A STUDY OF THE LEVEL OF INSTRUCTOR INTEREST AND EXPERIENCE CONCERNING THE DEVELOPMENT OF ON-LINE COURSES AT WISCONSIN INDIANHEAD TECHNICAL COLLEGE

by

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ABSTRACT

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A STUDY OF THE LEVEL OF INSTRUCTOR INTEREST AND EXPERIENCE
(Title)

CONCERNING THE DEVELOPMENT OF ON-LINE COURSES AT WISCONSIN

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This study examined the level of interest and experience concerning on-line course development among full-time instructors employed by the Wisconsin Indianhead Technical College. The purpose of the study is to determine level of interest concerning the development of on-line courses, the level of experience to develop and instruct on-line courses, and the need for training and support for on-line course development. Recommendations of this study will be used to help WITC develop a sense of direction for future on-line course development. It may also provide the necessary information needed to create and provide on-line course development training, curriculum guidelines and standards, and the collection and compilation of developmental resource materials.

Since the platform for on-line learning is through the Internet, an electronic on-line survey was chosen as the means of collecting data. During the Spring Semester of 2003, an e-mail message containing a link to access the survey was sent to all full-time WITC instructors. After each instructor completed the survey, the data was sent electronically via the Internet, without any personal identifiers, to University of Wisconsin-Stout Publications for processing.

Recommendations of this study will be used to help WITC develop a sense of direction for future on-line course development. It may also provide the necessary information needed to create and provide on-line course development training, curriculum guidelines and standards, and the collection and compilation of developmental resource materials.

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For me, the thought of returning to school was both exhilarating and frightening. It was only through the support and love of family and friends that made my dream a celebrated reality. I must thank my loving wife, LuAnne, who gave me the confidence to return to school. She has never held me back when I wanted to continue my education. Having earned three degrees in five years is something I would not have attempted alone. Thank you for taking care of our home and family while I focused on school. Now, it's your turn. I love you.

Thank you to my children, Janelle, Michael, Alison, Mark, and Aaron for your patience during those long evenings of study and research. I can still hear that familiar question, "When will you be done with school?" I hope in some way that I have encouraged you to follow your dreams. Don't ever allow yourself to say, "I wish I would have…" If you follow your heart and your conscience, always do your best, and enjoy what you are doing, you will never have regrets later in life.

Thank you to my grandchildren, Alex, Preston, Hunter, and Steven, who are a welcome distraction to my endless hours on the computer. It's okay to color outside of the lines. Grandpa does that every once in a while, too.

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Michael Connolly, M.S., 2nd year Mechanical Design Instructor, WITC Rice Lake; Dr. Michael Galloy, Career, Technical Education and Training B.S. Program Director, UW-Stout; Dr. David Johnson, Associate Professor of Training and Human Resource Development, UW-Stout; Evan Sveum, M.S., Lecturer, UW-Stout; Dr. Amy Gillett, Department Chair, Department of Education, School Counseling and School Psychology, UW-Stout; and Julianne Taylor, Ed. S., Career and Technical Education M.S. and Ed.S. Program Director, UW-Stout.

It is my belief that I am a product of the people I meet; my family, my friends, my mentors and my instructors. It is my goal to give back to education all of the gifts of knowledge you have given me.

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Introduction

Background

"Technological change is what many have said is the only constant in our work today" (Kubala, 2000, p. 331). In virtually all areas of industry and education, the new technologies of today are changing so rapidly that the need for some type of continuing education is indisputable. Students who are graduating from high schools, technical colleges, universities, and other learning institutions know that they will have to supplement their knowledge to continue to be productive in their career area. According to the Wisconsin Technical College System web site, approximately 66% of the fastest growing occupations will require education from a post-secondary learning institution (Advantages, 2001). Many who seek technical education cannot attend traditional classes due to lengthy travel time, costly housing and travel expenses, family responsibilities, work schedules, or the need to select specific courses. Options such as night and weekend classes, interactive television classes (ITV), independent study flex labs, and on-line Internet classes are available for those who may not have the time or resources available to receive instruction in the traditional classroom. Many students have realized the advantages to on-line learning in post-secondary educational institutions and the popularity of this off-site educational experience continues to grow.

