full-time (1755 students) and part-time (786 students) basis. Students were asked several questions about their perceptions of online learning, including strengths and weaknesses of online courses and reasons for not taking an online course. Demographic data, including age, gender, level (undergraduate or graduate) and status (full-time or part-time) was also gathered. In chapter four, the data will be analyzed to look for potential correlations between reasons, perceptions and demographic data using Pearson's chi squares and Fisher's Exact Tests to check for relationships between the variables, and Phi and Cramer's  $V$  tests to test for the strength of those relationships. An ANOVA test was also used to test for differences in the average responses to Question 8. Chapter four will conclude with limitations of the survey, population, and resulting data. A discussion of the data and recommendations for further studies can be found in chapter five.

## Chapter II: Literature Review

### *Introduction*

Universities, technical colleges, and other schools across the country are exploring the options of offering more courses and even entire programs online. “Distance education is becoming increasingly global, creating myriad new alliances as traditional educational institutions join with businesses, foreign governments, and international organizations to offer and use distance learning” (Potashnik & Capper, 1998, p. 42). The reasons for this are numerous. With the popularity and availability of computers, software and technology, educational institutions are continuing to explore ways to reach out to more students. This literature review will address what constitutes online learning, its growth and availability, advantages and disadvantages, and the reasons for its tremendous growth in the last several years. It will also attempt to answer the following questions: What perceptions do students have about online learning, what reasons do students who have never taken an online course have for not taking an online course, and do students perceive learning opportunities as similar in an online classroom to a face-to-face classroom setting?

### *Definition and Explanation of Online Learning*

Online learning, a form of distance learning, or elearning, is unique in that it provides the traditional college education in a nontraditional way. In fact, a student engaged in online learning may never set foot on their college campus during their entire educational process. All aspects of a student’s application, registration, and coursework can now easily be done completely online and off campus with the assistance of technology.

When students enroll in a distance learning course, specifically an online course, “not only does the instruction occur via a computer system, usually over the Internet, but other

educational processes occur via the computer as well. These educational processes are student services, training, and support” (Levy, 2003, ¶ 1). Online courses are set up in a variety of ways, utilizing both traditional and nontraditional teaching methods. Courses are generally available to students through the use of the Internet with a similar structure to those typically found in face-to-face classrooms. “The interface is usually some form of course management software, such as Blackboard or eCollege, that offers various options for navigating through course lessons, posting assignments (sometimes using a shared group working area), and discussing topics with other participants” (Hamilton-Pennell, 2002, p.33).

Students can expect many of the same traditional types of learning activities, including interaction and discussions with their classmates. “Online courses present materials but also provide interaction between instructor and student as well as among students.” (Schell, 2004, p. 54). “Although educational innovations such as active learning, collaborative learning, project-based teaching and situation learning have changed the nature of face-to-face instruction, online courses tend to build on very traditional views of learning. (Johnson & Aragon, 2003, p. 33).

#### *Popularity and Growth of Online Learning*

The popularity of online learning is evident in the numbers. “In the 12-month 2000–2001 academic year... there were an estimated 2,876,000 enrollments in college-level, credit-granting distance education courses, with 82 percent of these at the undergraduate level” (Waits, Lewis, & Greene, 2003, p.4). Since then, there has continued to be incredible growth. “In the 2006–07 academic year, 2-year and 4-year institutions reported an estimated 12.2 million enrollments (or registrations) in college-level credit-granting distance education courses” (Parsad & Lewis, 2008, p. 3). This type of growth is indicative that students are finding success and satisfaction in online learning. “Some experts say that the rising interest in online programs could lead more

colleges to expand their offerings or experiment with “blended” courses that mix in-person and online meetings” (Young, 2008, p. A20). However, with that astonishing growing popularity, there continues to be a population that is hesitant to try the online learning approach and do not enroll for online courses.

### *Educational Opportunities are Now Available for a New Population*

Advocates for online learning indicate that with the increasing availability and popularity of online learning, higher education courses are now available to a new group of learners who were unable to take higher education courses due to these issues of time, distance, and other responsibilities (Wyatt, 2005, p.460). Almost any course is now available via technology and the Internet. “The reason for much of the growth in distance education programs in recent years is the development of the Internet and improvement of technologies that support online learning environments.” (Johnson & Aragon, 2003, p.31). According to the National Center for Education Statistics, “the most common reasons that affect distance education decisions were meeting student demand for flexible schedules, providing access to college for students who would otherwise not have access, making more courses available, and seeking to increase student enrollment”. (Waits, Lewis, & Greene, 2003, p.32). Even traditional face-to-face courses are incorporating technology. As a matter of fact, “it is difficult to find a higher education course that does not employ or take advantage of technology in some way” (Rodriguez, Ooms, & Montanez, 2008, p. 105).

### *Students Have Choices in Online Learning*

With so many schools now offering numerous courses or even full programs online, students are flooded with a wide range of educational choices. Schools must invest in their own futures by marketing their programs effectively, providing competent instructors and sound

educational methods to capture and secure potential students. In addition, there is a substantial investment that must be made in the technology as well as training needed to make it succeed.

### *Online Learning Advantages for Students*

Perhaps the biggest advantage often used to describe online learning is that it has potential as a great convenience for students. In the discussion of a study done by Bold, she writes “student’s most frequent description of DL (distance learning) concerned its convenience and the word “convenient” appeared in answers across multiple survey items, regardless of whether a question sought information about convenience” (Bold, 2005, ¶ 36). In addition, “the greatest single convenience cited was not having to drive to campus for class” (Bold, 2005, ¶ 36). Distance and reliable transportation is no longer an issue for students enrolling in online courses as students no longer have to live in the vicinity of their school. Taking classes online allows students to take courses at schools that would otherwise be too far away or would require them to relocate. This also allows them to choose the college or university that will best meet their educational goals, not their demographic goals. In fact, with online learning, they can even live in or attend schools in other countries. Online learning offers these students the ability to fit courses around their existing jobs, family demands, and lifestyle choices by being available 24 hours a day, 7 days a week. With this type of constant access, students are able to study and complete their coursework at a time that fits into their schedules. Because of the availability of the Internet and the convenience of online learning, almost any type of learning or degree is now an option.

As stated, convenience and flexibility are benefits to online coursework (Bold, 2008, ¶ 36). Other advantages are easily identified as well with online learning. “Lower travel costs are showing up as a selling point in materials that market online programs” (Young, 2008, p. A20).

The student does not need to travel, therefore saving money on commuting costs such as gas, automobile maintenance and insurance. At times when gas prices are high, it seems logical to enroll in an online course instead of a face-to-face course, merely for the sake of budgeting.

Students who are parents have the option of staying home with their children and saving money on childcare. They can also custom design their school schedules and work within a timeframe that is most convenient to that individual's particular lifestyle. It is not necessary to rearrange home or work schedules. Parents are no longer faced with having to choose between attending class or their children's basketball games or other events. The invention of the laptop makes online learning portable, thereby becoming even easier and more convenient. One online student interviewed stated that "he enjoys taking his classes with him to his favorite coffee shops and even on vacation" (P.T. Ericksen, personal communication, December 20, 2008).

Some benefits are more personal, such as the potential to acquire skills of self motivation and responsibility. "Motivated students make obvious candidates for online courses." (Maeroff, 2004, ¶ 20). Without the weekly face-to-face interaction of a traditional classroom, students need to learn to read and follow directions carefully, meet rigorous academic demands and due dates, and work harder to establish connections with their online peers.

Challenges and opportunities to interact with a wide variety of students is another benefit to online learning. In one particular study, "50% of the students believed that the online courses gave them more opportunities to interact with their classmates as compared to a face-to-face course" (Leonard & Guha, 2001, p.55). This same study also found that "60% of the students believed that taking an online course was more challenging than taking a traditional course" (Leonard & Guha, 2001, p. 55). In addition to increased or better interaction with classmates, online students may find it easier and more convenient to interact with the course instructor.

“Emerging technologies provide opportunities for instructor-student as well as student-student real-time and/or time-delayed collaboration (Beldarrain, 2006, p.140).

