

A COMPARISON OF STUDENT ACHIEVEMENT AND SATISFACTION
BETWEEN A HYBRID TECHNICAL REPORTING CLASS AND
AN ONLINE TECHNICAL REPORTING CLASS AT
CHIPPEWA VALLEY TECHNICAL COLLEGE

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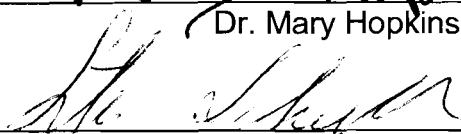
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ABSTRACT

The hybrid or blended course model has been touted as the next big trend in distance education, combining the benefits of face-to-face instruction and peer interaction with the flexibility of online learning. Chippewa Valley Technical College has started to offer hybrid courses on a limited basis.

In order to better determine what is necessary to make the hybrid learning model an effective one, this study used an online survey to compare student satisfaction between a wholly online Technical Reporting course and a hybrid Technical Reporting course offered at Chippewa Valley Technical College. Student grades on an identical assignment were also compared as were retention rates based on official student withdrawals from each course. Student satisfaction based on survey results was significantly better in the online course compared to the hybrid course, but student feedback provided mixed results.

This study also found that student grades were slightly higher in the online course while student retention was slightly better in the hybrid course.

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“Nothing great was ever achieved without enthusiasm.”

Ralph Waldo Emerson

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Chapter I

Background Information

The practice of distance education at higher education institutions has been part of our culture for over one hundred years, (Bower & Hardy, 2004) and technological advances have always played a principal role in its implementation and improvement. It all began in the 1800s with print-based correspondence course offerings at a number of institutions (Findley & Findley, 1997). This form of distance education was the standard until the advent of the next technology.

In the 1900s, technology and distance education advanced hand-in-hand, supplementing traditional correspondence courses. The 1920s brought the radio and audio recordings to distance education, followed by television in the 1950s, satellites in the 1960s, and fiber optics in the 1980s (Bower & Hardy, 2004).

The latest technology to drive trends in distance education is the global network that connects smaller networks and millions of computers together known as the Internet. Originally created by the U.S. government in the 1970s, by the 1990s, Internet use and availability had spread to the public domain and there were over 4 million users around the world (Internet Society, 2004). Today it is estimated that there are over 221 million Internet users in North America alone ("Internet Usage Statistics," 2004).

In the late 1990s, higher education institutions came to view the Internet as an easy and effective way to reach a new student population previously unavailable (Bower & Hardy, 2004). Students that had full or difficult work schedules could now complete coursework on their own schedules without ever

having to come to a campus. Students that could not afford to quit their jobs to attend college or those that had limited access to courses due to location or other commitments could now attend college due to the increased flexibility offered by online distance education courses (Wyatt, 2005). Most higher education institutions followed this online learning trend: by 2001, almost 90 percent of all two-year and four-year institutions were offering online distance education courses (Bower & Hardy, 2004). As the number of course offerings continued to grow, preliminary feedback about student satisfaction began to be examined.

Initially, student satisfaction with the completely online environment seemed high or comparable to the traditional classroom, even though research also showed that many students did not want to participate in distance learning (Simonson, 1997). However, as the influx of online course offerings created more online learners, feedback and initial research caused questions to be raised about the difficulty of online work, the effectiveness of the learning environment, and the rates of student success (Wyatt, 2005; Purcel & Stertz, 2005). Studies started showing that students were not as successful in online classes when compared to students taking traditional ones (Anstine & Skidmore, 2005).

Two of the biggest problems seemed to be retention and a lack of self-sufficiency. The first problem area seemed to be retention: "Previously, colleges focused on developing fully online courses that required no face-to-face meetings [but] some colleges report high dropout rates in classes that are completely virtual" (Young, 2002). Compared to traditional courses, retention, grades, and student attitudes in online courses were often lower than those in traditional

classroom classes (Oblender, 2002). According to Oblender (2002), the average dropout rate for students in online courses is 50 percent. The second problem area facing online classes seemed to be lack of self-sufficiency; without the structured face-to-face contact of the traditional classroom, many students were unable to spend the time needed to complete assignments on their own (Stein, 2004). A study that tracked the log-in time for students in an online environment revealed that many students went weeks without even accessing their online course (Oblender, 2002).

In an effort to address these problems, a new course delivery style known as the hybrid or blended course evolved that combined the best features of online learning and traditional classroom learning (Reasons, 2004). In the hybrid course model, students met in a traditional classroom with their instructor at least once a week, while also completing online course components similar to an online distance education course. This course model retained the structure and face-to-face contact that many students need to be successful, while retaining much of the flexibility of the online environment for those that cannot take a traditional class (Lorenzetti, 2004; "Going Hybrid," 2003; Hopper, 2003). While still an emerging course delivery style, the hybrid course is being touted as the next big trend in higher education (Young, 2002).

Although the hybrid delivery style is starting to be seen as a viable solution to the problems of online classes, initial feedback is still cautious, yet primarily positive (Reasons, 2004). Studies have shown that most online learners do prefer some face-to-face contact with instructors and tend to be more successful

when this occurs, thus supporting the hybrid course model (Riffel & Sibley, 2005). Initial research also seems to indicate “that student success rates in hybrid courses . . . are ‘equivalent or slightly superior’ to face-to-face courses, and that the hybrid courses have lower dropout rates than do fully online courses” (Young, 2002).

Despite the positive feedback, there is still concern that the hybrid course option may not be the solution to distance education problems. Student confusion about the combined online and traditional delivery styles, increased student workload in hybrid sections, and weak online components are all concerns being raised (Reasons, 2004). Still, the hybrid course model is quickly gaining popularity among institutions with a large number of wholly online courses, including the 16 technical colleges in Wisconsin.

Like many institutions, the 16 technical colleges of Wisconsin have had a strong online course presence. This includes the eTech College, which is an entirely online college—all courses are offered entirely via the Internet. One of these technical colleges, Chippewa Valley Technical College (CVTC), located in Eau Claire, Wisconsin, has offered a variety of online courses for over seven years, covering subject areas from accounting to speech. CVTC plans to offer 155 online distance education courses in the fall of 2005, the highest number the college has ever offered (J. Goldsmith, personal communication, June 8, 2005). CVTC is now starting to offer some hybrid courses in addition to its traditional online offerings.

Amidst the initial mixed feedback about the hybrid model, CVTC has started to pilot the hybrid course model in an effort to better meet students' needs and overcome some of the online learning issues. The Communication Skills Department at CVTC currently offers seven courses online and participated in a pilot study to determine the feasibility of hybrid courses.

In the spring of 2005, CVTC offered six hybrid courses in the Communication Skills Department for students and planned to offer additional hybrid offerings in the future to see how students adjust to the new delivery format. The Communication Skills Department offered hybrid classes in two formats: those that met twice a week in the classroom and once online, and those that met once a week in the classroom and twice online. For its online hybrid components, CVTC is using the Blackboard course learning system, the same system used for all its current online classes.

At this point, most studies show students do seem more successful in the hybrid learning environment, but more research is needed at CVTC and other institutions to fully understand the effect of hybrid courses on student success in the educational environment (Atan, Rahman, & Idrus, 2004). As research into hybrid learning continues, one thing remains clear when it comes to the role of distance education in learning: "instructional delivery method—asynchronous or face-to-face—has a significant impact on student outcomes" (Carpenter, Brown, & Hickman, 2004). The role the hybrid course model will play in the future of distance education has yet to be fully discovered. The role the hybrid course model will play at CVTC is yet to be fully realized.

Statement of the Problem

Like many institutions, Chippewa Valley Technical College (CVTC) is exploring alternate delivery methods that will aid student learning and address some of the problems associated with traditional online courses. The hybrid course delivery style is the approach being currently considered. Hybrid courses are being piloted at this time, but more information is still needed about student achievement, retention, and student satisfaction in the hybrid format compared to the wholly online classroom environment. In order for this new delivery style to be successful for students and instructors at the college, further analysis is needed to ensure a quality level of instruction is maintained and student success is taken into account.

Purpose of the Study

The purpose of this study is to compare student achievement, retention, and satisfaction between an online classroom environment and a hybrid environment. Two sections of Technical Reporting will be compared. Both courses, the online and the hybrid, will follow the same lesson plans and complete the same assignments over the course of the semester. The online course will be taught entirely online via Blackboard, while the hybrid will meet one day a week in the classroom and two days a week online via Blackboard. The two course delivery styles will be compared in order to better understand the differences and adjustments needed to make hybrid learning successful.

Research Questions

The following questions will be analyzed:

1. What is the relationship between student satisfaction and course delivery method (online vs. hybrid)?
2. How do grades differ on an identical assignment presented in online and hybrid formats?
3. What is the difference in student perceptions of course content and assignments based on the course delivery method?
4. What is the difference in student perceptions of instructor contact, feedback and peer-to-peer interaction based on the course delivery method?
5. What is the difference in retention based on course delivery method?

Importance of the Study

This study is important for the following reasons:

1. If the hybrid delivery style is to be successful at CVTC, research about what works and what doesn't in the hybrid model is essential to better tailor future hybrid classes to student needs. This in turn is the first step to establishing a consistent delivery style for the hybrid format that will help ensure student success.
2. Student feedback will also help the college and instructors better tailor assignments and activities for future learners. Some online assignments may work well in the hybrid format, while others may not. Recognizing and implementing these changes could result in increased student satisfaction and consistently positive student perceptions.

3. Student feedback is helpful to keep faculty in touch with students' personal needs and problems. By becoming aware of issues of importance to students, faculty can better address these issues in the classroom.
4. For the distance education learning process to be successful, it must be continually reviewed and evaluated to ensure success. Learners and technology are constantly changing; continual evaluation of this process is necessary to keep it as efficient as possible.
5. Due to limited feedback about hybrid courses at CVTC, this study will add to the overall state of knowledge on the topic. When combined with other studies and feedback from this institution and others, this study will give CVTC and other colleges a better picture of what is needed to make hybrid courses successful and viable.