To provide educational flexibility to the public, many learning institutions are developing new on-line courses each semester. The development and facilitation of on-line learning is new to many schools, and in many instances, courses are developed by a few brave volunteers among the faculty. As educational institutions provide more on-line

course offerings, instructors have become interested in this alternative style of learning with the possibility and potential to fill the need for trained on-line course developers.

One post-secondary learning institution is the Wisconsin Indianhead Technical College (WITC) located in the Northwest corner of the State of Wisconsin. The largest of the state's sixteen technical college districts, it covers an area of 10,000 square miles with over 250,000 residents (WITC, 2002). To meet the needs of the northwestern population, the WITC district includes campuses in Ashland, New Richmond, Rice Lake, and Superior, three branch campuses in Hayward, Hudson, and Ladysmith, and three learning centers in Balsam Lake, Siren, and Spooner. The total number of full-time instructors in all locations is approximately 160 (WITC, 2002).

Wisconsin Indianhead Technical College enlists the help of their instructors to develop and facilitate on-line courses. Information is often obtained by exploring other sample course sites for ideas and guidelines but still the development and design of the web site is governed by the individual instructor. As more and more courses are developed for on-line learning, the need for standardization and documentation becomes more apparent. Many instructors have the expertise to develop on-line courses but lack the time. Other instructors have the interest, enthusiasm, and time but require proper training, specific guidelines and standards, and possibly a mentor to help answer on-line construction questions. A brief two-day on-line course construction workshop may not provide the necessary prerequisites for instructors to develop an on-line course. In addition to proper training and available resources, a process of checks and balances should be in place to measure consistency and quality in the on-line courses offered district-wide.

The Wisconsin Technical College System developed the web site eTech to offer a wide variety of courses on-line for post secondary students across the nation. The total number of on-line courses is currently listed at 476 for the Spring Semester of 2003 (eTech, 2001). Of the sixteen Wisconsin Technical Colleges, only fourteen offer on-line courses through eTech. Wisconsin Indianhead Technical College is included in that group ranking third, under Milwaukee Area Technical College and Northcentral Technical College, respectively, in the total number on on-line courses offered. Although each Wisconsin Technical College may contribute to eTech's web site, they may also offer additional on-line courses directly from their district's web site.

For the Spring 2003 semester, WITC District on-line course offerings totaled 87; WITC New Richmond – 49, WITC Ashland – 20, WITC Rice Lake – 13, and WITC Superior – 5 (WITC, 2003). With the escalating demand for on-line courses by district students, the number of available on-line courses will probably increase with each new semester. With this increase, the need to enlist additional on-line course developers and instructors from the faculty of WITC will also increase. Determining the level of instructor interest and experience will help WITC develop a sense of direction for future on-line course development. It may also provide the necessary information needed to create and provide on-line course development training, curriculum guidelines and standards, and the collection and compilation of developmental resource materials.

According to the WITC learning first 2002-2003 catalog, one of the values that WITC holds is the value of flexible delivery options and the use of the latest theories and technologies to meet their students' needs (WITC, 2002). On-line learning is one of the most popular flexible delivery options in education today and completing a study of the

instructor interest and experience concerning the development of on-line courses at WITC will help plan for their students' needs.

Statement of the Problem

WITC needs to document the level of interest and experience concerning the development of web-based on-line courses by full-time instructors to create an academic consistency between classroom courses and web-based on-line courses. This is the first step to addressing this documentation, which may serve as a basis for WITC on-line instructor training and development.

Purpose of the Study

The purpose of this study is to document the level of interest and experience concerning the development of web-based on-line courses by full-time instructors employed at Wisconsin Indianhead Technical College. Data will be collected through an electronic on-line survey during the Spring Semester of 2003.

Objectives of the Study

The objectives of this study are to:

1. Determine the level of instructor interest concerning the development of on-line courses.
2. Determine the level of instructor experience to develop on-line courses.
3. Determine the level of instructor experience to facilitate on-line courses.
4. Determine the need for WITC to provide support for on-line course development.
5. Determine the need for WITC to provide training for on-line course development.

Significance of the Study

This study is important for the following reasons:

1. To WITC instructors, who are interested in on-line course development, but lack the necessary knowledge and skills to proceed.