“Another definitive benefit of the online learning experience was the autonomy given to students so that they were able to learn effectively on their own” (Robinson & Hullinger, 2008, p. 101). Many students find this type of learning experience rewarding and challenging at the same time. And opposite of autonomy, students can experience a wide range of diversity because online courses are available to students everywhere, no matter where their geographical location. Students who take online courses “have better opportunities to interact with a wider range of people than in traditional courses” (Li & Akins, 2005, p. 52).

Online courses appeal to and are sought out by a variety of different students for different reasons. In addition to the reasons of convenience, time, and location, some students may find the online environment more suitable to their own personal learning styles or personalities. These students may be more comfortable in the online learning environment. For example, “people who are introverts are more adept at creating a virtual environment because they can process information internally and are less outgoing socially” (Palloff & Pratt, 1999, p. 22). However, all learning styles may find online learning a suitable option. “Web-based learning allows for continuous monitoring of student progress, time for reflection and participation by all students, and modules designed for a variety of learning styles” (Hamilton-Pennell, 2002, p.33).

#### *Online Learning Benefits for Educational Institutions*

In addition to the benefits and conveniences for the student, educational institutions are also reaping the benefits of offering classes online. “These courses free up classroom space, allow faculty to reach a wider audience using technology, and are therefore cost effective” (Mansour & Mupinga, 2007, p.242). Schools are now enrolling students all over the country,

even students in other countries, making classrooms more interesting and diverse. Delivery of higher education is changing. “Once most courses are available in digital formats as well as on campuses, geographic monopolies and barriers that have sustained thousands of different colleges and universities in the U.S. and around the world will weaken” (Hiltz & Turoff, 2005, p.62).

Other issues such as the coordinating of classroom space and time concerns, the general expenses of paper, lighting, heating and air conditioning, parking, all contribute to the advantages discovered by the schools. Finding better qualified instructors to teach online courses may be easier as well, as the course is no longer limited to any specific geographical location. As with students, instructors may also be located in other states or even other countries.

#### *Disadvantages of Online Learning for Students*

Online learning certainly is not without its disadvantages for students. While technology has seen immense growth, there are still students who are not computer literate or do not like computers. “These students must invest extra effort in learning the necessary technology skills while being expected to simultaneously master new course content. (Rodriguez, Ooms, & Montanez, 2008, p. 106). This may be difficult, frustrating or even overwhelming for students. In one study, “technology hiccups and feeling lost in cyberspace were cited as negative experiences for the online class” (Mansour & Mupinga, 2007, p.247). As expected, “more experience with computers (hours per week of computer use, year of computer ownership, number of distance education courses taken) is generally related to more positive attitudes toward Internet-delivered courses” (Koroghlanian & Brinkerhoff, 2007-2008, p. 239).

Some students do not possess the motivation to complete coursework on their own and may drop out without the physical presence of a teacher or fellow students. In one study, “the

majority of students (over 70%) indicated they did not really know their fellow students and the instructors well when taking online courses” (Liu, Magjuka, Bonk, & Lee, 2007, p. 19). In a survey done by Ouzts, “only 15% of the students who completed the survey perceived a high sense of community in their courses” (Ouzts, 2006, p. 292). When looking at expert opinions on the disadvantages of online learning, Cole comments that in a face-to-face classroom environment “a teacher satisfies student needs for connections to others, challenges them beyond expectations, promotes high-level and collaborative learning, and can adjust to student personalities and learning styles.” (Luterbach & Cole, 2008, p.8). In addition, learning can be frustrating for students who find themselves in classrooms with little feedback or teacher direction.

Also, students need to be concerned with finding quality courses and quality schools. “With the proliferation of online courses as part of many college and university degree programs come many concerns about the quality of online courses” (Rakes, 2008, p.1). “There is no equivalent in higher education of a “consumer’s union” or other non-profit organization dedicated to providing unbiased information to the student at a level of assessing deficient degree programs and courses, much like a consumer can get details on the properties of a particular automobile”. (Hiltz & Turoff, 2005, p.63). This requires students to thoroughly research educational institutions offering programs before enrolling.

#### *Disadvantages for the Educational Institution*

Disadvantages to online learning also present challenges for the educational institutions. “The rapid growth of online classes fosters concerns about quality of instruction as well as student learning” (Ouzts, 2006, p. 285). “The rapid growth of online distance education worldwide has prompted the need to revise delivery structures and rethink pedagogical practices

that were once appropriate” (Beldarrain, 2006, p.139). Poorly constructed and/or taught courses could be devastating to the reputation of the institution. In addition, colleges and universities are being forced to face the changes and challenges of educating online. “In the structural change resulting from the elimination of geographical monopolies for higher education, colleges and universities must face the need to change, or risk extinction” (Hiltz & Turoff, 2005, p. 62).

Class enrollment needs to be kept at numbers that keep the class profitable. However, enrollment issues can also be a concern as well. “Increasing the number of students who claim to have studied there can damage a university’s reputation if those students do not receive the level of teaching that the university’s name was built on (Lessons of a Virtual Timetable, 2001). Finding a balance between enrollment and cost effectiveness is a continuous challenge.

It has become necessary for educational institutions to be on the leading edge of technology and to have good support systems. There are numerous technologies that must be invested in, and these technologies come at a price. “Technologies utilized for distance learning include: correspondence courses, physical mail, and printed matter; telephone and/or audio recordings; television and/or video recordings; computer-assisted instruction; group communications (asynchronous and synchronous); the web and multimedia materials; simulation and gaming; collaborative learning; asynchronous learning networks (ALN); collaborative knowledge systems; immersive simulations; and wireless and handheld devices” (Hiltz & Turoff, 2005, p.59). This vast variety in technology requires a major commitment and investment on the part of educational institutions to stay competitive and build and offer well designed courses.

However, “in spite of the rapid growth in its use, there is considerable concern about the effectiveness of computer technology in education” (Johnson & Aragon, 2003, p. 32). Colleges and universities are continuously challenged with using technology efficiently and effectively.

“Making the best use of technology to provide an instructionally sound and effective learning experience can also be tricky” (Hamilton-Pennell, 2002, p.34).

Inadequate training and resources for teachers in online classrooms can also provide unsatisfactory learning environments for students. Parker states that “learning technologies can promote powerful connections to content, context, and community. Unfortunately, they can also offer broad access to poorly designed and executed software.” (Parker, 2004, p. 405). Providing adequate training may be difficult and expensive. Well trained instructors that are skilled at presenting a challenging and well designed course are hard to find. Instructors may not like to teach online and resist the change. Putting weak or poorly constructed courses online can be destructive to an educational institution.

Tying both the advantages of such a wide range of beneficial technology together with good teaching strategies is challenging. A survey done by Bold reports that “social connection emerged as a problematic aspect of distance learning” (Bold, 2008, ¶ 38). She continues that “although most students reported feeling connected in the online setting, loss of interaction was cited frequently as a disadvantage with comments such as “I miss the continued face-to-face interaction” (Bold, 2008, ¶ 38). Face-to-face classrooms offer teachers the ability to get to know the students, identify with them personally, ask questions, and give hands on assistance. In online environments, the reduced social and visual cues might expose online learners to a risk of feeling isolated and disconnected. (Liu, Magjuka, Bonk, & Lee, 2007, p.9).

### *Growth of Online Learning*

Finding a balance between the advantages and disadvantages are crucial for colleges and universities. Online learning is becoming an important and vital part of education. If schools want to continue to engage in online learning, it is essential for them to be informed and

maintain constant understanding of and research into promoting the benefits. In addition, schools must understand the disadvantages and explore opportunities to overcome them. “Instructors must be able to gain and maintain students’ attention by providing an environment that is engaging and participative” (Johnson & Aragon, 2003, p.36).

Colleges and universities are offering many types of options online for students. According to Potashnik and Capper, “even some elite universities that would not previously have considered getting involved in distance education are cautiously entering the arena” (Potashnik & Capper, 1998, p. 42). We are even seeing enrollments of more than “100,000 students per year” in “mega universities” (Potashnik & Capper, 1998, p. 42) . There is a lot of variation on what types of courses students can enroll for online. Some institutions offer just a few courses, while others may offer an entire degree without a student ever having to step foot on campus.