Limitations of the Study

The following are limitations of the study:

1. The students evaluated for this study are from two sections of Technical Reporting classes offered by the college. Factors such as student program, demographics, class time, class size, and student ability levels are limitations because this is not a random sampling of students. Students were used solely because they registered for one of the two selected course sections.
2. Students registered for the hybrid course section may or may not have been aware that they were signing up for a hybrid class when they initially registered for their course. The college did not have a consistent

notification method in place at that time for students registering, so there was no guarantee that it was completely successful. Because of this, student opinions of the course delivery style may be biased.

3. The survey used to collect student feedback is limited because students may or may not correctly interpret the survey questions asked, thus potentially leading to inaccurate or unclear feedback.
4. Time is a limitation of the study because all students were from one semester. A sampling of courses and feedback from multiple semesters and multiple instructors would strengthen the overall survey results and validity.

Definition of Terms

The terms below are referenced in this study.

1. Distance Education is defined as learning that takes place in a learning environment where the faculty and students do not meet in a face-to-face setting.
2. Blackboard is a software system that provides an online course management platform that includes tools for online communication, surveying, and grading. It can be accessed from any computer with Internet access (Spiegel, 2004).
3. Hybrid or Blended Course is a course that contains required classroom components and required online learning components.
4. Synchronous learning refers to teacher-student learning that occurs simultaneously.

5. Asynchronous learning refers to student learning that occurs independently of any specific time or schedule.

Methodology

This study was designed to determine if there were any differences in student achievement and satisfaction between an online and a hybrid course section.

Online surveys placed in Blackboard were used to gather feedback from students about the course environment. In addition, student grades for an identical course assignment were compared to judge student achievement. Finally, student withdrawals from both classes were tracked to compare student retention rates.

Chapter II

Review of Literature

The goal of Chippewa Valley Technical College to create effective hybrid learning courses is something that is currently being developed. To better understand the relationship between online courses and the newer hybrid model, data from the two learning environments were collected. The following review of literature will address the current challenges facing learners in typical online courses and the differences or improvements the new hybrid model is supposed to make when it comes to students' needs and success in this form of distance education. The review of literature will also cover the successes and realities experienced in some of the recent hybrid programs and what have been the biggest benefits gained from their programs. Finally, the review will include a closer examination of what makes those hybrid programs effective and what seems to be necessary to create a successful hybrid learning environment for students and faculty.

Challenges Facing Online Learners

One of the driving reasons given for a push to online courses is to better meet the flexibility of students and to reach a greater number of students than could be served with just traditional classroom classes. This is happening in large and small institutions—Penn State now supports 62,000 students with online technology, while other colleges, like Pierce College, generate 46% of its revenue from online programs (Abel, 2005). Recent studies estimate that “by 2005, 90% of all higher education institutions will have e-learning programs”

(Martyn, 2003). It is projected that by 2007 almost "50 percent of post-secondary learners will take courses through electronic media" (Tesone, Alexakis, & Platt, 2003). Despite the continued growth, most research shows that average completion rates in these same courses has been fairly low, usually hovering around 40-50%, and that course completion rates for online courses is usually much lower than those in the traditional classroom (Laws, Howell, & Lindsay, 2003). Despite the low completion rate, research has also shown that completely online courses can achieve high levels of success and student satisfaction, but one key missing component seemed to be face-to-face contact (Dziuban, Hartman, & Moskal, 2004).

One of the most consistent problems associated with the online learning environment that adversely affects student learning is "a sense of isolation due to a lack of interaction" (Ludwig-Hardman & Dunlap, 2003). This sense of isolation can lead to lower motivational levels and a lack of self-direction, causing higher drop-out levels and higher levels of dissatisfaction with online learning. Studies suggest that students will often drop out of a course because they do not feel like they are "part of a community" (Ludwig-Hardman & Dunlap, 2003). This sense of community or higher level of interactivity appears to be one of the key elements missing in many online classes. Many online courses lack any real peer interaction, which is also equally important to achieve student success (Oblinger & Oblinger, 2005). One of the keys to retaining online learners is providing them with support in the learning environment through interaction with fellow students and instructors (Ludwig-Hardman & Dunlap, 2003; Tesone,

Alexakis, & Platt, 2003). Along with retention comes satisfaction: "Distance learning students are more likely to find their interaction with the instructor a factor in determining their overall satisfaction with a course" (Martyn, 2003).

Online learners typically take distance education classes for the convenience of flexible times and locations, yet many are not aware that online learners are usually expected to undertake a higher "level of responsibility and initiative for their own learning," which causes another online learning problem ((Ludwig-Hardman & Dunlap 2003 ;Tesone, Alexakis, & Platt, 2003). Students that do not possess the personal motivation or level of comfort with the technology usually have difficulty staying on task in the online environment. Learner motivation plays an important role: "to be successful in delivering online courses, faculty must . . . provide specialized attention to students with low levels of self-directedness" (cited in Laws, Howell, & Lindsay, 2003). This specific focus on student motivation is often lacking in the fully online environment and difficult to address, yet "Quality student-faculty contact is an important factor in student motivation" (Martyn, 2003).

The third major problem area identified with online courses is students who lack the familiarity or comfort level with the technology used in the courses. Due to the lack of face-to-face interaction, many online students are left to fend for themselves when it comes to learning the technologies associated with Internet-based courses. Many older students that do not initially have a comfort level with using computers or accessing information via the Internet tend to struggle in the fully online environment because in addition to learning the

materials for the course, they are also learning to use a new technology at the same time (Oblinger & Oblinger, 2005).

Hybrid Courses: Rethinking Online Learning

Distance learning is often defined as “any learning setting where faculty and students are physically separated” (Martyn, 2003). The hybrid, or blended course, is designed to keep the online course’s flexibility while retaining the traditional course’s face-to-face interaction, often a crucial element to student success (Brooks, 2003). The hybrid course’s purpose is to “End the Divide Between Traditional and Online Instruction By blending approaches [to better] meet students’ needs” by ending the vacuum of fully online offerings (Laws, Howell, & Lindsay, 2003). In addition to the student benefits, the hybrid model is designed to enhance learning by better meeting specific course needs (Voos, 2003).

Part of this push for hybrid courses was driven by the students enrolled in online courses. At many institutions, the students taking the fully online courses are not always the true distance education learners. For example, at the University of Central Florida, research discovered that “more than 75 percent of students enrolled in . . . fully online ‘distance learning’ courses were also enrolled in on-campus face-to-face sections” (Dziuban, Hartman, & Moskal, 2004). Research showed that only fully online programs tended to have students that did not attend classes on campus. This information was one of the driving factors to create hybrid courses. It was a chance to still give campus students the flexibility of an online course while attempting to improve the success rates

and lower the withdrawal rates of fully online courses (Dziuban, Hartman, & Moskal, 2004).

The final theory on hybrid learning is that it is better suited to varying learning styles because it includes face-to-face components, online components, and self-paced learning—it mixes the synchronous online components with asynchronous self-paced study. It blends online and offline learning (Singh, 2003). The big benefit is the idea that “learning is a continuous process,” not a solitary event that occurs a few times a week in a classroom. By using multiple delivery modes the “hybrid online model employs the best characteristics of online education and the interactivity that typically characterizes face-to-face classroom instruction” (Martyn, 2003). In addition to improving the learning experience for students and instructors, the hybrid course reestablishes the sentiment echoed in many institutions’ mission statements, which emphasize the idea of “quality education with a personal touch” (Martyn, 2003).

Data on Hybrid Course Offerings

A number of educational institutions have already implemented the hybrid learning model, and much of the data from these experiences shows drastic changes in student completion rates. For example, a clear case where hybrid learning made a significant impact occurred at Stanford University—traditional online classes which had been offered for ten years were experiencing a completion rate of just over 50%, usually composed of highly motivated students. The university added a “live e-learning” component into its program and the completion rate grew to 94%. “The improvement was attributed to the ability of a

scheduled live event to motivate learners to complete self-paced materials on time; the availability of interaction with instructors and peers; and higher quality mentoring experiences.” This study suggests that the implementation of a hybrid style of learning versus a fully online environment can strongly impact completion rates which have been typically low in distance education courses (Singh, 2003).

Another case occurred at Baldwin-Wallace College. There hybrid classes incorporated a first face-to-face meeting where students were given an orientation to the course’s online components. Feedback about student satisfaction was collected by course surveys distributed to students during the course of the semester. Student feedback showed that the initial meeting with hands-on practice of the technology used for the course greatly alleviated student anxiety towards the online class components and built more of a sense of community within the class (Martyn, 2003). This hybrid strategy at Baldwin-Wallace College “resulted in a near 100-percent completion rate in the hybrid online courses” (Martyn, 2003). These successes were not limited to student retention, but also translated to more effective student learning as well: A study by Thompson Learning revealed that students taught in a blended learning environment composed of online and face-to-face instruction “performed tasks with 30 percent more accuracy and 41 percent faster than the online-only group” (Martyn, 2003).

In general, the hybrid course model seemed to work better in almost all critical areas necessary for effective learning. The hybrid model improved retention and grades, created more interaction and engaging of students in

discussions, and developed a more student-centered learning approach that used more effective learning activities (Sudzina, Kaleta, & Garnham, 2003).

Despite these impressive results, a deeper examination of what the hybrid model is and what exactly makes it successful is necessary to fully understand this growing trend in higher education. Two of the biggest and most detailed implementations of the hybrid learning model occurred at the University of Wisconsin Milwaukee (UWM) and Florida Central University (FCU). While all institutions were successful, each took a different approach to hybrid learning, ended up with slightly different results, and learned unique lessons from their hybrid experiences.