2. To WITC administration, to help them identify faculty interest and the need for training and support for WITC instructors during the development and facilitation of on-line courses.

3. To faculty and staff at WITC campuses, branch campuses, and learning centers, to provide the needed information to justify district-wide on-line course development standards and procedures.

4. To the Wisconsin Technical College System, by revealing other potential on-line course development and facilitation considerations in the process.

Assumptions of the Study

The assumptions of this study are:

1. That all information submitted by full-time instructors at WITC is truthful and will contribute to the accuracy of this study.

2. That all full-time instructors at WITC have basic knowledge of the Internet and are capable of completing an on-line survey without difficulty.

3. That all full-time instructors at WITC have access to the survey in order to complete it on-line.

Limitations of the Study

The limitations of this study are:

1. It should be mentioned that the survey used in this study was created by this study's author and the meaning of each survey item may be interpreted differently by the respondents.

2. The survey respondents may be biased because some instructors are currently involved in on-line course development and WITC decision making.

3. Each WITC campus is independent of the other in terms of the level of knowledge and exposure to on-line course planning and development. WITC New Richmond has the largest number of faculty involved in on-line learning development and facilitation of the four main WITC campuses.

Definition of Terms

The definitions of this study are:

1. Course development – identifying and documenting strategies that will best facilitate on-line teaching and learning.

2. eTech – developed and maintained by the WTCS to provide students an alternative way to achieve educational goals through on-line course offerings (WTCS, 2002).

3. Full-time WITC instructors – members of the faculty who teach credit and non credit courses at Wisconsin Indianhead Technical College main campuses, branch campuses, and learning centers.

4. On-line courses – all course materials and communications are shared via the Internet.

5. Web-based – same meaning as on-line courses.

CHAPTER 2

Review of Literature

Introduction

The review of literature will examine aspects of distance learning, post-secondary on-line learning, on-line course development, on-line courses offered at WITC, and on-line instructional guidance and support at WITC.

Distance Learning

According to Phipps and Merisotis (1999):

> Technology is having, and will continue to have, a profound impact on colleges and universities in America and around the globe. Distance learning, which was once a poor and often unwelcome stepchild with the academic community, is becoming increasingly more visible as a part of the higher education family. (p. 7)

Bower (2001) also wrote:

> Who could doubt that distance learning, in the multiple forms it takes today, is the hottest, sexiest, most controversial issue in American higher education? Hardly any issue of any higher education journal or newsletter is published that doesn't contain at least one article on the topic of distance learning or educational technology. (p. 1)

While there are many interpretations of distance learning, they all contain three basic ingredients: an instructor or facilitator at one location, a student or learner at a different location, and some form of technology that enables them to communicate in some manner. Greenberg (1998) described our current form of distance learning as "a planned teaching/learning experience that uses a wide spectrum of technologies to reach

learners at a distance and is designed to encourage learner interaction and certification of learning" (p. 36). Although the term distance learning is used today as if it was a new discovery, it has been in existence well over a hundred years. In 1840, Sir Isaac Pitman, the English inventor of shorthand, decided to use the mail system to deliver correspondence courses to distant learners (Phillips, 1998). From Pitman's vision, the acceptance of distance learning continued to grow to include the use of audio and video recordings, telephone, radio, television, satellite television, and the Internet. According to the National Center for Education Statistics (1999), there were over 1.4 million distance learning students enrolled in the United States during the 1998-1999 academic year.

Post-secondary On-line Learning

While web-enhanced courses are used in conjunction with face-to-face delivery methods and act as a supplement to traditional classroom activities, one of the newer and increasingly popular facets of distance learning is web-based learning, which also uses the services of the Internet. Described as both web-based and on-line learning, this ever-evolving instructional medium is receiving a large share of attention from educational institutions. "The rapid expansion of the Web as a potential course delivery platform, combined with the increasing interest in lifelong learning and budget constraints, has created a significant incentive for universities to develop on-line programs" (Yeung, 2002, ¶ 2). About two-thirds of the accredited four-year colleges and graduate schools in the U.S. complement their campus class offerings with classes via the Internet (Clarke, 1999; Shea & Boser, 2001). To add to the momentum of on-line learning, Shea and Boser (2001) predicted by 2005, ninety percent of colleges and universities may have on-line

courses. The number of on-line courses offered to the public continues to increase because of the flexibility and freedom it gives the student.