Others are finding this a business opportunity as well and are quickly offering numerous services to help educational institutions meet their online goals. “There are more than 250 firms eager to help established universities to go online (Lessons of a Virtual Timetable, 2001). There are many challenges that must be met in order to offer a quality online course. Planners and educators need to gain insight and knowledge into their students in order to deliver a good product. “To develop the market for e-learning requires a deeper understanding of the process of learning, how pupils respond to ideas presented by a computer rather than by a teacher or a book” (Lessons of a Virtual Timetable, 2001).

The challenge for instructional designers is to devise ways to incorporate the most effective and innovative instructional strategies in courses delivered over the Internet” (Johnson & Aragon, 2003, p. 33). Online learning must continue to evolve and change as technology improves and the understanding of good online learning practices increases.“As distance

educators acknowledge the need to foster social interaction for the purpose of knowledge construction, pedagogical approaches are adjusted and new teaching models emerge” (Beldarrain, 2006, p. 142). There are many technological tools available to enhance the learning environment. Institutions must know what they are, be well trained in them and choose them appropriately. In addition, “teaching models that integrate technologies such as blogs or wikis may afford more learners control, and thus may be more effective at delivering instructional strategies that support knowledge constructions” (Beldarrain, 2006, p.142).

The use of technology allows putting many course documents easily online. “The versatility of social software and other collaboration tools available today support constructivist environments that seek to motivate, cultivate and meet the needs of the 21<sup>st</sup> century learner.” (Beldarrain, 2006, p.140). Course materials have to be clearly written with explicit directions. Colleges are challenged with the task of deciding how to “design and implement” online learning programs (Levy, 2003, ¶ 10). Developing programs that maintain an institution’s standards and uphold its commitment to academic excellence is challenging. Measuring and ensuring that students competently meet the course competencies is difficult. Online instructors must create an online learning environment that helps students learn well independently while providing challenging and worthwhile activities that meet the competencies of the course.

#### *Characteristics of the Online Population*

The online student can be anyone, but there are some current trends. Online learning seems to be preferred by females more than males. According to a study done by Selwyn, “using the computer for studying online and ‘e-learning’ was seen as one of the more feminine aspects of computing – alongside art and design, communicating via chat rooms and email.” (Selwyn, 2007, p. 744) and also reports that “this relatively feminine view of e-learning was consistent

between male and female respondents. (Selwyn, 2007, p. 745). Another study done by Koroghlanian and Brinkerhoff also found that “females are more likely than males to find such courses more convenient and to prefer them over a face-to-face format than males (Koroghlanian & Brinkerhoff, 2007-2008, p. 239). Even more interesting was a study done by Lim and Kim that interpreted that “female students seemed to attribute their successful learning experiences from external sources such as instructional design factors while male students find those from internal orientation such as personal interest and motivation” (Lim & Kim, 2003, p. 434).

There has been research done on the skills and attitudes of online course takers. (For example, a study showed that “most students who have taken one or more Internet-delivered t course have positive feelings concerning their experiences, older students and graduate students have more positive feelings than younger students or undergraduates...” (Koroghlanian & Brinkerhoff, 2007. p.239). Another interesting aspect that repeatedly surfaced during the literature review was the mention of personality types and the perceptions of online learning. A study done by Bishop-Clark, Dietz-Uhler and Fisher found that personality type did not influence performance, but did influence satisfaction (Bishop-Clark, Dietz-Uhler, & Fisher, 2007).

#### *Satisfaction of Online Courses versus Face-to-Face*

Students also seem to be satisfied with their online learning experiences. One particular study noted that “students in the online group rated statistically significantly higher on the overall quality of course, the quality of learning, and the quality of communication with the instructor than students in the traditional learning group (Lim, 2008, p. 118). A study done by Wyatt in 2005 of 66 students that completed at least one online course found that 54% of students were very satisfied with the online course they have taken. Only 9% were either somewhat dissatisfied (5%) or very dissatisfied (4%) (Wyatt, 2005, p.464). In addition “Thirty

percent of students indicated that online instruction offers an excellent academic experience” (Wyatt, 2005, p.463). Researchers have also been interested in looking how online courses compare with face-to-face courses in both areas of quality and satisfaction. In a study by Warren and Holloman, Jr., 52 students were divided randomly into two sections of the same course, one face-to-face and one online. The study concluded that “there was no significant difference between the face-to-face section and the online section” (Warren & Hollowman, 2005, p. 149). In addition, “results of the course evaluations administered by the university reveal no significant difference in students’ satisfaction between the two sections.” (Warren & Hollowman, June 2005, p. 150).

### *Conclusion*

While there is a lot of literature available on online learning and student perceptions, this area of research is still relatively new and continues to grow and change rapidly. Online learning is set up in a variety of different formats and utilizes both traditional and nontraditional learning activities.

Online learning has become a popular option in part because of the numerous benefits it offers to students. These benefits include convenience, flexibility in schedules, ability to work around job responsibilities and childcare issues, and little or no travel-related costs. It also offers more choices for students, such as full or part time enrollment, accessibility to a variety of programs, and the availability to attend schools world wide as location is no longer an issue.

Benefits for schools include the ability to reach students in new demographic areas, cost savings in areas such as space, parking, paper, lighting and other building expenses. It may also be easier to find capable instructors, as schools are no longer limited to a demographic area.

However, online learning is not without its disadvantages. Technology issues, challenges of interacting with classmates, feelings of isolation, and lack of interaction with instructors can leave students frustrated and feeling helpless. Finding quality courses, programs and schools can be challenging as well.

Disadvantages for schools include high technology and software costs, finding competent online instructors, and the need to compete with other schools and programs. In addition, risk of growing too quickly can be damaging and risk the reputation of the school.

While online learning continues to gain popularity, studies show that online learning is generally preferred by females and older students. Overall, students are satisfied with online learning and satisfaction between online and face-to-face courses seems to be the same (Warren& Hollowman, 2005, p.150).

As the world of online learning continues to grow and emerge, and as technology increases, we can expect to find online learning becoming even more accessible and offer even more alternatives to traditional learning. Online learning has become a necessary and vital part of our educational system.

## Chapter III: Methodology

### *Introduction*

This research study explored a unique facet of the online learning community, those who have not yet entered into it. It specifically explored the factors that influence a student's decisions to eschew online courses in favor of traditional face-to-face coursework. With the exploding growth of the distance learning market along with educators wondering how to best serve this population in terms of quality, technology, and convenience, it was important to investigate the population that is not involved and explore the reasons that keep these students in traditional classrooms. More specifically, this study identified the perceptions that students who choose to remain only in the traditional classroom had about online learning courses.

This chapter will include a detailed description of the subjects, the survey used, how the data was collected, an analysis of the data, and the limitations of this study.

### *Subject Selection and Description*

This research for this study was completed at the University of Wisconsin – Stout. UW-Stout is located in West Central Wisconsin in Menomonie, Wisconsin. During the fall 2009 semester, the University of Wisconsin-Stout enrolled 7,766 undergraduate students and 1,045 graduate students (UW Stout, 2009). The sample for this research study was gathered from graduate and undergraduate students registered for the spring 2009 semester at the University of Wisconsin - Stout. All students that registered for one or more credits of distance education in spring 2009 were removed from the list. This was done in an attempt to eliminate students who have taken on online course, although students could have taken an online course before this timeframe either at the University of Wisconsin - Stout or other educational institution. The first

question of the survey (have you ever taken on online course?) was used to eliminate the rest of these students.

### *Instrumentation*

A 15 question survey was developed to specifically to answer the research objectives of this study (Appendix A). Questions were written to address the demographic data (age, gender, status, undergraduate or graduate) of the participants and their opinions of online learning. In addition, participants were asked to share their concerns, the computer applications they felt comfortable with, where they usually access the Internet, and how likely they would be to take an online course in the future.