University of Wisconsin Milwaukee

Hybrid courses were first piloted at the University of Wisconsin Milwaukee (UWM) during 1999-2001. One unique factor at UWM that relates to their keys to success is the idea of flexibility. UWM has “no standard approach to a hybrid course” (Aycock, Garnham, & Kaleta, 2002). The actual format needed to vary based on course content, student needs, and faculty needs. Some hybrid instructors met with students several weeks in a row and then let the students work independently for several weeks, while others shortened class time by adding an online component. This flexible approach to the class structure was considered one of their keys to success. Instead of fitting all courses into a rigid hybrid formula, instructors were permitted to develop their own hybrid courses based on course content, instructor teaching style, and personal preference (Aycock, Garnham, & Kaleta, 2002).

Results of this flexible approach to the hybrid model were seen on the student and the faculty side. Faculty approval was perfect: 100% of UW-Milwaukee faculty liked the hybrid course format mainly because it better facilitated student learning. The faculty felt their courses were improved in three areas: student interactivity, student performance, and achieving course goals. The faculty discovered that “the hybrid course environment caused faculty to create better ways to engage students online, which also increased interaction in the classroom” (Aycock, Garnham, & Kaleta, 2002).

UWM faculty almost universally believed their students learned more in the hybrid format than they did in traditional class sections. Student retention was better than in online courses and student grades were better as well. Studies showed the hybrid course model “increased engagement and interactivity in a course” (Aycock, Garnham, & Kaleta, 2002). Student satisfaction levels were gauged based on surveys distributed to the students. Survey questions used to measure satisfaction asked about the amount of communication with peers and instructors, the amount of work given when compared to other traditional classes, and whether or not the hybrid learning format was effective for learning. Feedback from students echoed the improvements noticed by faculty: 80% of students surveyed reported that they felt the hybrid courses model was “worthwhile” and they would recommend the course to their friends, and over 60% of students indicated they would like to see more courses offered as hybrids (Garnham & Kaleta, 2002).

With the success of the flexible hybrid model at UWM came some important lessons learned. Hybrid instructors discovered that time management skills for students were a bigger problem than understanding the technology (Aycock, Garnham, & Kaleta, 2002). The hybrid format still required students to have a high level of motivation, and the face-to-face component gave the faculty the opportunity to address this issue more directly. Technology issues were not a significant barrier to learning, mainly because the classroom portions of the hybrid class allowed instructors to devote early meetings in the semester to technology orientations and student socialization. The result of this initial training was that most students felt the online technology was easy to use and viewed the computer skills taught in the hybrid format to be helpful for other classes and their future careers (Aycock, Garnham, & Kaleta, 2002).

As a whole, UWM's hybrid program resulted in improved student interactivity, better student performance, and increased active learning techniques. Hybrid instructors reported "*increased* interaction and contact among students and between the instructor" (19). While flexible in its delivery style offerings, faculty at UWM tried to integrate online and face-to-face components as much as possible, and the results continue to be positive. At UWM, the hybrid course environment emphasizes active learning techniques and provides the best of both worlds for students and faculty alike (Aycock, Garnham, & Kaleta, 2002).

University of Central Florida

The hybrid course offerings started at the University of Central Florida (UCF) started in 1996 and have grown ever since, with over 4,000 registered students in 2003. The university has experienced improved grades and retention rates when compared to traditional and fully online courses, as illustrated in Table 1 and Table 2. UCF hybrid courses had “higher success rates (percentage of students obtaining an A, B, or C) and a lower withdrawal rate than their comparable face-to-face courses” (UCF, 2005). Online courses reviewed during the same period exhibited lower success rates and higher withdrawal rates during the same period.

Table 1. UCF Grade Comparison Tables

	Spring 2001	Summer 2001	Fall 2001	Spring 2002	Summer 2002	Fall 2002	Spring 2003
Face- to-face	91	93	91	90	94	91	91
Blended	91	97	94	91	97	92	91
Fully online	89	93	90	92	92	92	91

Note. From University of Central Florida. (2005) Distributed Learning Impact Evaluation. *Research Initiative for Teaching Effectiveness*. Retrieved January 27, 2006, from <http://pegasus.cc.ucf.edu/rite/impactevaluation.htm#Success>

Table 2. UCF Student Withdrawal Rates

	Spring 2001	Summer 2001	Fall 2001	Spring 2002	Summer 2002	Fall 2002	Spring 2003
Face- to-face	6	3	4	5	3	3	5
Blended	6	2	5	5	2	6	5
Fully online	10	6	8	8	6	6	7

Note. From University of Central Florida. (2005) Distributed Learning Impact Evaluation. *Research Initiative for Teaching Effectiveness*. Retrieved January 27, 2006, from <http://pegasus.cc.ucf.edu/rite/impactevaluation.htm#Success>

The university's research "has found that blended [or hybrid] courses have the potential to increase student learning outcomes while lowering attrition rates." UCF has been gathering research data on student success and student retention in hybrid courses compared to fully online courses for the past seven years, and the improved student success and lower student retention has remained consistent (Dziuban, Hartman, & Moskal, 2004).

Despite these constant improvements in two key areas, UCF also measured its hybrid success by its opportunity to change or rethink its educators' approach to learning. While the university felt the fully online course could also be successful, UCF wanted to focus on an area that students reported lacking: face-to-face contact. UCF encouraged educators teaching the hybrid model to

“focus on learner-centered, engaging instruction.” In addition to incorporating discussion groups, chat rooms, and e-mail to increase student-instructor interaction, instructors of hybrid classes were trained and allowed to redesign their courses in new, creative ways to better tailor the learning activities to the delivery method. In addition, instructors were allowed to determine the format for their hybrid courses—the frequency and number of online and face-to-face meetings were determined by the individual instructor, not by a set formula. This flexibility was backed up by an extensive support network, resulting in high faculty satisfaction with hybrid courses: 88% of faculty stated they were satisfied with the course format and would teach another hybrid course (Dziuban, Hartman, & Moskal, 2004).

Of note to new institutions starting their own hybrid programs, researchers at UCF were not sure whether the successes they experienced would be quickly present at an institution just starting to offer the hybrid course format or if the successes experienced would take time to fully appear (UCF, 2005).

Conclusions

In general, all hybrid programs showed some type of improvement in a measurable way. Many of the institutions have documented improvements in retention and student success based on direct comparisons of grades and withdrawals. Most have documented improvements in faculty and student satisfaction based on feedback from surveys given during the course of the semester that address student opinions on communication, interaction, learning, and usefulness of the hybrid learning environment. Regardless of the actual

numbers or the level of improvement, most institutions mirrored three similar keys to successfully implementing the hybrid course delivery model.

The first key to success was seen as the personal touch, something often lacking in the completely online course (Martyn, 2003). Waddoups & Scott (2002) pointed out that the hybrid format helped bridge the gap between learners and educators that existed in the wholly online environment, and it helped students feel like “insiders.” Fostering peer-to-peer and peer-to-instructor interaction was really important to make the hybrid model work. To be successful it is necessary to bring back the socialization lost in the wholly online environment (Bleed, 2001).

The second key seemed to be effective, enthusiastic educators. Hybrid learning is most successful when “facilitated by educators with high interpersonal skills, accompanied by reliable, easy-to-use technology” (Derntl & Motschnig-Pitrik, 2005). In fact, instructor attitude towards the learning environment/format was even more important than instructor experience (Brooks, 2003).

The final key seemed to be flexibility. Not having a set formula for hybrids but instead matching the format to the instructor and the course format appeared to be the most effective hybrid technique. Multiple institutions seem to echo this view—it is important to avoid establishing rigid hybrid formats that all courses must follow (Veronikas & Shaughnessy, 2004). All of these techniques worked together to reduce the distance between student and instructor, an important plus to the hybrid course format. These keys work well because the concept of the

hybrid course is “rooted in the idea that learning is not just a one-time event—*learning is a continuous process*” (Singh, 2003).

Chapter III

Methodology or Procedures

This study combines both quantitative and qualitative elements to determine the effectiveness of the hybrid-learning environment when compared to the wholly online learning environment. The purpose of this research was to gather data to give some insight into the effectiveness of the hybrid learning environment when compared to the online learning environment. The results of the study may be used to help ensure student success in future hybrid course offerings at Chippewa Valley Technical College (CVTC). The research examines student grades on an identical assignment given in both course formats and also uses an online survey to gauge student satisfaction and success in the two classroom formats. This study is important for the following reasons:

1. The findings will help determine whether the current hybrid format being offered at CVTC is an effective way to teach students when compared to the traditional online course delivery style.
2. The findings of this study will help future hybrid instructors better adapt and tailor their hybrid class to students' needs.
3. The findings of the study will help determine whether lesson plans and assignments need to be further adapted to be effective in the hybrid course delivery method.

In the literature review, the current challenges facing learners in typical online courses were examined. The differences or improvements the new hybrid model is supposed to make when it comes to students' needs and success were

examined. The review of literature also looked at the successes and realities experienced in some of the recent hybrid programs and what had been the biggest benefits gained from their programs. Finally, the review took a closer examination of what makes those hybrid programs effective and what seemed to be necessary to create a successful hybrid learning environment for students and faculty. Prior to the literature review, the researcher defined the research purpose and gained approval of the research topic from the researcher's advisor and research committee.

To accomplish the purpose of this study, data were gathered from two classes, an online Technical Reporting class and a hybrid Technical Reporting class that met face to face once a week and online two days a week. Technical Reporting is a course designed to teach the preparation and presentation of oral and written technical reports. It is "designed as an advanced communication course" and another course, Written Communication, must be completed as a prerequisite to taking this course (CVTC, 2006). The core course objectives are to teach students to be clear and concise in their presentation of information when writing for a specific purpose with a specific audience in mind.

The Technical Reporting course objectives are accomplished through a number of written and oral assignments based on Wisconsin's state-approved curriculum. Both the online and the hybrid course share all the same core assignments and use the same course materials—the assignment guidelines, grading criteria, and due dates for the major assignments were virtually identical. There were two principal differences between the two courses. First, due to its

face-to-face component, the hybrid course had lectures introducing most of the major assignments, while the online course did not. Second, some of the minor assignments, like lab activities, were modified slightly to accommodate each course's delivery style, but the overall grading and content of the assignments remained consistent between both courses.