Early on-line courses were not trying to attract younger traditional students but were aimed at disciplined adult learners (Guernsey, 1998). According to On-line (1998), many on-line students are older than traditional students. It may seem as if the population of on-line students may have responsibilities such as family commitments and would be unable to attend a university to participate in classroom courses (Miller, Smith, & Tilstone, 1998). With personal time and budget constraints, the demographic characteristics of the on-line population will continue to expand to include other types of individuals. Traditional college and university students are becoming on-line students because it fits in with their busy academic schedules or enables them to take courses that are only available at other learning institutions. Depending on their lifestyle and educational needs, students may complete on-line course requirements regardless of the schedules of the other on-line course students. Many on-line courses allow the learner to complete the course at their own pace. Questions may be e-mailed to the instructor at any time of the day, with a response usually within twenty-four hours. According to Perrin & Mayhew (2000), web-based learning allows students to exercise more control over their learning experience. As an example of this control, students may choose on-line learning to help minimize pressures and stresses that time and environments may create. Introverted individuals may choose web-based courses to remove them from embarrassing situations, which may be compounded by their shyness (Liang & McQueen, 1999). Since students have individual learning styles and study habits, attrition

rates may also improve when students are able to customize their own learning environment.

Creating their own study schedule, students are able to access on-line courses twenty-four hours a day from anywhere in the world, as long as they possess the means and the knowledge to access that technology. The basic components needed for on-line participation are an adequate computer, Internet access, and the appropriate software programs to complete coursework. The student must also possess the knowledge to use software programs, explore Internet web sites, send e-mails with attachments, and troubleshoot basic computer problems.

With the continual growth of technology, on-line distance learning will increase in popularity and continue to evolve, making it high on the list of priorities and concerns of post-secondary education administration and faculty. To keep up with this demand, existing faculty are being enlisted as on-line course developers and facilitators. The transition from classroom instruction to on-line course instruction may be a major hurdle for some to accept, much less embrace.

On-line Course Development

"The vast majority of on-line courses are organized in much the same manner as are their campus counterparts: developed by individual faculty members, with some support from the IT staff, and offered with a semester or quarter framework" (Twigg, 2001, p. 3). Since on-line course development is still new in most educational institutions, the administration relies on faculty volunteers to pioneer and lead the transition of classroom courses to an on-line format with little or no guidance. The long term acceptance of on-line courses and its development will depend on the amount of

encouragement and support the faculty receives from the school administration. Sherron (1998) confirmed this by stating, “If the faculty are to embrace distance education, the administration must consistently address traditional faculty issues with fresh ideas and innovative approaches” (p. 47). A well-defined plan with training and technical support will enhance the development of on-line courses by educating those who are intimidated by computers and on-line technology. An administrator’s first step to developing a successful distance education program should be to listen to the concerns of faculty members who will be involved to make sure their transition to on-line technologies and teaching methods is as smooth as possible (Allen, 2002). The process of developing on-line courses is not just a simple matter of transferring instructional materials from the classroom to the on-line web site. An educator must address and revise their classroom teaching paradigm to accept the new on-line instruction paradigm.

In the classroom, the instructor holds the students’ attention by lecturing for an hour with a question and answer session that lasts on the average of 5 to10 minutes. Students rarely prepare for instruction by reading texts, since they can rely on the instructor for information. In an on-line class, the instructor isn’t the focus of the course. Students must read course materials posted on the web site and provide feedback, which is shared with the rest of the class. Virtual discussion boards allow students to ask questions and exchange information that a classroom discussion couldn’t possibly control nor provide enough class time.

The responsibilities of an on-line instructor are best described by the U. S. Congress, Office of Technology Assessment (1998) which stated:

> Although it is the technology that removes barriers and expands opportunity for learning, it is the teacher who teaches. In distance learning, teachers find that they are required to change their method of teaching and give more attention to advanced preparation, student interaction, visual materials, activities for independent study, and follow-up activities. (p. 11)

There are both positive and negative aspects to developing and facilitating an on-line course, which may be why Gillette (1999) stated, "Teaching on-line is something you should not attempt without some degree of computer knowledge and a fair amount of outside technical support" (p. 22). Information obtained by faculty members who have already developed and facilitated on-line courses is a great resource to administrators and also instructors who are interested in joining the ranks of on-line instructors. Many of the experienced on-line faculty may act as mentors and trainers to encourage and support their peers as they become on-line developers and instructors.