### *Data Collection Procedures*

A 15 question survey was sent to a random population consisting of 50% of current undergraduates and to a 100% sample of the current graduate students who were not registered for one or more distance education credits during the spring 2009 semester. The survey was sent to 2,541 total students, (2,304 undergraduate and 237 graduate students) through the University of Wisconsin - Stout email using the University of Wisconsin Stout survey tool, SelectSurvey ASP. The survey was first deployed on June 18, 2009 for a total of ten days with 303 responses (12%) received. On July 2, 2009, the survey was reopened, a reminder email was sent to those students who had not responded to the survey, and 56 more responses were received for a total of 359 (14%). A final reminder was sent four days later on July 7, 2009, and 123 more responses (5%) were received. The survey was open for a total of 17 days and closed on July 10, 2009, thus receiving a total of 482 responses (19%).

### *Data Analysis*

The data gathered from the survey was analyzed using a variety of statistical analysis tools. First, frequency tables and cross tab tables were used to organize, describe, and analyze the data. Pearson's chi-square and Fisher's Exact tests were used to check for a relationship between the variables. When a relationship was determined to exist, the Phi and Cramer's  $V$  tests were used to look for the strength of those relationships.

Demographic data for both the current level (graduate or undergraduate) and enrollment status (full time or part time) was unable to be analyzed because of a low number of responses of graduate (17 responses or 12%) and part time (10 responses or 7%) students.

### *Limitations*

Limitations of this study included a limited number of students who have not taken an online course at either the University of Wisconsin - Stout or other educational institution. Out of 482 respondents, only 150 replied as never taking an online course or 31%. In addition, the timing of the study occurred during the summer months when students may be less likely to access their email accounts.

## Chapter IV: Results

The purpose of studying a group of students who have never taken an online course was to determine the reasons that these students were not participating in online courses, to identify any potential significance between demographics and perceptions of online learning, and gather reasons given for not engaging in online learning. A 15 question survey was deployed through UW Stout's Survey Tool, SelectSurvey ASP. The survey was sent to 2,541 current students (2,304 undergraduate and 237 graduate students) who were identified as not taking a distance education course during the spring 2009 semester. Responses were received from 127 undergraduate and 17 graduate students who have never taken an online course. Data was not able to be analyzed separately into undergraduate and graduate groups because of the small response rate of graduate students. A total of 482 responses were received.

### *Item Analysis*

The first question of the survey, "have you ever taken an online course?" was asked at the beginning of the survey in an effort to remove participants from the study that had previously taken an online course. By answering "no" to this question, the respondent was thanked for participating and the survey ended. Of the total 482 respondents to the survey, a total of 332 (69%) of the students answered "yes" to this question, and 150 students (31%) answered no. Therefore, the following questions and data are based on the responses of the 150 students who answered "no" to this first question. (See Table 1).

Table 1: Survey Respondents

Survey Respondents		
Online Participation	N	Percentage
Taken an Online Course	332	69%
Have Not Taken an Online Course	150	31%
Total Participants	482	100%

The next three questions of the survey addressed technical aspects of online learning such as where students typically access the Internet, computer-related applications most comfortable with, and the concerns students have when considering online courses. The survey continued by asking students if they would consider taking an online course in the future, how likely it would be that they would take an online course within the next year, and what factors influenced that decision, such as technology issues, social considerations, and convenience. Finally, the survey addressed the perceptions and opinions held of online learning including whether they perceived online courses as being easier or more difficult, in addition to the perceived strengths and weaknesses of online learning.

Demographic data including sex, gender, full-time or part-time status, undergraduate or graduate level, and age of each participant was also gathered during the survey to look for any potential correlations between demographics and perceptions.

Demographic Data (Questions 12-15): There were four demographic questions in the survey regarding gender, enrollment status (part-time or full-time), student level (undergraduate or graduate) and age. (See Table 2).

Table 2: Survey Respondents Demographic Data (Questions 12-15)

Survey Respondents		
Participants	Frequency	Percentage
<b>Gender</b>		
Men	72	50%
Women	72	50%
<b>Current Status</b>		
Full Time	134	89.3%
Part Time	10	6.7%
<b>Current Level</b>		
Undergraduate	127	84.7%
Graduate	17	11.3%
<b>Age</b>		
18-21	85	56.7%
22-25	37	24.7%
26+	22	14.7%

The survey respondents were equally men and women with 72 men and 72 women. Most students were full-time (93% or 134 respondents), and 7% or 10 respondents were part-time. More than half of the students responding to the survey (85 or 59%) were between the ages of 18 and 21, 37 (26%) of the respondents were age 22-25, and 22 (14.7%) were age 26 and older. One hundred and twenty seven of the participants were undergraduate students (88%) and 17 were graduate students (12%).

“Where do you currently access the Internet?” (Question #2): Most students (131 or 87.3%) responded that they access the Internet at home, followed by 112 (74.7%) accessing it at the university campus, 61 (40.7%) students accessing the Internet at a friend or relative’s home, 41 (27.3%) at their workplace, and 37 (24.7%) at the public library. (See Table 3). In the “other” box, answers included eight written in responses including “anywhere with free wireless”, “cafes”, “hotels”, and “local free Wi-Fi areas”.

Table 3: Access to the Internet

Access to the Internet					
Participants	Home	Work- place	University Campus	Public Library	Friend or Relative's Home
<b>Gender</b>					
Men					
Count	67	21	58	18	23
Percentage	93.1%	29.2%	80.6%	25.0%	31.9%
Women					
Count	64	20	54	19	38
Percentage	88.9%	27.8%	75.0%	26.4%	52.8%
<b>Age</b>					
18-21					
Count	77	17	66	21	43
Percentage	90.6%	20.0%	77.6%	24.7%	50.6%
22-25					
Count	33	14	30	12	11
Percentage	89.2%	37.8%	81.1%	32.4%	29.7%
26+					
Count	21	10	16	4	7
Percentage	95.5%	45.5%	72.7%	18.2%	31.8%

Note: Shaded areas denote statistically significant relationships.

When doing crosstab tables with the demographic data and accessing the Internet, statistical significance was found between accessing the Internet at work and the participant's age (see Table 4). Results showed that 20% of students in the age group of 18-21 accessed the Internet at work, 37.8% in the 22-25 age group accessed the Internet at work, and 45.5% of the 26+ age group accessed the Internet at work. Cramer's  $V$  test was run with a value of .231, showing a strong relationship between age and accessing the Internet at work. Also of significance was the relationship between gender and accessing the Internet at a friend or relative's home (see Table 5). Over half, 52.8%, of women responded that they access the Internet at a friend or relative's home, versus 31.9% of men. This was proven to be statistically significant with the Phi being -.211. No other significant relationships existed between demographic data and where students accessed the Internet.

Table 4: Statistical Data for Accessing the Internet at Work and Age

		Age with 3 groups			Total
		18-21	22-25	26+	
Access_work	Count	68	23	12	103
	% within Age with 3 groups	80.0%	62.2%	54.5%	71.5%
Selected	Count	17	14	10	41
	% within Age with 3 groups	20.0%	37.8%	45.5%	28.5%
Total	Count	85	37	22	144
	% within Age with 3 groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.705 <sup>a</sup>	2	.021
Likelihood Ratio	7.573	2	.023
N of Valid Cases	144		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.26.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.231	.021
	Cramer's V	.231	.021
N of Valid Cases		144	

Table 5: Statistical Data for Accessing the Internet at a Friend or Relative's Home

Crosstab

		What is your gender?		Total
		female	male	
Access_friend	Count	34	49	83
	% within What is your gender?	47.2%	68.1%	57.6%
Selected	Count	38	23	61
	% within What is your gender?	52.8%	31.9%	42.4%
Total	Count	72	72	144
	% within What is your gender?	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.399 <sup>a</sup>	1	.011		
Continuity Correction <sup>b</sup>	5.575	1	.018		
Likelihood Ratio	6.452	1	.011		
Fisher's Exact Test				.018	.009
N of Valid Cases	144				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.50.

## Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.211	.011
	Cramer's V	.211	.011
N of Valid Cases		144	

“What concerns you most when choosing whether or not to take an online course?”

(Question #3): In this “check all that apply” question, 74% of respondents (111 participants) chose contact with the instructor as concerning, followed by working independently (61 responses, 40.7%), contact with classmates (53 respondents, 35.3%) and technology concerns (49 responses, 32.7%). In the “other” box, 28 written in responses were given as concerns when choosing whether or not to take an online course. These comments included: “being able to learn in class or first hand from the professor”, “getting the most out of class”, “I am an audio learning – I get minimal information from reading”, “I will forget to do things online”, and “time management”.

Table 6: Concerns Regarding Online Courses.

Concerns Regarding Online Courses				
Participants	Tech- nology	Instructor Contact	Classmate Contact	Working Independently
<b>Gender</b>				
Men				
Count	23	56	31	30
Percentage	31.9%	77.8%	43.1%	41.7%
Women				
Count	26	55	22	31
Percentage	36.1%	76.4%	30.6%	43.1%
<b>Age</b>				
18-21				
Count	30	66	29	37
Percentage	35.3%	77.6%	34.1%	43.5%
22-25				
Count	13	31	14	17
Percentage	35.1%	83.8%	37.8%	45.9%
26+				
Count	6	14	10	7
Percentage	27.3%	63.6%	45.5%	31.8%

Pearson's chi square tests, Phi and Cramer's  $V$  symmetric measures were run on the data of concerns and demographic data. No significant relationships were proven to exist.

"Please check the computer-related applications you feel comfortable with" (Question #4): Of the total respondents, 94.7% (142 participants) stated they felt comfortable with email, 91.3% (137 participants) with Microsoft Word, 90% (135) with D2L (Desire to Learn), 82% (123) with PowerPoint, and 50.7% (76) with Microsoft Excel. In addition, 85.3% (128 participants) stated they felt comfortable accessing and/or browsing the Internet. Nine respondents added a comment in the "other" box of this question. Comments included "Adobe products", "just about everything", lots of other programs, CADD, inventor, Alias", "Photoshop", and "most Adobe, Autodesk, and Solidworks applications".

Table 7: Comfort With Computer-Related Applications

Participants	Email	Power Point	D2L(Desire to Learn)	Microsoft Word	Microsoft Excel	Internet
<b>Gender</b>						
<b>Men</b>						
Count	71	63	66	68	43	60
Percentage	98.6%	87.5%	91.7%	94.4%	59.7%	83.3%
<b>Women</b>						
Count	71	60	69	69	33	68
Percentage	98.6%	80.3%	95.8%	95.8%	45.8%	94.4%
<b>Age</b>						
<b>18-21</b>						
Count	83	74	82	81	44	76
Percentage	97.6%	87.1%	96.5%	95.3%	51.8%	89.4%
<b>22-25</b>						
Count	37	33	34	35	21	34
Percentage	100%	89.2%	91.9%	94.6%	56.8%	91.9%
<b>26+</b>						
Count	22	16	19	21	11	18
Percentage	100%	72.7%	86.4%	95.5%	50.0%	81.8%

Note: Shaded areas denote statistically significant relationships.

Pearson's chi square tests, Phi and Cramer's  $V$  symmetric measures were run on the comfort of computer-related applications and demographic data. A significant relationship was shown to exist between gender and comfort with using the Internet. Sixty eight (94.4%) of women responded as feeling comfortable with using the Internet, while 60 (83.3%) of men responded that they feel comfortable using the Internet. Pearson chi-square showed statistical significance at .034.

Table 8: Statistical Data for Gender and Comfort Using the Internet

Crosstab

		What is your gender?		Total
		female	male	
Comfort_Internet	Count	4	12	16
	% within What is your gender?	5.6%	16.7%	11.1%
Selected	Count	68	60	128
	% within What is your gender?	94.4%	83.3%	88.9%
Total	Count	72	72	144
	% within What is your gender?	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.500 <sup>a</sup>	1	.034		
Continuity Correction <sup>b</sup>	3.445	1	.063		
Likelihood Ratio	4.686	1	.030		
Fisher's Exact Test				.061	.030
N of Valid Cases	144				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.00.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.177	.034
	Cramer's V	.177	.034
N of Valid Cases		144	

“If you could take a future class in either a face-to-face format or online, which would you choose?” (Question #5): Most respondents (131 or 87.3%) answered face-to-face, followed

by 13 (8.7%) students who answered that they would choose an online course. See Table 9.

Respondents were asked for reasons for this choice in Question #6 below.

Table 9: Choice of Face-to-Face or Online Format

Participants	Face-to-Face	Online
<b>Gender</b>		
<b>Men</b>		
Count	69	3
Percentage	95.8%	4.2%
<b>Women</b>		
Count	62	10
Percentage	86.1%	13.9%
<b>Age</b>		
<b>18-21</b>		
Count	74	11
Percentage	87.1%	12.9%
<b>22-25</b>		
Count	36	1
Percentage	97.3%	2.7%
<b>26+</b>		
Count	21	1
Percentage	95.5%	4.5%

Note: Shaded areas denote statistically significant relationships.

In response to this question, 95.8% (69) of men indicated they would prefer a face-to-face class, while 86.1% (62) of women would prefer to take a course in the face-to-face format rather than online if given a choice (see Table 10). Three men (4.2%) and 10 women (13.9%) stated they would choose an online course if given the choice in the future. The Pearson chi-square test shows a significant relationship at .042.

Table 10: Statistical Data for Gender and Choice of Future Course Format

		Crosstab		Total
		What is your gender?		
		female	male	
If you could take a future class in either a face-to-face format or online, which would you choose?	Face-to-face	Count 62	69	131
		% within What is your gender?	86.1%	95.8%
Online	Count	10	3	13
	% within What is your gender?	13.9%	4.2%	9.0%
Total	Count	72	72	144
	% within What is your gender?	100.0%	100.0%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.143 <sup>a</sup>	1	.042		
Continuity Correction <sup>b</sup>	3.044	1	.081		
Likelihood Ratio	4.351	1	.037		
Fisher's Exact Test				.078	.039
N of Valid Cases	144				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.50.

b. Computed only for a 2x2 table

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal	Phi	-.170
	Cramer's V	.170
N of Valid Cases		144

“Please indicate the reason(s) for your choice in Question #5 above” (Question #6): In this “check all that apply” follow-up question, 68.7% (103) listed social considerations, 36% (54) answered convenience, 23.3% (35) technology considerations, and 15.3% (23) independence as

reasons for choosing either an online or face-to-face course in questions #5. Comments were provided by 39 students in the “other” box. Responses included: “actual professor interaction”, “actually learning material”, “face to face is just easier than learning than online”, “have questions answered sooner”, “ I learn better from lecture/hands on”, “if my computer fails, I can still see the teacher for more help”, and “interaction between classmates and instructor – lots of learning occurs with face to face relationships”.

Of those students who chose face-to-face in question #5, 103 respondents (78.6%) listed social considerations, 44 (33.6%) chose convenience, 33(25.2) technology, and 14 (10.7%) chose independence as factors in their decision of a face-to-face course.

Of those students who chose “online” in question #5, 13 (100%) answered social considerations, 10 (75.9%) answered convenience, 9 (69.2%) answered independence, and 2 (15.4%) answered technology considerations (see Table 11). Two participants who chose online added comments in the “other” section. These two comments were “complete courses faster, take more courses” and “you get the education part of class without professors wasting time with “group activities” and such”.

Table 11: Reason for Choosing Face-to-Face or Online Format.

Reason for Choosing Face-to-Face or Online Format.				
Participants	Tech- nology	Social Considerations	Convenience	Independence
<b>Gender</b>				
<b>Men</b>				
Count	19	54	23	9
Percentage	26.4%	75.0%	31.9%	12.5%
<b>Women</b>				
Count	16	49	31	14
Percentage	22.2%	68.1%	43.1%	19.4%
<b>Age</b>				
<b>18-21</b>				
Count	22	60	36	15
Percentage	25.9%	70.6%	42.4%	17.6%
<b>22-25</b>				
Count	9	28	12	4
Percentage	24.3%	75.7%	32.4%	10.8%
<b>26+</b>				
Count	4	15	6	4
Percentage	18.2%	68.2%	27.3%	18.2%

No statistically significant relationships were shown between reasons for choosing face-to-face or online course format and demographics.