Populations

To accomplish the research objective, two different populations were used. The first population consisted of students in an online Technical Reporting class. There were a total of 26 students in this population. All students in the class were required to complete the prerequisite for this course, Written Communication, so all students had some basic writing experience prior to taking the selected course. Academic majors enrolled in this course were primarily nursing students, but also included information technology students, geographic information systems students, and alcohol and other drug abuse students.

The second population consisted of 22 students enrolled in a hybrid Technical Reporting class. Once again, all students were required to have completed the prerequisite Written Communication course. Academic majors in this course were equally varied, although once again the principal major for students in the class was nursing.

Because Technical Reporting has a prerequisite, most students taking the course are second-semester program students or students in their second term of their program sequence. Most students in the course would have been in at

least their second semester of attendance at the technical college, while some may have been in their third or fourth semesters.

Population Selection

All students from each population were surveyed for a total population of 48 students. The two groups of students were chosen because both were enrolled in the same course, both courses used the same objectives, core content, and both were taught by the same instructor, adding a further level of consistency between the two groups. The selection of the populations was approved by the University of Wisconsin-Stout Committee on Protection of Human Subjects in Graduate Research (Appendix A).

Instrumentation

The researcher used a self-developed 10-question survey (Appendix B) based on research conducted for the literature review. Most institutions that measured student satisfaction did it via some type of student survey that asked students' opinions about matters pertaining to their course experience. In general, repeatedly asked questions fell into four categories: perceptions of course content, access to course materials, communication levels with instructors and peers, and satisfaction with given grades. Based on this research trend, the researcher developed questions 1 -9. Question 10 was added because many institutions felt that students' comfort levels with technology would be a factor in their achieving success in the online or hybrid course delivery models. The researcher's survey was reviewed and approved by the research advisor and research committee prior to its use. All ten questions were multiple

choice and used the options “Strongly Agree,” “Agree,” “Disagree,” “Strongly Disagree.” In addition, the survey included a section for user responses and specific feedback for each of the questions. The research questions as related to the 10 survey items are identified in Table 3, as illustrated below. Each original research question is stated, and the survey question that addresses that research question is indicated. Research questions two and five were not addressed by the survey; instead, data were collected based on student grades and withdrawal rates from the two classes to answer these questions.

Table 3. Research Questions Related to Survey Items

Research Question	Survey Item
1. What is the relationship between student satisfaction and course delivery method (online vs. hybrid)?	5, 8, 9
2. How do grades differ on an identical assignment presented in online and hybrid formats?	NA
3. What is the difference in student perceptions of course content and assignments based on the course delivery method?	2, 3, 6, 7
4. What is the difference in student perceptions of instructor contact, feedback and peer-to-peer interaction based on the course delivery method?	1, 4, 10
5. What is the difference in retention based on course delivery method?	NA

Data Collection Procedures

The survey method chosen was an online survey given via Blackboard, the online course management program utilized in both hybrid and online courses. The online surveys were made available to the populations for a period of one week. In each course, an online announcement was posted reminding students to complete the survey and thanking them for their time and feedback. Both classes also received an all-class e-mail (see Appendix C) explaining the purpose of the survey, reminding the students of their anonymous responses, telling them completion of the survey was optional, and thanking them for their participation. In addition, to the electronic communication, students in the hybrid class were also reminded to complete the survey in a face-to-face meeting.

After one week's time, both online surveys were deactivated. In the online class, 21 of the 26 students completed the online survey. In the hybrid class, 16 of 22 students completed the online survey.

In addition to the online surveys, grades from an identical assignment completed in both class sections were gathered to gain feedback about the relationship between grades in the two learning environments. The assignment selected was a creating visuals assignment that involved students interpreting data and selecting and creating an appropriate visual for the data (see Appendix D). All portions of the assignment could be created using Microsoft Word, a software program readily available to all students. The assignment was selected by the instructor because it involved more than just analyzing the data; students would have to use a specific software program to create their report.

The assignment in the online class contained a posted guideline sheet, an introductory PowerPoint touching on some assignment keys, and a PowerPoint demonstrating how to use Microsoft Word to create visuals including a sample illustrating one part of the assignment. The hybrid class received the same materials, but instead of posting the PowerPoints online, the instructor presented the PowerPoints in class and lectured on the materials. In addition, the instructor demonstrated creating a visual using Microsoft Word and also answered assignment-related questions during a face-face meeting with the hybrid students.

The final data collected were official student withdrawals from each course over the 16 weeks of the semester. At CVTC, instructors receive automated e-mails over the course of the semester informing them of any student withdrawals from current courses. Students have to officially drop the course for this process to happen. Students that merely stopped attending a course or stopped participating in or submitting course assignments were not counted.

Data Analysis

SPSS was used to analyze the data from both courses. An independent groups t-Test analysis was conducted on the sets of grades from each course. Then an independent groups t-Test analysis was conducted on the survey results from each course. Findings from these analyses produced the means and standard deviations for each set of information, and the results are discussed in the following chapters.

Limitations

1. Completion of the survey was optional. In both populations, not all of the students completed the online survey, thus limiting the number of responses.
2. As both surveys were online, students may or may not have incorrectly interpreted the survey questions, thus potentially leading to inaccurate or unclear feedback.
3. As both surveys were conducted via Blackboard, there was the possibility of a computer or software glitch resulting in an incomplete or unfinished survey.
4. The sample populations were taken from just two classes and both classes were fairly small, so the total populations used in these analyses may not be completely indicative of all online or hybrid class populations.

Chapter IV

Analysis of Results

Three pieces of data were collected for this study in order to better assess the differences between a wholly online learning environment and a hybrid learning environment. First, a survey was given to students in an online Technical Reporting class and a hybrid Technical Reporting class. Second, grades on an identical course assignment were compared between the same two classes. Finally, retention rates between the two classes were analyzed by comparing the number of withdrawals in each class. The online Technical Reporting class contained 24 registered students and the hybrid Technical Reporting class contained 22 registered students. Completion rates for the surveys are shown in Table 4 below.

Table 4. Survey Return Rates

Delivery Style	Total Enrollment	Completion Rate	Percent
Online Course	24	21	87.5
Hybrid Course	22	14	63.6

Student Satisfaction

The online survey posted in the online course was completed by 21 of the 24 students in the class, or 87.5% of the class. The online survey posted in the hybrid course was completed by 14 of the 22 students, or 63.6% of the class. The students' responses were scored as follows: 1 = strongly agree, 2 = agree, 3

= disagree, and 4 = strongly disagree. Combined scores from both classes produced means that ranged from a low of 2.74 for survey Question 7: "The hybrid/online course format required the same or less amount of work than a traditional course," to a high of 3.49 for survey Question 2: "The hybrid/online course provided easy access to course materials and/or documents." As a whole, responses to all survey questions had means that were closer to "agree" and "strongly agree" than "disagree" or "strongly disagree."

Standard deviations ranged from the lowest at .458 for survey Question 10: "Technology support from my instructor/college was good," to the highest at .980 for survey Question 2: "The hybrid/online course provided easy access to course materials and/or documents." The small range of standard deviations shows that even the survey item that had the greatest range would still fall more into the "agree" category than "disagree." A clearer view of student satisfaction is gained by independently examining the similarities and differences of the two delivery styles.

The one survey question that shared the exact same mean (3.29) occurred for survey Question 10: "Technology support from my instructor/college was good." Other closely scored survey items dealt with communication with the instructor, access to course materials, and time given to complete assignments. The closest and also lowest means occurred for survey Question 7: "The hybrid/online course format required the same or less amount of work than a traditional course." These similarities are shown in Table 5 and Table 6.

In nine of the ten survey questions, the online course respondents rated the questions higher than respondents in the hybrid course. The highest differences in responses were all related to one area—learning environment. Hybrid students did not feel as strongly about peer-to-peer interaction and the effectiveness of the learning environment as the online course respondents. The other big differences in scores occurred with the questions dealing with respondent's perceptions of grades. Finally, the biggest discrepancy between means occurred for survey Question 9: "I would take another course in the hybrid/online course format if given the opportunity." While the mean for the hybrid class was still closer to "agree" than "disagree," both the mean and the standard deviation were furthest apart on this question, as seen in Table 5 and Table 6.

Table 5. Hybrid Student Satisfaction

Question Topic	Mean	Standard Deviation
1. Communication with Instructor	3.07	.917
2. Access to Course Materials	3.43	.514
3. Course Assignments	3.07	.616
4. Peer-to-Peer Interaction	2.64	.745
5. Classroom Environment	2.86	.663
6. Grades Received	2.93	.917
7. Amount of Work	2.57	1.016
8. Successful Learning Experience	3.07	.616

9. Course Format	2.79	.975
10. Technology Support	3.29	.469

Table 6. Online Student Satisfaction

Question Topic	Mean	Standard Deviation
1. Communication with Instructor	3.24	.436
2. Access to Course Materials	3.52	.512
3. Course Assignments	3.24	.436
4. Peer-to-Peer Interaction	3.24	.436
5. Classroom Environment	3.19	.402
6. Grades Received	3.57	.507
7. Amount of Work	2.86	.964
8. Successful Learning Experience	3.52	.512
9. Course Format	3.76	.436
10. Technology Support	3.29	.463

Survey results were also compared using an independent t-Test. The most robust differences were found in survey Question 9, "I would take another class in the hybrid/online format if given the opportunity." Statistics showed that the online students were significantly more likely to take another course in the online format when compared to the hybrid students. Statistics confirmed that it was 99% likely that the difference was not due to chance, as shown in Table 7.

Other significant differences occurred with survey question 4 (peer-to-peer interaction), survey Question 6 (perception of grades), and survey Question 8 (successful learning experience). For these questions, online students were more likely to agree to the questions than their hybrid counterparts as shown in Table 7.