On-line Courses Offered at WITC

The popularity of on-line courses offered by the Wisconsin Technical College System's (WTCS) eTech College of Wisconsin continues as Neal Henning, director of eTech, shared, "The popularity of eTech has exceeded our initial expectations, and there's no end in sight to the growth" (WTCS, 2002, ¶ 2). In a student survey taken in 2001, the first year eTech courses were available, 86 percent of the students said that they would take another on-line course from eTech and 89 percent said that they would recommend eTech courses to others (WTCS, 2002). For the Spring Semester of 2003, the Wisconsin Indianhead Technical College offered 84 different on-line courses through their district web site with 73 of those offered on eTech (eTech, 2001). One major

requirement of all courses offered on eTech is that they must include a Wisconsin Instructional Design System (WIDS) Outcome Summary. This summary is compared to a Curriculum Quality Standards Checklist, which was developed by the eTech Curriculum Committee. This process ensures the on-line instructor and student that all the necessary components are contained within the on-line course. Items such as the course introduction, course outline, syllabus, student responsibilities, assignments and due dates, support materials, and instructor contact information are available to help identify the course and its requirements. Before a student decides to register for an on-line course, they may visit the WITC webcourse catalog to preview an on-line course and compare it with the classroom equivalent. For many traditional and non-traditional students, this is the first experience they may have with distance learning, so they are free to contact instructors with their concerns.

Michael Boyle, WITC Dean of Trade and Technical (personal communication, February 17, 2003), stated that regardless if a class is offered in the classroom or on-line, the basic course competencies are the same. The WITC guidelines toward course expectations seem to parallel those of Pennsylvania State University. Gary Miller, associate vice president of distance learning at Penn State and executive director of the World Campus, said, “We don’t want to make a distinction between what we do online and what we do in the classroom. The courses offer the same rigor, the same expectations and the same research” (cited in Reeves, 2002, ¶ 32).

On-line Instructional Guidance and Support at WITC

Classroom training is often the best method for instructor development, but because of time constraints, it isn’t most effective means of instruction. Diana Zilberman,

director of distance learning for Baltimore City Community College, has created a program that helps faculty experience on-line learning by putting them in the role of the student. “I realized that the best way for an instructor to learn how to teach online is to experience being an on-line student first,” Zilberman said (cited in Lorenzetti, 2002, p. 3). This is a viable method of introducing new on-line instructors to the same learning experience of their students.

WITC has used this method, but in a shortened form. A one-day hands-on on-line workshop is scheduled twice a year for interested members of the WITC faculty. Participants are given a logon and password to access a specially made on-line course and they have the opportunity to view the various communication tools it has to offer. Another resource for on-line development at WITC is “Critical thinking in on-line communities,” which is offered during the Facilitating the Future staff development for three days in the summer. This workshop helps instructors to incorporate critical thinking components into an on-line course. Instructors also access the on-line course web site to become familiar with the on-line format.

If further help is needed, on-line course construction mentors are available at each of the four main WITC campuses. Since both full-time and part-time WITC faculty are allowed to develop and facilitate on-line courses, this support is available to help new on-line instructors with their questions. Administrative and faculty support is a very important part of the success of on-line course development and facilitation. Instructors shouldn’t learn from their mistakes as they teach on-line courses, but should be trained and confident before entering the on-line classroom (Buchanan, 1999).

Although on-line learning is not for everyone, it can be tailored to provide instruction for students in general education, economics, health and child care, business, and even trade and technical courses. Tom Kubala, a member of the Department of Educational Foundations at the University of Central Florida, concluded, “Finally, I am convinced that almost any course can be taught at a distance using the Internet. It takes knowledge, creativity, perseverance and help from others” (Kubala, 2000, p. 338).

CHAPTER 3

Methodology

The methods and procedures used in this study are explained in this chapter under the headings of: 1) method of study, 2) selection of sample, 3) description of sample, 4) instrumentation, 5) data collection, 6) data analysis, and 7) limitations.