“Would you consider taking an online course in the future?” (Question #7): Over half of the students surveyed, 104 or 69.3%, said they would consider taking an online course in the future, while 40 respondents or 26.7% stated they would not consider taking an online course in the future (see Table 12).

Table 12: Willingness to Take a Future Online Course

Willingness to Take a Future Online Course		
Participants	Yes	No
<b>Gender</b>		
<b>Men</b>		
Count	46	26
Percentage	63.9%	36.1%
<b>Women</b>		
Count	58	14
Percentage	80.6%	19.4%
<b>Age</b>		
<b>18-21</b>		
Count	66	19
Percentage	77.6%	22.4%
<b>22-25</b>		
Count	24	13
Percentage	64.9%	35.1%
<b>26+</b>		
Count	14	8
Percentage	63.6%	36.4%

Note: Shaded areas denote statistically significant relationships

When comparing the likelihood of taking an online course in the future and age, no statistical significance existed, however, the percentage of those respondents answering “no” increased with age. There was a statistical significance, however, between sex and whether or not the participants would consider taking an online course in the future (see Table 13). This study showed that 58 women (80.6%) and 46 men (63.9%) responded that they would consider taking an online course in the future. The Phi test showed statistical significance at  $-.186$ .

Table 13: Statistical Data for Gender and Consideration of Future Online Course

Crosstab

		What is your gender?		Total
		female	male	
Would you consider taking an online course in the future?	No	Count 14	26	40
		% within What is your gender? 19.4%	36.1%	27.8%
	Yes	Count 58	46	104
		% within What is your gender? 80.6%	63.9%	72.2%
Total		Count 72	72	144
		% within What is your gender? 100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.985 <sup>a</sup>	1	.026		
Continuity Correction <sup>b</sup>	4.188	1	.041		
Likelihood Ratio	5.044	1	.025		
Fisher's Exact Test				.040	.020
N of Valid Cases	144				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.00.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.186	.026
	Cramer's V	.186	.026
N of Valid Cases		144	

“How likely are you to take an online course within the next year?” (Question #8): Of the total participants, 31% (44) were unsure, 23% (33) answered very unlikely, 19% (27) very likely, 15% (22) likely, and 14% (20) not likely (see Table 14).

Table 14: Likelihood of Online Course Enrollment within One Year (Likert Scale)

Participants	N	Mean
<b>Gender</b>		
Men	72	2.68
Women	70	3.2
<b>Age</b>		
18-21	83	3.1
22-25	37	2.59
26+	22	2.91

Note: Shaded areas denote statistically significant relationships

A two-tailed t-test run between and gender and likelihood of taking on online course within the next year was significant at .027 (see Table 15).

Table 15: Statistical Data for Gender and Likelihood of Taking an Online Course in Next Year

T-Test: differences in average responses to question 8 by gender

## Group Statistics

	What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
How likely are you to take an online course within the next year? (Choose one)	female	70	3.20	1.431	.171
	male	72	2.68	1.330	.157

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
How likely are you to take an online course within the next year? (Choose one)	Equal variances assumed	.501	.480	2.241	140	.027	.519	.232	.061	.978
	Equal variances not assumed			2.239	138.592	.027	.519	.232	.061	.978

“In your opinion, are online courses easier or more difficult than traditional face-to-face courses? (Question #9): More than half of the students, 64.7% (97), replied unsure, 23.3% (35) stated more difficult, and 8% (12) responded easier (see Table 16).

Table 16: Perception of Online Course Difficulty in Comparison to Face-to-Face Courses.

Perception of Online Course Difficulty in Comparison to Face-to-Face Courses			
Participants	Easier	More Difficult	Unsure
Gender			
Men			
Count	7	19	46
Percentage	9.7%	26.4%	63.9%
Women			
Count	5	16	51
Percentage	6.9%	22.2%	70.8%
Age			
18-21			
Count	4	18	63
Percentage	4.7%	21.2%	74.1%
22-25			
Count	6	12	19
Percentage	16.2%	32.4%	51.4%
26+			
Count	2	5	15
Percentage	9.1%	22.7%	68.2%

No statistical significance was shown between opinion of difficulty and demographics.

“In your opinion, what are the strengths of online courses?” (Question #10): In this “check all that apply” question, 117 respondents (78%) answered flexibility, 107 (71.3%) answered convenience, 76 (50.7%) answered independence, and 0 respondents chose more interaction with classmates as strengths of online courses (see Table 17). Written replies were received from eight respondents in the “other” box. Answers given as strengths of online courses included: “more likely to get into class”, “none”, “not bound by location”, and “you don’t have to be in the same state to take the class, so if you need one class to graduate, you can do it at your own convenience”.

Table 17: Perceived Strengths of Online Courses.

Perceived Strengths of Online Courses.				
Participants	Convenience	Flexibility	More Interaction with Classmates	Independence
Gender				
Men				
Count	53	59	0	30
Percentage	73.6%	81.9%	0%	41.7%
Women				
Count	54	58	0	46
Percentage	75.0%	80.6%	0%	63.9%
Age				
18-21				
Count	63	72	0	49
Percentage	74.1%	84.7%	0%	57.6%
22-25				
Count	27	29	0	17
Percentage	73.0%	78.4%	0%	45.9%
26+				
Count	17	16	0	10
Percentage	77.3%	72.7%	0%	45.5%

Note: Shaded areas denote statistically significant relationships.

A statistically significant relationship was found between gender and independence with 41.7% of men (30 respondents) and 63.9% of women (46 respondents) choosing independence as a perceived strength of online learning. Pearson’s chi-square showed significant at 0.008 (see Table 18).

Table 18: Statistical Data for Gender and Perceived Strength of Independence

Crosstab

		What is your gender?		Total
		female	male	
Strength_independence	Count	26	42	68
	% within What is your gender?	36.1%	58.3%	47.2%
Selected	Count	46	30	76
	% within What is your gender?	63.9%	41.7%	52.8%
Total	Count	72	72	144
	% within What is your gender?	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.133 <sup>a</sup>	1	.008		
Continuity Correction <sup>b</sup>	6.269	1	.012		
Likelihood Ratio	7.194	1	.007		
Fisher's Exact Test				.012	.006
N of Valid Cases	144				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.00.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.223	.008
	Cramer's V	.223	.008
N of Valid Cases		144	

“In your opinion, what are the weaknesses of online courses? (Question #11): In this “check all that apply” question, 130 students (86.7%) responded less interaction with the instructor, 95 students (63.3%) answered less interaction with classmates, 72 students (48%) replied feeling isolated, 68 students (45.3%) stated technology issues, and 17 students picked “other” (see Table 19). Some of the responses written in as weaknesses included: “cheating”,

“hard to ask questions”, “having to teach myself the material”, “inability to properly learn the required material”, “it just seems to me that the teacher is not teaching. The student is doing the learning and the teaching. An online class should cost half the money”, and “the experience and networking that can come from going to a class”.

Table 19: Perceived Weaknesses of Online Courses

Perceived Weaknesses of Online Courses.				
Participants	Less Interaction with Instructor	Less Interaction with Classmates	Feeling Isolated	Technology Issues
<b>Gender</b>				
Men				
Count	68	52	37	31
Percentage	94.4%	72.2%	51.4%	43.1%
Women				
Count	62	43	35	37
Percentage	86.1%	59.7%	48.6%	51.4%
<b>Age</b>				
18-21				
Count	77	56	38	48
Percentage	90.6%	65.9%	44.7%	56.5%
22-25				
Count	34	25	19	14
Percentage	91.9%	67.6%	51.4%	37.8%
26+				
Count	19	14	15	6
Percentage	86.4%	63.6%	68.2%	27.3%

Note: Shaded areas denote statistically significant relationships

Significance was found with the relationship between technology being a weakness of online learning and age. The 18-21 year-old age group selected this answer the most (48 or 56.5%); 37.8% (14) of the 22-25 age group and 27.3% (6) of the 26+ age group selected technology issues as a weakness to online learning. The Pearson chi-square showed significance with .021 and Cramer's  $V$  .021 (see Table 20).