Table 7. Comparison of Survey Results

Survey Question	t	Sig. (2-tailed)
1. Allowed me to easily communicate with instructor	-.723	.475
2. Provided easy access to course materials	-.539	.594
3. Enough information to successfully complete assignments	-.939	.355
4. Effective peer-to-peer interaction	-2.985	.005
5. Created a classroom environment conducive to learning	-1.855	.073
6. Grades received same/better than	-2.670	.012

traditional course		
7. Required the same/less amount of work than traditional course	-.841	.406
8. Provided a successful learning experience	-2.362	.024
9. Would take another course in this format	-4.042	.001
10. Technology support was good	.000	1.000

Note. Equal variances assumed (df = 33)

In addition to the multiple-choice responses given to the 10 survey questions, respondents had the opportunity to provide typed comments for each of the questions. The student feedback comments received for each survey were very extensive. The responses by survey question are presented in Appendix F. Responses relevant to the initial research questions are included in the appropriate sections of Chapter 5. Feedback from each survey question is reviewed below along with common themes in each of the delivery styles.

Survey Question 1, "The hybrid/online course format allowed me to easily communicate and receive feedback from my instructor," produced one constant theme in both delivery styles: perceptions of instructor response time vary. The

feedback given was mixed—some thought feedback was prompt, while others felt it was delayed. In the hybrid class, slightly more than half the feedback felt instructor feedback was slow and “not timely.” The others felt instructor feedback was “almost instant” with the instructor “always e-mailing” the students. More of the feedback was positive in the online course, as students felt e-mails were answered “within time period given,” yet others felt “we had to wait quite a while for some assignments to be graded.”

Student responses to survey Question 2, “The hybrid/online course format provided easy access to course materials and/or documents,” revealed that students in both delivery styles felt they had easy access to course materials, with comments being overwhelmingly positive. A typical response in the hybrid course was “I thought that it was very easy to learn, everything was laid out for you.” A typical response in the online course was “The course is easy to understand.”

Student responses to survey Question 3, “The hybrid/online course format gave me enough information to successfully complete course assignments,” revealed all positive responses from the hybrid students (“everything is readily available”) and mixed feedback from the online class (“it can be difficult”) suggesting that the face-to-face interaction of the hybrid course made completing assignments a little easier for the students than in the wholly online course.

Survey Question 4, “The hybrid/online course format gave me effective peer-to-peer interaction in group discussions and/or group work,” produced a similar theme in each delivery style: use of the discussion board is a helpful tool,

regardless of delivery style. A hybrid student commented that the discussion board was “a neat method of communicating with your classmates,” while an online student noted “the discussion board is a great communication tool.”

Responses to survey Question 5, “The hybrid course format created a class environment conducive to learning,” revealed that students are more familiar and comfortable with the online course format than they are with the hybrid course format. Online responses centered on the idea that “the internet format is less stressful for me,” while hybrid comments reflected the idea that students “perform much better with the structured class room method.”

Survey Question 6, “The grades I am receiving using the hybrid course format are about the same or better than the grades I would have received if I had taken this course with traditional methods,” revealed that hybrid and online students aren’t really sure of their grades. Comments ranged from “no clue” to “so far they seem higher” to “I think they are low.” Based on comments, online students generally viewed their grades as better, while hybrid students generally viewed their grades as lower than they would have received in a traditional setting.

Survey Question 7, “The hybrid/online course format required the same or less amount of work than a traditional course,” revealed two differing themes. First, online students seemed to have trouble effectively managing their time. A typical online student survey response was “I just need more time.” Second, hybrid students viewed much of the work given in the hybrid format as “Busy work,” not something relevant to the course.

Feedback to survey Question 8, "Overall, the hybrid/online course format provided a successful learning experience," revealed one common theme: students love the flexibility distance education offers them. An online student commented that "It is so nice to be able to take online classes that don't interfere with my work schedule." A hybrid student commented "This particular class allowed myself more flexibility."

Feedback to survey Question 9, "I would take another course in the hybrid/online course format if given the opportunity," revealed that the more familiar students are with a course delivery style, the more likely they are to take additional courses in the same format. As the Internet-based course format has been available to students for years, feedback echoed this theme: "I'm glad CVTC offers online classes" and "I will continue to take internet courses in the future." Some hybrid students shared this sentiment as well: "I really like the hybrid. it's nice to have." Due to the newness of the hybrid format, there were some negative comments as well: "I wouldn't take another class like it."

Feedback for survey Question 10, "Technology support from my instructor/college was good," showed that most students at CVTC are comfortable with technology. There were no negative comments in either group. Online students' comments were all similar: "I love using blackboard for classes." Hybrid students' comments summed it all up as well: "I didn't have any problems." This theme of not having any real problems with technology was also found in the review of literature.

Student Grades

In the online class, 21 of the 24 students submitted the selected assignment, or 87.5% of the class. In the hybrid class, 20 of the 22 students submitted the selected assignment, or 90.9% of the class. The mean between grades in both classes was very close: the hybrid mean was 82.20 and the online mean was 84.38. The standard of deviation was very close as well, with 11.428 for the hybrid course and 10.356 for the online course, as shown in Table 8.

Table 8. Comparison of Student Grades and Instruction Method

Delivery Style	Mean	Standard Deviation
Online	82.20	11.428
Hybrid	84.38	10.356

The breakdown of students receiving a “C” or better for the two courses was nearly identical as well, with 18 of the 21 online students and 18 of the 20 hybrid students receiving one of these grades. Three students in the online course received a grade of “D” and one student received a “D” and one student received an “F” for the assignment in the hybrid course (see Appendix E).

An independent samples t-Test was also conducted on the grades from each course. While the online course scored slightly higher on the selected assignment and the grade distribution was wider in the hybrid course, there was no significant difference between grades based on t-Test results, as shown in Table 9.

Table 9. Student Grade t-Test Results

	t	Sig. (2 tailed)
Student Grades	-.641	.525

Note. Equal Variances Assumed (df=39)

Student Retention

Student withdrawals for the course were as follows: by the end of the semester, the online course experienced five registered withdrawals. Based on this, the online course had a 79.1% completion rate. Over the same semester, the hybrid course experienced two registered withdrawals, giving it a 90.9% completion rate, as shown in Table 10.

Table 10. Student Withdrawal Rates

Delivery Style	Enrollment	Withdrawals	Completion Rate
Online Course	24	5	79.1%
Hybrid Course	22	2	90.9%

Chapter V

Summary, Conclusions, and Recommendations

As online learning continues to grow, many institutions are looking for alternate delivery methods to help solve some of the problems typically associated with the wholly online environment. One approach being adopted is the hybrid or blended course, one that combines the flexibility of online courses with the familiarity of traditional on-campus courses.

Summary

Chippewa Valley Technical College (CVTC) piloted the hybrid course delivery style, but more information was still needed about student achievement, retention, and student satisfaction in the hybrid format compared to the wholly online classroom environment. In order for this new delivery style to be successful for students and instructors at the college, further analysis was needed to ensure a quality level of instruction is maintained and student success is taken into account.

The purpose of this study was to compare student achievement, retention, and satisfaction between an online classroom environment and a hybrid environment. Two sections of Technical Reporting were compared. Both courses, the online and the hybrid, followed the same lesson plans and completed the same assignments over the course of the semester. The online course was taught entirely online via Blackboard, while the hybrid met one day a week in the classroom and two days a week online via Blackboard. The two

course delivery styles were compared in order to better understand the differences and adjustments needed to make hybrid learning successful.

The following questions were analyzed:

1. What is the relationship between student satisfaction and course delivery method (online vs. hybrid)?
2. How do grades differ on an identical assignment presented in online and hybrid formats?
3. What is the difference in student perceptions of course content and assignments based on the course delivery method?
4. What is the difference in student perceptions of instructor contact, feedback and peer-to-peer interaction based on the course delivery method?
5. What is the difference in retention based on course delivery method?

The following were limitations of the study:

1. The students evaluated for this study were from two sections of Technical Reporting classes offered by the college. Factors such as student program, demographics, class time, class size, and student ability levels are limitations because this was not a random sampling of students. Students were used solely because they registered for one of the two selected course sections.
2. Students registered for the hybrid course section may or may not have been aware that they were signing up for a hybrid class when they initially registered for their course. The college did not have a consistent

notification method in place at that time for students registering, so there was no guarantee that it was completely successful. Because of this, student opinions of the course delivery style may be biased.

3. The survey used to collect student feedback was limited because students may or may not correctly interpret the survey questions asked, thus potentially leading to inaccurate or unclear feedback.
4. Time is a limitation of the study because all students were from one semester. A sampling of courses and feedback from multiple semesters would strengthen the overall survey results and validity.

The review of literature highlighted two significant themes in the area of distance education. First, the shortcomings of wholly online classes were examined, and problems with lower grades, retention, and student satisfaction were common issues. Second, the apparent benefits of the hybrid learning model were explored, and in most cases improvements in retention, grades, and satisfaction were consistently documented. Based on the review of literature, students in the hybrid learning environment should perform at least slightly better than students in an online environment in the three aforementioned areas of research.

Three elements of each course were researched for this study. First, an online survey was used to collect data about student satisfaction in both course formats. In addition, student feedback was also gathered via the survey to give a complete picture of satisfaction. Second, student grades on an identical assignment were compared in both course formats to see whether or not the

delivery style made a significant impact on the students' grades. Finally, retention was tracked for both courses by counting the number of registered withdrawals from each of the selected courses. Using these three elements, the following results were reported.

After the data were analyzed for this study, research conducted in the two Technical Reporting courses showed slightly higher assignment grades in the online course, while the hybrid course had a slightly better retention rate for the semester. However, despite better retention, student satisfaction levels based on survey results were generally lower in the hybrid course when compared to the online course. To better understand this information, it is necessary to examine each originally proposed research question individually in conjunction with the survey data and the student feedback to individual questions from each course. Also accompanying each research question is an initial research hypothesis based on the previous review of literature.

Conclusions

Research Question #1: What is the relationship between student satisfaction and course delivery method (online vs. hybrid)?