Method of Study

This study was to determine the level of instructor interest and experience concerning on-line courses at Wisconsin Indianhead Technical College. Throughout the researcher's literature review, many of the journal articles focused on instructor concerns regarding distance learning, the recruitment of faculty for on-line course development, and the need for further training and support for on-line instructors. Many of the same concerns and questions may be surfacing for full-time instructors at Wisconsin Indianhead Technical College. To gather data for this study, the researcher used quantitative research methods by creating and implementing an on-line survey. By subdividing the population of WITC administration, faculty, and staff, a cluster sample was obtained for distribution of the survey.

Selection of Sample

Since the researcher of this study is a part-time instructor who has developed and facilitated an on-line course at WITC, it was first thought that those WITC instructors teaching full-time and part-time, teaching credited and non-credited, and teaching at main campuses, branch campuses, and learning centers should be included in the survey. It was later decided to only include full-time WITC instructors, since it may not be reasonable to assume that all other WITC instructors would have the time, interest, or need for on-

line course development. Many of the guidelines for on-line course development will be left up to those instructors who have been involved in distance learning from the start. Lois Eichman, Vice President of Instructional Services at WITC Shell Lake (personal communication, February 27, 2003), believed that the instructors who have pioneered on-line course development should continue to set their own benchmarks without the interference of the administration. Eichman explained that some of the experienced on-line course developers at WITC are full-time instructors and voiced her support of their achievements. Because of these statements, the researcher felt that input from full-time instructors at WITC would make a significant contribution to this study.

Description of Sample

According to the Wisconsin Indianhead Technical College Staff Directory (WITC, 2003), there are approximately 160 full-time instructors employed by the four campuses in the WITC district. Since a few individuals on the list may be counselors or other support personnel, the researcher e-mailed a list of full-time employees to the WITC district office in Shell Lake, Wisconsin to confirm that each individual was a full-time WITC instructor. A revised list of 135 full-time instructors accompanied an e-mail message from the WITC district office.

Instrumentation

Since this study explored instructor interest and experience concerning on-line courses, it only seemed reasonable to collect data for this study using the same means of communication as on-line courses. Since all WITC full-time instructors possess an e-mail account through the WITC web server and have daily computer access, the use of an on-line survey would be advantageous to the researcher and the responding subjects. Rather

than spending time and money printing surveys, addressing envelopes, and purchasing stamps for mailing and return envelopes, an on-line survey was developed by the researcher.

The researcher discovered a documented on-line survey, created by Robert D. Pennings (2001), which had been used to obtain information from WITC instructors. Although this study would seek information for an entirely different topic, the survey layout and data collection items were very helpful in the construction of this researcher's on-line survey. According to the Pennings thesis, the survey's response rate was 22%; therefore, it was the researcher's goal to develop an on-line survey that produced a higher response rate and still collected the necessary data to complete the study's objectives.

The researcher created the on-line survey using Microsoft FrontPage software, which he had learned while taking an on-line course at UW-Stout. FrontPage uses Hypertext Markup Language (HTML) formatting, which offered the researcher the ability to customize the survey. Also, the transfer of the survey file was virtually seamless to the UW-Stout web server.

The researcher developed the survey to obtain demographic information and opinions using various 5-point Likert scales, and included a text box for respondents' comments. Table 1, on the following page, displays the items in the survey which reflect the statements contained in the study's objectives.

Table 1

Research Objectives Addressed in On-line Survey

Objectives of the Study	Survey Item Number
1. Determine the level of instructor interest concerning the development of on-line courses.	Item # 5, 8-29
2. Determine the level of instructor experience to develop on-line courses.	Item # 6, 30-38, 40, 41
3. Determine the level of instructor experience to facilitate on-line courses.	Item # 7, 39
4. Determine the need for WITC to provide support for on-line course development.	Item # 42 - 54
5. Determine the need for WITC to provide training for on-line course development.	Item # 42 - 54

Item #1 through #4 of the survey dealt with demographics. The researcher's main interest was the instructional area, frequency of computer usage, highest level of education, and number of years as a full-time instructor.