Table 20: Statistical Data for Age and Perceived Weakness of Technology

Crosstab

		Age with 3 groups			Total
		18-21	22-25	26+	
Weakness_tech	Count	37	23	16	76
	% within Age with 3 groups	43.5%	62.2%	72.7%	52.8%
Selected	Count	48	14	6	68
	% within Age with 3 groups	56.5%	37.8%	27.3%	47.2%
Total	Count	85	37	22	144
	% within Age with 3 groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.738 <sup>a</sup>	2	.021
Likelihood Ratio	7.911	2	.019
N of Valid Cases	144		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.39.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.232	.021
	Cramer's V	.232	.021
N of Valid Cases		144	

## Chapter V: Discussion

The study “Perceptions of Online Learning in Students Who Have Never Taken an Online Course” was done to gather demographic information, reasons, and perceptions of those students who have not taken an online course. This study was completed using a 15 question survey, which was deployed through UW Stout’s SelectSurvey ASP Survey tool to 2,541 (2304 or 50% of undergraduate population and 237 or 100% of the graduate population) students who were identified as not enrolling in a distance education course during the spring 2009 semester.

### *Limitations*

This study was limited by the difficulty of finding students who have never taken an online course at UW Stout. According to the data gathered from this survey, even after running the sample list and removing known students who had previously registered for a distance education course, 70% of those who responded had taken an online course. In addition, by eliminating from the sample those students who were registered for a distance education course during the spring 2009 semester, some students who have never taken an online course may have been eliminated as online learning is only one part of distance education.

### *Conclusions*

Online learning is a popular option for students taking college courses. However, there are still many students who have not taken an online course. This study identified this group of students and surveyed the demographics of these students in addition to their perceptions of online learning, the computer-related applications they are comfortable with, where they access the Internet and how likely these students are to take an online course in the future.

According to the results of this survey, most students are comfortable with the Internet. They usually access the Internet from home (87.3%). But students are also accessing the Internet

at locations such as cafes, coffee shops, and hotels. One student commented that he/she accesses the Internet “anywhere free wireless access is provided”. According to this study, a statistically significant relationship was shown between gender and accessing the Internet at a friend or relative’s home. Women (38 or 52.8%) are more likely than men (23 or 31.9%) to access the Internet at a friend or relative’s home. A statistically significant relationship was also shown between accessing the Internet at work and the student’s age. Not surprisingly, as students get older, accessing the Internet at the workplace increases, with 20% of 18-21 year-olds, 37.8% of 22-25 year-olds, and 45.5% of 26+ year-olds reporting they access the Internet at their place of work.

Another interesting finding of this study was that 85.3% (128) of students are comfortable using the Internet. However, if roughly 15% of students are not comfortable accessing the Internet, this could have a negative impact on whether those students would be comfortable or perhaps even successful in an online course. It may be that we take for granted student’s comfort level with Internet access. In addition, a statistically significant relationship was determined between gender and the comfort level of using the Internet. More women (94.4% or 68 respondents) than men (83.3% or 60 respondents) reported being comfortable with the Internet. This study also found that only 50.7% (76) of the total respondents answered that they were comfortable with Microsoft Excel. Knowing this information can help colleges and universities understand their student population, what needs they have, and how they might better be served.

Most students who have never taken an online course are willing to consider taking an online course in the future, and women were found to be more likely than men to consider a future online course. This study showed a statistically significant relationship in which 80.6%

(58) of women and 63.9% (46) of men who have never taken an online course stated they would consider taking an online course in the future. However, over a quarter (27.8%) of respondents stated they would not be open to taking an online course in the future.

The data also showed that students who have not taken an online course would prefer to keep it that way. When participants were asked to choose between an online and face-to-face format for a future course, 91% (131) picked the face-to-face format. A statistically significant relationship was shown between gender and the choice of a future course format with 95.8% of men (69) and 86.1% of women (62) preferring a face-to-face course over an online course when given the choice. Clearly, students in this study showed a preference for the face-to-face course format. One student commented, “I consider myself a visual learner – online classes don’t provide any interaction with the professor”, and another provided the reason of “interaction between classmates and instructor – lots of learning occurs with face-to-face relationships”.

When students were asked how likely they were to take a future online course, a significant relationship was shown with women (mean 3.20) being more likely than men (2.68) to take an online course in the future.

Results of this study also found that students perceive online courses as having some strengths. A statistically significant relationship was found to exist between gender and a perceived strength of online courses as independence. In this study, 63.9% of women (46) and 41.7% of men (30) reported independence as a perceived strength of online learning.

Student concerns about online learning were also identified. Surprisingly, contact with the instructor was the most given response in this study with 111 students or 74% choosing this. In addition, a statistically significant relationship was found between the age of students and their perception of technology issues as a weakness of online courses. Technology concerns

lesson as students get older. In the 18-21 year-old age group, 56% of students felt that technology issues were a weakness of online courses, followed by 37.8% of 22-25 year-olds, and 27.3% of 26+ year-olds. Some interesting concerns added by students included, “I am paying the same for an online course as I would a normal class and don’t get the face to face interaction”; “not being able to budget my time wisely”, “whether I will comprehend the material well enough without a lecture”, “not getting the work done on time”, and “lack of class questions and participation”. These concerns given by the students are very consistent with information found during the literature review portion of this paper.

*Recommendations:*

Recommendations for further study would include a more detailed study analyzing the comfort level of online students with various computer-related applications and specifically, comfort using the Internet. Also, because instructor interaction was a repeating theme in the comments given by participants, a study looking into the amount of interaction and feedback by instructors would be helpful. Another study addressing the perceptions of online learning between graduate and undergraduate students who have never taken an online course would be beneficial as well. Universities should consider the comments students are offering and consider making some changes to accommodate the comfort level and confidence of students in their online learning courses. By understanding the concerns of this group of students, higher educational institutions can look at their programs, make the necessary changes, and market their courses appropriately.

## References

- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education, 27*(2), 139-153.
- Bishop-Clark, C., Dietz-Uhler, B., & Fisher, A. (2007). The effects of personality type on web-based distance learning. *Journal of Educational Technology Systems, 35*(4), 491-506.
- Bold, M. (2005). Development and evaluation of a distance learning master's degree in family studies. [Electronic version]. *Online Journal of Distance Learning Administration, 8*(3). Retrieved August 1, 2008, from <http://www.westga.edu/~distance/ojdla/fall83/bold83.htm>
- Bruning, R., Schraw, G., Norby, M., & Ronning, R. (2004). *Cognitive Psychology and Instruction* (4th ed.). New Jersey: Pearson Education, Inc.
- Hamilton-Pennell, C. (2002). Getting ahead by getting online. *Library Journal, 127*(19), 32-35.
- Hiltz, S. R., & Turoff, M. (2005). Education goes digital: The evolution of online learning and the revolution in higher education. *Communications of the ACM, 48*(10), 59-64.
- Horrigan, J. B. (2008). Home broadband adoption 2008. *Pew Internet & American Life Project, 1-40*. Retrieved February 23, 2009, from <http://www.pewinternet.org/Reports/2008/Home-Broadband-2008.aspx?r=1>
- Johnson, S.D., & Aragon, S.R. (2003). An online instructional strategy framework for online learning environments. *New Directions for Adult and Continuing Education, 100*, 31-43.
- Koroghlanian, C. M., & Brinkerhoff, J. (2007). Online students' technology skills and attitudes toward online instruction. *Journal of Educational Technology Systems, 36*(2), 219-244.