Hypothesis: Student satisfaction should be better in the hybrid course.

Findings: This research question was tied into survey questions 5, 8, and 9.

All three questions resulted in more positive responses and higher means for the online course as opposed to the hybrid, which does not support the hypothesis based on research. Survey Question 5, "The hybrid/online course format created a classroom environment conducive to learning," had a mean response of 3.19

for the online class compared to 2.86 for the hybrid. In addition, all five student feedback comments from the hybrid class for this question were negative in nature, with a few noting that they felt the hybrid format gave them more busy work to one respondent that stated “The idea of classroom based and internet based lesson[s] should be kept separate.” In contrast, three of the four posted feedback comments for the online class were positive. The only negative comment addressed too much information being presented, not that the online format itself was not working.

Survey Question 8, “Overall, the hybrid/online course format provided a successful learning experience,” provided a mean of 3.52 for the online class compared to 3.07 for the hybrid and also provided one of the more significant differences based on the t-Test results. Online students were much more likely to classify their learning experience as “successful” when compared to the hybrid students. Student feedback mirrored the statistical results. Feedback from the hybrid course revealed two positive responses and one negative, compared to all positive responses from the online section. All positive comments centered on the idea of flexibility, an important selling point for all types of distance education offerings. Positive comments from both courses paralleled one another. “This particular class allowed me more flexibility” was a comment made in the hybrid class, while an online student stated “It is nice to take an online class that doesn’t interfere with my work schedule.”

Survey Question 9, “I would take another course in the hybrid/online course format if given the opportunity,” yielded the most robust difference based

on the t-Test and means. Based on the data, the online students were significantly more likely to take another course in this format compared to the hybrid students. The t-Test score was -4.042 with a significance of .001 for this survey question. The online course mean was 3.76, while the hybrid course mean was 2.79. Equally telling were the student responses. Almost all of the online responses were positive; negative statements were mild: "Although I do like the flexibility that comes with an Internet course, I actually do prefer the traditional classroom setting." In contrast, hybrid feedback was split between positive and negative, and some of the negative feedback was fairly strong: "I wouldn't take another class like it." Another respondent noted ". . . what I don't like is I get busy work to do just because it is a hybrid class." Based on these findings, the wholly online format seemed to be preferred over the hybrid format in this study.

Research Question #2: How do grades differ on an identical assignment presented in online and hybrid formats?

Hypothesis: Grades should be higher in the hybrid course format.

Findings: The findings do not support the hypothesis again, but it was a minor difference in this case. Grades were slightly higher in the online course, but overall they were very close—82.80 for the hybrid versus 84.38 for the online. The standard deviation was very close as well—11.428 for the hybrid versus 10.356 for the online. In each class, an identical number of students received a grade of "C" or better: 15. Despite the extra attention and time spent reviewing the assignment and a face-to-face question and answer period in the hybrid

format, grades did not surpass the online scores, going against the findings gathered from most institutions as documented in the review of literature.

Research Question #3: What is the difference in student perceptions of course content and assignments based on the course delivery method?

Hypothesis: Students would perceive the course content and assignments to be easier and more relevant in the hybrid course format.

Findings: Results were mixed here. Survey questions 2, 3, 6, and 7 pertained to this research question. For all four survey questions, the online course rated the questions higher than the hybrid course, yet individual student feedback suggests that in some cases the hybrid students were happier with the course content and their grades, which supports the findings in the review of literature. However, when it came to the amount of work given in each course, both online and hybrid students were unhappy with the quantity of work, but for different reasons.

Survey Question 2, "The hybrid/online course format provided easy access to course materials and/or documents," and Survey Question 3, "The hybrid/online course format gave me enough information to successfully complete course assignments," were both fairly close when it came to means, but all feedback from the hybrid course was all positive, while the feedback from the online course was mainly negative when it came to access of course materials. Hybrid feedback praised the course format: "I like meeting once a week and the other days are eclass because you can sort of work at your own pace." Another respondent commented "I could find everything I needed on

blackboard at anytime for the course material and assignments.” While the online students also praised the course format—“The layout of the course is perfect. It’s really user friendly”—they also expressed concerns about assignment comprehension: “i am doing assignments that i have never done before and it is difficult for me.” Another comment stated “it can be difficult to know what the teacher wants without seeing them in person.” Despite the slightly higher means for the online course, 3.52 versus 3.43 and 3.24 versus 3.07, some online students did express concerns about understanding the materials without direct contact with their instructor, suggesting that there may have been more trouble with the course format than the survey initially revealed.

Survey Question 6, “The grades I am receiving using the hybrid/online course format are about the same or better than the grades I would have received if I had taken this course with traditional methods,” showed the second-greatest disparity between the two course formats. T-Test scores showed a strong differences ($t = -2.670$, Sig. = .012) indicating the online students were more likely to agree with this survey question than the hybrid students. Looking at the student feedback to this question gives a little different insight to the responses. The hybrid course students rated this question lower, with a mean of 2.93, and yet their all-positive feedback didn’t suggest this. One respondent stated “My grade is higher than my traditional class room settings.” Another commented “I am getting probably a better grade than I did in a traditional classroom setting. In contrast, the online course students rated this question relatively high with a 3.57 mean, yet their feedback comments were mixed.

Some comments stated that grades were “probably higher,” while others stated grades were “a little lower” or “about the same.”

Finally, Survey Question 7, “The hybrid/online course required the same or less amount of work than a traditional course,” received the lowest scores from both course formats, with means of 2.57 and 2.86 respectively. Student feedback echoed this, but for different reasons. In the hybrid class, there was a general feeling from students that they were given too much unnecessary work. One respondent noted “There were more assignments in this class than any other class,” while others simply noted “Busy work” and “way more!” In contrast, the online student feedback was centered on a lack of time and time management. One respondent noted “I just need more time,” while another stated “Too many other things going on – I need fewer commitments or more time.” One respondent commented “I don’t think I have had time to comprehend much. There has been too many things due in a single week’s time.” These comments relate to research in the review of literature that suggests online students need to be highly motivated to succeed in the online environment, as they are more responsible for taking charge of their own learning and responsible for their own time management.

Research Question #4: What is the difference in student perceptions of instructor contact, feedback and peer-to-peer interaction based on the course delivery method?

Hypothesis: Students in the hybrid class will perceive instructor contact and peer interactions in a more positive light due to the fact that they will have the opportunity of weekly face-to-face meetings.

Findings: Results were mixed: survey questions showed better scores for communication and peer interaction in the online course, but peer interaction got better feedback in the hybrid course. The findings from the review of literature that technology was not a serious problem for distance learning students was confirmed by this study.

Survey Question 1, "The hybrid/online course format allowed me to easily communicate and receive feedback from my instructor," produced similar means (3.34 for online and 3.07 for hybrid) and feedback was equally mixed between the positive and negative in both delivery styles. Some hybrid students felt instructor contact "Was helpful, but not timely," while others saw communication as faster: "e-mail and black board are almost instant." The online responses were similar. Some thought it was great: "the instructor is very good about staying in touch, almost as if your in the classroom," while others felt ". . . the lack of student-instructor contact is the major drawback of Internet based training." Both classes' mean scores fell between "Agree" and "Strongly Agree," indicating that as a whole respondents felt instructor communication was good, but the mixed feedback shows it is truly a matter of individual student perspective—some saw communication as effective, while others did not.

Survey Question 4, "The hybrid/online course format gave me effective

peer-to-peer interaction in group discussions and/or group work,” also provided mixed results. The t-Test data was the second strongest, indicating strong differences were found between the two courses, with the online students much more likely to agree with the idea of effective peer-to-peer interaction than the hybrid students. The online survey mean was 3.24 compared to 2.64 for the hybrid, yet all hybrid feedback was positive, and all online feedback was positive with the exception of one negative comment. Hybrid and online feedback centered around use of the discussion board: “. . . I thought it [the Discussion Board] was a neat method of communicating with your classmates.” Online comments included “I feel that the discussion board is a great communication tool between students, and forces us to talk.” The only negative comment was from the online survey and revealed a problem common to online courses: “Its hard when you don’t have any classmates you can just talk to.”

Survey Question 10, “Technology support from my instructor/college was good,” received identical mean scores from both course formats at 3.29. Student comments from both courses were all positive as well, with no feedback concerning a lack of support. This supports the review of literature, which found that technological issues were not a major barrier to success in distance learning.

Research Question #5: What is the difference in retention based on course delivery method?

Hypothesis: Retention will be slightly better in the hybrid course.

Findings: Retention was better in the hybrid class, supporting the studies

examined in the review of literature. The hybrid course had two registered withdrawals compared to five registered withdrawals for the online course. Despite consistently rating the student satisfaction survey questions higher than their hybrid counterparts, the retention was still lower, suggesting that even though students might not have been as satisfied with the overall course experience, the course format, namely the weekly contact with the instructor and other students may have created a stronger personal bond, thus reducing the number of withdrawals from the course, an idea reinforced by the review of literature.

On the surface, this study revealed mixed results that don't initially support all of the findings in the review of literature. While no significant difference between grades was discovered, the online students were significantly more satisfied than their hybrid counterparts based on the data. In addition, they were much more likely to take another course in the online format. Both of these findings go against the researched findings in the review of literature. Only in the area of retention did this study have findings consistent with the review of literature. However, when examined closely, while not as definitive as some of the documented successes when implementing the hybrid course environment, this study of a hybrid learning course compared to an online learning course does in many ways support the review of literature. Although student satisfaction was higher in every surveyed category for the online course, actual student feedback responses showed that in many cases students in the hybrid course were equally or more satisfied with the course format than their online

counterparts. And while grades were lower in the hybrid course, they were not significantly different, which when taken into account with overall course retention made the hybrid course more successful.

Recommendations

Based on this study and the analysis of the data, some new findings have been revealed that could be used to improve the hybrid course model.