Item #5 through #13 dealt with personal experience and goals asking the respondent to answer these items by selecting either yes or no. If the respondent answered item #5 through #13 with a "no" answer, they had the option of continuing or stopping at this point to submit the survey. If they answered "yes" to any items, they were encouraged to complete the entire survey. To successfully submit the survey at this point, all respondents had to provide an answer to item #1 through #13 or the survey could not be submitted. If any items were left unanswered, the respondent would be prompted to revisit the survey and complete the unanswered item(s).

Item #14 through #29 dealt with the respondents' level of interest to various on-line activities. A 5-point Likert scale was used to rate each item (no interest, limited interest, moderate interest, much interest, and extreme interest).

Item #30 through #41 dealt with the respondents' level of guidance to complete a list of tasks. A 5-point Likert scale was used to rate each item (not sure of amount of guidance, no guidance, minimal guidance, some guidance, and extensive guidance).

Item #42 through #46 dealt with the respondents' level of importance to selected on-line activities. A 5-point Likert scale was used to rate each item (not important, slightly important moderately important, very important, and extremely important).

Item #47 through #54 dealt with the level of need on selected on-line support items. A 5-point Likert scale was used to rate each item (no need, little need, moderate need, great need, and extreme need).

Item #55 provided a text box to allow the respondent to enter any comments concerning the development of on-line courses at WITC.

Christine Ness, research and statistical consultant at UW-Stout, supplied valuable information concerning the layout and wording of each subsequent survey draft. One particular concern was that the complete survey had to appear on the computer screen of the respondent regardless of the screen area setting of the instructor's computer screen. This would avoid the need for the respondent to scroll back and forth across the screen to view all possible choices. Dillman (2000) stated that on-line surveys should be viewed on old and new computer equipment with different operating systems in order to test viewing compatibility. Dr. Amy Gillett, Chair for the Department of Education, School Counseling and School Psychology at UW-Stout, proofread the survey after countless

revisions to condense each numbered item. The revised survey finally fit all general computer screen configurations allowing the user the ability to view the complete Likert scale for each line of entry. A paper copy of the on-line survey is provided in Appendix E.

Data Collection

One major concern was in the timing of the distribution of the survey. Since the WITC school calendar listed May 9, 2003 as the last day of instruction and instructors would be busy calculating final grades and completing paperwork, the researcher decided to distribute the survey at least 2 to 3 weeks before the final day of school at WITC. After obtaining input from members of WITC administration and UW-Stout instructors, and UW-Stout's Institutional Review Board (IRB), the researcher decided that the survey would be distributed the Tuesday after Easter vacation and be available for 7 days, ending on at midnight on Monday, April 28, 2003. Since on-line survey results are obtained faster than the traditional return by mail, paper survey, the length of time the survey is available may be shortened (Dillman, 2000).

After speaking with Larry Mattis, Network Technician at WITC Rice Lake, the researcher learned that the majority of the faculty at Rice Lake used a screen setting of 800 x 600 pixels. Mattis also mentioned that although the instructors used laptop computers in their office cubicles or had other means of daily access to their campus e-mail accounts, many of them may only check that account weekly or possibly not at all. Because of the chance that many instructors would not check their e-mail account regularly, the researcher decided to distribute a paper survey notice to all full-time WITC instructors. The reminder was placed on a 3" x 5" note card and a shiny United States

penny was attached to the lower right hand corner of the card. A copy of this notice is provided in Appendix A. The penny added weight to the card and could attract the curiosity of the instructors. The researcher contacted mailroom assistants by telephone at WITC Ashland, WITC New Richmond, WITC Rice Lake, and WITC Superior to ask them to distribute the reminders by placing them in specified instructors' mailboxes on the morning of Tuesday, April 22, 2003. The note cards were sent by United Parcel Service (UPS) on Wednesday, April 16, 2003, in order for them to arrive at the respective campuses on time for distribution the following week. A letter was sent with each UPS package containing a list of full-time WITC instructors for that particular WITC campus. A copy of this letter is provided in Appendix B. In addition to the distribution of the note cards, a copy of the note card message was also sent by e-mail to all full-time WITC instructors on Monday, April 21, 2003. A copy of this e-mail message is provided in Appendix C.