- Leonard, J., & Guha, S. (2001). Education at the crossroads: Online teaching and student's perspectives on distance learning. *Journal of Research on Technology in Education*, 34 (1). 51-57.
- Lessons of a virtual timetable. (2001). *Economist*, 358 (8209), p.69-71.
- Levy, S. (2003). Six factors to consider when planning online distance learning programs in higher education. *Online Journal of Distance Learning Administration*, 6(1). Retrieved August 1, 2008, from: <http://www.westga.edu/~distance/ojdl/spring61/levy61.htm>
- Li, Q., & Akins, M. (2005). Sixteen myths about online teaching and learning in higher education: Don't believe everything you hear. *TechTrends* 49(4), 51-60.
- Lim, D. H., & Kim, H. (2003). Motivation and learner characteristics affecting online learning and learning applications. *Journal of Educational Technology Systems*, 31(4), 423-439.
- Liu, X., Magjuka, R. J., Bonk, C.J., & Lee, S. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *The Quarterly Review of Distance Education*, 8(1), 9-24.
- Luterbach, K., & Cole, J. (2008). Can computers tutor students as effectively as teachers? *Learning and Leading with Technology*, 8-9. Retrieved February 23, 2009 from [http://www.iste.org/Content/NavigationMenu/Publications/LL/LLIssues/Volume\\_35\\_2007\\_2008\\_/MarchNo6/356081.pdf](http://www.iste.org/Content/NavigationMenu/Publications/LL/LLIssues/Volume_35_2007_2008_/MarchNo6/356081.pdf)
- Maeroff, G. (2004). e-learning: Lessons from higher education. *Independent School*, 63(4), 64-70. Retrieved July 30, 2009 from Academic Search Premier database.
- Mansour, B. E., & Mupinga, D. M. (2007). Students' positive and negative experiences in hybrid and online classes. *College Student Journal* 41(1), 242-248.

- Merriam-Webster Dictionary Online*. (n.d.). Retrieved February 8, 2009 from  
<http://www.Webster-online.com>
- Ouzts, K. (2006). Sense of community in online courses. *The Quarterly Review of Distance Education*, 7(3), 285-296.
- Palloff, R. M., & Pratt, K. (1999). *Building Learning Communities in Cyberspace: Effective Strategies for the Online Classroom*. San Francisco: Jossey-Bass Publishers.
- Parker, N. K. (2004). The quality dilemma in online education. *Theory and Practice of Online Learning*, (Chapter 16). Athabasca, Canada: Athabasca University. Retrieved on April 1, 2009 from  
[http://gandrewpage.com/elearning/learning%20objects/TPOL\\_book.pdf#page=417](http://gandrewpage.com/elearning/learning%20objects/TPOL_book.pdf#page=417)
- Parsad, B., and Lewis, L. (2008). *Distance education at degree-granting postsecondary institutions: 2006–07* (NCES 2009–044). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved July 29, 2009 at <http://nces.ed.gov/pubs2009/2009044.pdf>
- Potashnik, M., & Capper, J. (1998). Distance education: Growth and diversity. *Finance & Development* (3), 42-45.
- Robinson, C.C., & Hullinger, H. (2008). New benchmarks in higher education: student engagement in online learning. *Journal of Education for Business*, 84(2), 101-109.
- Rodriguez, M. C., Ooms, A., & Montanez, M. (2008). Students' perceptions of online-learning quality given comfort, motivation, satisfaction, and experience. *Journal of Interactive Online Learning* 7(2), 105-125.
- Schell, G. P. (2004). Universities marginalize online courses. *Communications of the ACM*, 47 ( 7), 53-56.

- Selwyn, N. (2007). e-learning or she-learning? Exploring students' gendered perceptions of education technology. *British Journal of Educational Technology* 38(4) , 744-746.
- Sweller, J. (2008). Cognitive load theory and the use of educational technology. *Educational Technology* 48(1), 32-35.
- United States Distance Learning Association. (n.d.). *Research, statistics and distance learning resources*. Retrieved July 28, 2009, from <http://www.usdla.org/html/aboutUs/researchInfo.htm>
- United States Census Bureau Current Population Survey. (2003). Computer and internet use in the united states: 2003. Retrieved July 31, 2008, from: <http://www.census.gov/prod/2005pubs/p23-208.pdf>
- University of Wisconsin – Stout. *Facts about UW-Stout*. Retrieved July 29, 2009 from the University of Wisconsin – Stout Web site: <http://www3.uwstout.edu/geninfo/facts.cfm>
- Waits, T., & Lewis, L., & Greene, B. (2003). *Distance education at degree-granting postsecondary institutions: 2000-2001*. (NCES 2003-017). National Center for Education Statistics ,U.S. Department of Education. Washington, DC. Retrieved July 31, 2008, from <http://nces.ed.gov/pubs2003/2003017.pdf>
- Warren, L. L., & Hollowman, H. L. (2005). Online instruction: are outcomes the same? *Journal of Instructional Psychology*, 32(2), 148-151.
- Wyatt, G. (2005). Satisfaction, academic rigor and interaction: perceptions of online instruction. *Education* 125(3), 460-468.
- Young, J.R. (2008). \$4-a-gallon gas drives more students to online courses. *Chronicle of Higher Education*, 54(45), A20-A20.



5. If you could take a future class in either a face-to-face format **or** online, which would you choose?

- Face-to-face  
 Online

6. Please indicate the reason(s) for your choice in Question #5 above. (Please check all that apply).

- Technology considerations  
 Social considerations  
 Convenience  
 Independence  
 Other, please

specify \_\_\_\_\_

7. Would you consider taking an online course in the future?

- Yes  
 No

8. How likely are you to take an online course within the next year? (Please circle one).

- Very likely          Likely          Unsure          Not likely          Very Unlikely

9. In your opinion, are online courses easier or more difficult than traditional face-to-face courses?

- Easier  
 More difficult  
 Unsure

10. What are the strengths of online courses?

- Convenience  
 Flexibility  
 More interaction with classmates  
 Independence  
 Other, please

specify \_\_\_\_\_

11. What are the weaknesses of online courses?

- Less interaction with instructor  
 Less interaction with classmates  
 Feeling isolated  
 Technology issues

\_\_\_\_\_ Other, please  
specify \_\_\_\_\_

12. Gender:      \_\_\_\_\_ Male                      \_\_\_\_\_ Female

13. Status:      \_\_\_\_\_ Full Time Student      \_\_\_\_\_ Part-Time Student

14. Level:      \_\_\_\_\_ Undergraduate  
                    \_\_\_\_\_ Graduate

15. Age:              \_\_\_\_\_ 18-21                      \_\_\_\_\_ 22-25                      \_\_\_\_\_ 26-30  
                            \_\_\_\_\_ 31-35                      \_\_\_\_\_ 36-40                      \_\_\_\_\_ 41-50                      \_\_\_\_\_ 51-60  
                            \_\_\_\_\_ 61+

Thank you for completing this survey!

## Appendix B

**Date:** May 21, 2009

**To:** Julia Buck

**Cc:** Judith Jax

*Susan Foxwell*

**From:** Sue Foxwell, Research Administrator and Human  
Protections Administrator, UW-Stout Institutional  
Review Board for the Protection of Human  
Subjects in Research (IRB)

**Subject: Protection of Human Subjects**

Your project, "*Perceptions of Online Learning in Students Who Have Never Taken an Online Course*," has been approved by the IRB through the expedited review process. The measures you have taken to protect human subjects are adequate to protect everyone involved, including subjects and researchers.

**Please copy and paste the following message to the top of your survey/interview form before dissemination:**

**This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.**

If you are conducting an **online** survey/interview, please copy and paste the following message to the top of the form:

**"This research has been approved by the UW-Stout IRB as required by the Code of Federal regulations Title 45 Part 46."**

This project is approved through **May 19, 2010**. Modifications to this approved protocol need to be approved by the IRB. Research not completed by this date must be submitted again outlining changes, expansions, etc. Federal guidelines require annual review and approval by the IRB.

Thank you for your cooperation with the IRB and best wishes with your project.

**\*NOTE: This is the only notice you will receive – no paper copy will be sent.**