1. Activities and assignments in the hybrid course format need to be relevant to the course and their purpose and relevancy needs to be clearly explained to students. Many hybrid students viewed the work they had to do during the online portions of the class as “busy work” instead of useful course content. While online students completed the same exact assignments, it is clear that they did not view them the same way. Assignments and activities need to be better tailored to suit the hybrid format so students will consider them essential elements of the course.
2. Students need to see that the workload in a hybrid course is identical to an online or traditional course. The lowest-rated category in both courses dealt with the workload for the course. Students felt the workload was too heavy and more than what would be given in a traditional version of the course. Instructors need to first make sure the reason behind giving an assignment is clear to the students, and second they need to tell or show students that the workload they will experience in the hybrid course is identical to what they would encounter in a traditional course.

3. Peer interaction needs to be improved. While hybrid students rated peer interaction as good based on the survey and its feedback, the focus of the responses was on the discussion board, an activity used outside of the classroom. No mention was made of the weekly face-to-face meetings in the classroom, which might suggest the students did not view this as time to interact with peers or work together. Ideally, the face-to-face component of the hybrid course should provide an opportunity for the students to develop into more of a classroom community, which may not have completely happened in this situation. Future instructors need to make sure that in-class components of a hybrid class provide an opportunity for student interaction, not just an opportunity to lecture key materials or concepts.
4. Students need to understand what a hybrid course is and be aware they are signing up for one prior to starting the class. The hybrid course model is new at CVTC, and even though students may have a general idea of what it entails, they may not fully understand it. Understanding the format and the reason for the format needs to be required before registering. In addition, as discussed in the limitations of this study, students may or may not have been aware that the course they registered for was being taught in the hybrid format. Signing up for what was thought to be a traditional course and then discovering it was a hybrid may have caused some negative impressions and resulted in some of the negative feedback. Students that signed up for the online course knew it was an online course

and because of this may have been better prepared for the course and its delivery style, resulting in more positive feedback.

Recommendations for Further Study

Further research is needed at CVTC to get a complete picture of the hybrid learning model and its effectiveness.

1. More student feedback is needed. For many of the survey questions, feedback was mixed between positive and negative. It is possible that individual student interviews or repeated surveys during the course of the semester would yield better or more consistent feedback, which would help identify what is working and what needs to be changed to better create an effective hybrid environment.
2. Once CVTC has a method in place of alerting students to the type of course they are signing up for, additional surveys or studies should be done to determine if this was a significant factor when comparing a hybrid course to an online course. If students are aware that a class is a hybrid and willingly sign up for it, they may be more prone to succeed.
3. A broader, longer survey of hybrid learning should be conducted. As this study was limited to a small population and two courses during one semester, its scope is limited—a survey using a larger population conducted over the course of a couple semesters might reveal more effective data about the effectiveness of the hybrid course model. Distance education is going to continue to grow and evolve, and as it

does, it will bring new challenges. As CVTC enters into its new phase of distance learning with hybrid courses it faces the task of designing and implementing this course delivery style in a way that will successfully meet the needs of the learner by effectively combining the benefits of the face-to-face environment with the flexibility of the online course. The fundamental nature of the hybrid learning environment is summarized by Plato: "Learning occurs in the mind, independent of time and space" (Singh, 2003). As the college continues to offer more hybrid offerings and gather further feedback from its distance education program, its courses will improve and the benefits of the hybrid course model may be fully realized.

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Appendix A: Protection of Human Subjects Approval Form



Stout Solutions • Research Services
152 Voc Rehab Building

University of Wisconsin-Stout
P.O. Box 790
Menomonie, WI 54751-0790

715/232-1126
715/232-1749 (fax)
<http://www.uwstout.edu/rps/>

Date: March 28, 2006

To: Paul Reid

Cc: Dr. Howard Lee

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, "*A Comparison of Student Achievement and Perceptions Between a Hybrid Technical Reporting Class and an Online Technical Reporting Class at Chippewa Valley Technical College*," has been approved by the IRB through the expedited review process. This protocol has been approved provided the following items are addressed. Then the measures you have taken to protect human subjects are adequate to protect everyone involved, including subjects and researchers.

- 1) Informed consent will be sought from each prospective subject or the subject's legally authorized representative, in accordance with, and to the extent required by §46.116

Reviewer comment: Please add a statement to your consent form that says: "By completing this survey, you agree to participate in the project entitled (insert your title here)"

Please send revisions to Research Services - 152 Voc Rehab.

Please copy and paste the following message to the top of your survey 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.

This project is approved through March 27, 2007. Research not completed by this date must be submitted again outlining changes, expansions, etc. Annual review and approval by the IRB is required.

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

Appendix B: Hybrid/Online Course Survey

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

Statement of Consent:

By completing this survey you agree to participate in the project entitled *A Comparison of Student Achievement and Perceptions between a Hybrid Technical Reporting Class and an Online Technical Reporting Class at Chippewa Valley Technical College*

1. The hybrid course format allowed me to easily communicate and receive feedback from my instructor.

Strongly Agree Agree Disagree Strongly Disagree

2. The hybrid course format provided easy access to course materials and/or documents.

Strongly Agree Agree Disagree Strongly Disagree

3. The hybrid course format gave me enough information to successfully complete course assignments.

Strongly Agree Agree Disagree Strongly Disagree

4. The hybrid course format gave me effective peer-to-peer interaction in group discussions and/or group work.

Strongly Agree Agree Disagree Strongly Disagree

5. The hybrid course format created a class environment conducive to learning.

Strongly Agree Agree Disagree Strongly Disagree

6. The grades I am receiving using the hybrid course format are about the same or better than the grades I would have received if I had taken this course with traditional methods.

Strongly Agree Agree Disagree Strongly Disagree

7. The hybrid course format required the same or less amount of work than a traditional course.

Strongly Agree Agree Disagree Strongly Disagree

8. Overall, the hybrid course format provided a successful learning experience.

Strongly Agree

Agree

Disagree

Strongly Disagree

9. I would take another course in the hybrid course format if given the opportunity.

Strongly Agree

Agree

Disagree

Strongly Disagree

10. Technology support from my instructor/college was good.

Strongly Agree

Agree

Disagree

Strongly Disagree

Appendix C: Survey E-Mail Sent to Students via Blackboard

Hi Everyone!

An online survey has been activated under the assignments button in the course. Please take a few moments to give some feedback about your experiences in this course so far this semester! All responses are anonymous and the survey is optional; if you chose to complete it, the survey should take about 10 minutes to complete.

If you have any questions or need any help, please contact me!

Your feedback is very important! Thanks in advance!

Paul Reid

Appendix D: Technical Reporting Visuals Assignment

TECHNICAL REPORTING PAUL REID

FORMAT AND GRAPHICS

Writing is just one aspect of technical communication. The purpose of these exercises is to give you practice expressing information clearly through visuals. Visuals are a powerful tool for effective and clear communication of ideas. The visuals exercises consist of a combination of assignments from your textbook and the Internet. Create carefully—these exercises may not be revised!

All visuals should be created with a computer. You may use any software that you know to create your visuals, but Microsoft Word is recommended.

Remember the four keys for effective visuals:

complete information, clear labels, descriptive titles, and citations!

PART 1 (25 POINTS)

1. Create either a horizontal or vertical bar chart for the following information. In 2005, the retirement plan for a government employee is divided up as follows: the employee contributes 5 percent of the salary; the federal government contributes 4 percent of the salary; and the state government contributes 2 percent of the salary. Create a bar chart showing the total amount in dollars contributed annually for a government employee and the individual amounts contributed by each participant based on an employee earning a \$50,000 salary. Label and title this visual.

PART 2 (25 POINTS)

2. VISUAL OF YOUR CHOICE: Create an appropriate visual for the following scenario. You are a marketing director for ABC Company that raises turkeys in Texas, Virginia, New York, and Ohio. You have been asked to create a visual for a sales report to the company's board of directors. Using the information below, create a graphic to clearly explain ABC Company's sales for 2000-2004.

Sales (Thousands of Pounds)

Texas: 2000: 90.4; 2001: 98.6; 2002: 99.8; 2003: 104.6; 2004: 97.6

Virginia: 2000: 60.3; 2001: 62.4; 2002: 60.6; 2003: 58.4; 2004: 54.8

New York: 2000: 58.4; 2001: 60.6; 2002: 65.6; 2003: 67.8; 2004: 72.4

Ohio: 2000: 40.8; 2001: 48.5; 2002: 52.5; 2003: 56.3; 2004: 58.9

Label and title this visual.

PART 3 (25 POINTS)

3. VISUAL OF YOUR CHOICE: The website Health on the Net <<http://www.hon.ch/Survey/analysis.html>> provides information about the growth of the Internet. Visit this site and click on the Surveys link. Pick five pieces of information (It could be just one area) and create a visual that accurately and clearly presents the information. Label, title, and cite the source for this visual. Type a paragraph summarizing and analyzing the information presented in the visual.

PART 4 (25 POINTS)

4. Locate two visuals from the Internet relating to your major field of study. Copy or paste these into Microsoft Word and then type a paragraph for each visual explaining the content and evaluating the effectiveness of the visual. Keep in mind visuals can be anything—charts, graphs, pictures, diagrams, etc. Make sure you provide specific supporting evidence for your subjective evaluation! Cite the sources of the visuals.

**IF YOU HAVE ANY QUESTIONS ABOUT THESE GUIDELINES, PLEASE E-MAIL
YOUR INSTRUCTOR!**

THIS IS A 100-POINT ASSIGNMENT.

Appendix E: Visuals Assignment Grades

Hybrid Course Grades

1. 91
2. 80
3. 73
4. NOT SUBMITTED
5. 72
6. 98
7. 77
8. 78
9. 78
10. 87
11. 91
12. 86
13. 71
14. 90
15. 52
16. 89
17. NOT SUBMITTED
18. 85
19. 98
20. 67
21. 88
22. 93

Online Course Grades

1. 74
2. 96
3. 94
4. 81
5. NOT SUBMITTED
6. 88
7. 80
8. 81
9. 94
10. NOT SUBMITTED
11. 95
12. 83
13. 96
14. 79
15. 93
16. 66
17. NOT SUBMITTED
18. 97
19. 93
20. 64
21. 68
22. 84
23. 78
24. 88

Appendix F: Student Feedback to Survey Questions

Hybrid Survey Results:

1. The hybrid course format allowed me to easily communicate and receive feedback from my in instructor.

Comments:

Yes, but took a while to receive messages back.

Was helpful, but not timely.

Feedback on blackboard slower

He is always on time any thing you have questions to he can always answer in a short time

Sometimes it is hard to figure out when things are due and to ask the instructor questions and get a prompt reply.

I have really enjoyed the form of teaching for me. Paul is an awesome instructor and helps whenever needed and is always e-mailing to let us know about assignments. If I would have had a teacher that wasn't as helpful as Paul I don't think I would of been able to complete assignments and enjoy it as well.

e-mail and black board are almost instant

hard to find teacher on e-class days

2. The hybrid course format provided easy access to course materials and/or documents.

Comments:

I like meeting once a week and the other days are eclass because you can sort of work at your own pace.

I like that there were things that we had to do online. It made me develop better computer skills that I will be able to use in the future.

I thought that it was very easy to learn, everything was laid out for you.

Access to the materials that I needed was very easy.

This class should have computer class as the prerequisite before signing up.

3. The hybrid course format gave me enough information to successfully complete course assignments.

Comments:

everything is readily available plus you are already online so the internet can be used for information too

I could find everything I needed on blackboard at anytime for the course material and assignments.

Can access it on any computer with the internet. Very nice tool.

it does make things very convenient.

4. The hybrid course format gave me effective peer-to-peer interaction in group discussions and/or group work.

Comments:

We are doing peer editing over the discussion board and I think it will be a good experience.

Everybody is working at the different pace; different assignments...

Being on the computer does take away some amount of contact, but there was a lot of discussion through the discussion board posted on the site which made up for it. I didn't lose anything by having part of the class this way.

I had never used the discussion board and when I tried it for our assignment I thought it was a neat method of communicating with your classmates.

5. The hybrid course format created a class environment conducive to learning.

Comments:

I perform much better with the structured class room method.

The idea of classroom based and internet based lesson should be kept separate.

Not enough time to comprehend.

it just gives more busy work

I think doing assignments that are on blackboard and submitting them that way is excellent. But what I don't like is just because there are three scheduled days for class and two of them are on blackboard, why does there have to be an assignment to go with it? Why not just something to read?

6. The grades I am receiving using the hybrid course format are about the same or better than the grades I would have received if I had taken this course with traditional methods.

Comments:

no clue

so far they seem higher or at least the same

I'm doing a little better in this course now.

My grade is higher than my traditional class room settings

I'm not sure how I'm doing yet till the end of the sem. but I'm sure I'm doing a good job so far.

my grades are about the same

I am getting probably a better grade than I did in a traditional classroom setting.

I am actually getting a good grade!

7. The hybrid course format required the same or less amount of work than a traditional course.

Comments:

It's hard trying to remember that you have an assignment due when you don't have a "class" that day, so some of my assignments have been a day late.

I have had to spend more time with this class than my others because I have had to figure things out on my own as I went along.

Way more!

There were more assignments in this class than any other class.

On the days that you have a e-class you have until midnight to turn the assignment in. I like it because if you have another assignment that is due you can do it first and then submit the tech reporting assignment.

Busy work.

things are due either tuesdays or thursdays till midnight so it makes you do it

The instructor is always contactable, and replies in a very timely manner.

There is independence and freedom for working on and completing assignments.

8. Overall, the hybrid course format provided a successful learning experience.

Comments:

I like having all the information and notes on blackboard where I can access it any time.

I can not always communicate with my teacher through E-mail. I am old fashion, like being in the class and communicate with my teacher that way.

This particular class allowed myself more flexibility. I needed that because I work full-time and it is necessary for me to have some flexibility in my schedule. I learned all of the information just as well as I would have had I had all traditional in-class lessons. Everything was very accessible as well.

9. I would take another course in the hybrid course format if given the opportunity.

Comments:

I wouldn't take another class like it.

I would take a hybrid class again because it sort of allows me to work at my own pace and still connect with the teacher once a week to stay on the same page and that's my learning style.

I really like the hybrid. it's nice to have

I like to be able to receive information online but what I don't like is that I get busy work to do just because it is a hybrid class.

It allows for flexibility which takes tension off of me and enables me to concentrate on what I need to.

It created the best learning experience for me because it made me use the computer and programs that I thought I would never figure out. I was required to figure them out in order to complete everything in the class that needed to be completed.

10. Technology support from my instructor/college was good.

Comments:

CVTC has provided everything I needed to complete the assignments that have been assigned to me so far.

It would be nice if all classes had to use Blackboard.

lots of availability to computers

Paul has explained everything clearly.

I love using blackboard for classes

Online Class Survey Results

1. The online course format allowed me to easily communicate and receive feedback from my instructor.

Comments:

I think the lack of student-instructor contact is the major drawback of Internet based training.

If I need to talk to him, I know how to get a hold of him.

I feel I've had enough contact with the instrutor. When I started taking online classess I was told that the responsiblity of taking and completing the class was on my shoulders and I'm ok with that.

Instructor was easy to contact.

The instructor has been fine. Answers emails within time period given as an expectation.

I really like the fact that the instructor sends weekly e-mails reminding students of the cut off dates for assignments. I need to learn to use this tool more to ask for help and clairfication when I need it.

the instructor is very good about staying in touch, almost as if your in the classroom.

I don't like the idea of having to get questions answered via email. I know phone is another option, but that also requires planning on the part of both parties, the student and instructor.

It would be nice if our grades were posted with in a couple of days after assignment submission. I feel we had to wait quite a while for some assignments to be graded.

2. The online course format provided easy access to course materials and/or documents.

Comments:

Layout is great easy to understand. All assignments and due dates are very self explanatory.

So far the layout is fine, the movement between concepts has been fluid.

The layout of this course is perfect. It's really user friendly.

The course is easy to understand.

Everything is pretty clear – I like being able to see all assignments at once.

3. The online course format gave me enough information to successfully complete course assignments.

Comments:

i am doing assignments that i have never done before and it is diffecult for me. it can be difficult to know what the teacher wants without seeing them in person. I don't use much for this class because I can look up most things on my own. I've used Blackboard before and like the consistency. it would be nice to have an over all explanation of what can be expected as far as assignments and projects. slower paced than the rest of the internet courses that i have taken Having web sites to refference to when doing assignments gives me a refference point in how to do the assignments the right way. Also having the books that give specific examplpes also helps me learn how to do things that I have never done before.

4. The online course format gave me effective peer-to-peer interaction in group discussions and/or group work.

Comments:

I enjoy posting information on the discussion board and responding to other postings. The discussion board activities were helpful. It was nice to have some interaction with my classmates, even if it was online. Its hard when you don't have any classmates you can just talk to I feel that the discussion board is a great communication tool between students, and forces us to talk.

5. The online course format created a class environment conducive to learning.

Comments:

Slow down. Figure out what concepts are most important for the students and focus on them rather than sprinting to get through a great deal of information. The online format always works for me. Taking this class allowed me to have the freedom to stay at home and complete my assignmetns and still work. I can finish my homework early and not get punished for it. The internet format is less stressful for me.

6. The grades I am receiving using the online course format are about the same or better than the grades I would have received if I had taken this course with traditional methods.

Comments:

My grades are a little lower, but its my fault. my grades are probably lower

I'm not sure.

My grades are about the same as my other classes.

I think they are low.

7. The online course format required the same or less amount of work than a traditional course.

Comments:

I just need more time.

A lot more rushed. I don't think I have had time to comprehend much. There has been too many things due in a single week's time.

Too many other things going on - I need fewer commitments or more time.

It's hard for me to remember when all the assignments are due for this class.

I could use more time to get everything organized and finished.

Too much work, not enough time!

There is alot of work to get done in the time given.

Cut down on the assignments, it's a lot of work!

8. Overall, the online course format provided a successful learning experience.

Comments:

I will continue to take internet courses in the future and I hope more classes are offered this way.

it is nice to have instruction in written form. this style of learning is motivating for me.

English is not so interesting to me. So it is just something I have to do.

The class seems fine to me jsut the way it is.

I am a busy single mother of two children and work full-time. Being able to take this class online saved me time away from my children, which is very important to me. It also helped me to require less daycare and time off of work. I would have had a MUCH harder time if I had been required to take this class on campus.

I have a family and I work 30 hours a week. It is so nice to be able to take online classes that don't interfere with my work schedule.

The thing I like best about the Internet course is the fact that I can work from home when it's convenient for me. I still have to meet assignment deadlines and due dates, but not having to physically attend a class is very beneficial when you have a family.

9. I would take another course in the online course format if given the opportunity.

Comments:

I had to work a little harder on the self discipline and this course is helping me very much.

I enjoy Internet classes for general courses. I need in class instruction for my programming classes because it is new to me. I have been taking English classes since first grade so it is a bit easier.

I believe that I am a better student in a class room setting. I feel that I learn and retain the information much better, and the instructor gets a better understanding of who I am as a person. I have a hard time teaching myself information that is difficult for me in the first place.

I'm glad that CVTC offers online classes, otherwise I wouldn't be able to attend due to work and family commitments.

I do miss taking the classroom version, as I always feel there is something to learn from classroom discussions.

Although I like the flexibility that comes with an Internet based course, I actually do prefer the traditional classroom setting. I like being able to ask a question when I have it, not having to type an email and wait for a response. The whole "ask a question by email" process makes learning more difficult. it is easier for me to fit into my schedule

10. Technology support from my instructor/college was good.

Comments:

I didn't have any problems.

the instructor always gave me quick answers to any problems.

Blackboard is easy to use and understand.

Its pretty easy to get help if you need it.