Barbara Button, UW-Stout webmaster, assigned a student to assist the researcher to correct minor errors and help prepare the survey for the collection of research data. The student assistant made the survey available on the UW-Stout web server on the afternoon of Tuesday, April 22, 2003. On that Tuesday evening, the researcher sent out an introductory e-mail message using all full-time WITC instructors' e-mail addresses announcing the posting of the survey and provided a hyperlink to locate the survey on the UW-Stout web server. A copy of this e-mail message is provided in Appendix D. On Friday, April 25, 2003, a second e-mail message was sent to the same full-time instructors thanking them for their participation if they had filled out the survey and reminding the non-respondents to fill out the survey. A copy of this second e-mail

message is provided in Appendix F. The same link to the on-line survey was again provided for those who had not participated after the first message on Tuesday, April 22, 2003.

Since the percentage of surveys returned neared 50%, the researcher decided to extend the availability of the on-line survey for a total of 11 days. On Wednesday, April 30, 2003, a third e-mail message was again sent to the same full-time instructors thanking them for their participation if they had filled out the survey and reminding the others to fill out the survey. The third e-mail message explained that a few more instructors were needed to participate in the survey, that the survey would be quick and easy to complete, and that the survey would be available for a few more days. A copy of this third e-mail message is provided in Appendix G. The survey was removed from the UW-Stout web server at 4:00 pm, Friday, May 2, 2003. An extension of time was not necessary since the response rate of the total subjects was well above the valid response rate for small populations, which is 20%.

Data Analysis

The raw data from the on-line survey was collected using the UW-Stout web server, which was placed in a text delimited Microsoft Excel spreadsheet to be analyzed using Statistical Package for the Social Sciences (SPSS) analysis software. A copy of the raw data was sent to Christine Ness at UW-Stout to calculate the frequency counts, the percentages, the valid percentages, and the cumulative percentages of all answers. Percentages and frequency counts were used to compile the demographic information. Responses entered in the text box provided in the demographic section under item #1 and the text box provided in the comment section under item #55 were listed and are provided

in Appendix H. Correlations and standard deviations were calculated depending on the type of information needed.

Limitations

The limitations of the methodology were:

1. The survey was developed by the researcher and was not tested. The validity and reliability of the instrument have not been determined; however, a panel of experts was used to ensure content validity.

2. Because the researcher is fairly well-known at the campus where he is employed, the response rate of that campus may be influenced to a higher degree than the response rate of the other campuses.

3. The full-time instructors at Wisconsin Indianhead Technical College were the only respondents to the survey and the results may not reflect those of the other full-time instructors in the Wisconsin Technical College System.

4. Some instructors may not have responded to the on-line survey because of the lack of computer knowledge, computer accessibility, biases for or against the subject of on-line course development, or absence from work.

5. The listing of full-time WITC instructors and their e-mail addresses may not have included all eligible individuals.

6. It was assumed that the mailroom assistant at each WITC campus distributed the note cards in the specified instructor's mailboxes announcing the availability of the on-line survey on the target date.

7. While the researcher did not wish to visibly show the support of the WITC campus administration for this survey, some campus's faculty and staff may have encouraged their instructors and peers to complete this survey.

8. This survey only collected information from the present full-time WITC instructors and may not reflect the wishes and ideas of future full-time WITC instructors.

9. Many part-time WITC instructors are involved in on-line course development and instruction; therefore, if they would have been surveyed, their input may have changed the findings of this study.

10. Since the reminder e-mail message also contained the link to the survey, there is a slight chance that respondents may have completed and submitted the survey twice.

11. This survey was distributed three weeks before the final day of instruction at all WITC campuses, which may have influenced the response rate of the survey.

CHAPTER 4

Results and Discussion

In order to determine the level of interest concerning the development of on-line courses, the level of experience to develop and facilitate on-line courses, and the need for training and support for on-line course development at Wisconsin Indianhead Technical College, full-time WITC instructors were asked to participate in an on-line survey. An on-line survey was created using Microsoft FrontPage by the researcher and posted on the University of Wisconsin-Stout web server. An announcement containing a link to the survey was distributed through the Internet by e-mail to each instructor's respective WITC e-mail account during the 2003 Spring semester.

Although there were 55 items in the survey, it was the researcher's intent to make sure the demographic and background information items were completely filled out by the survey respondents before submitting the survey. This information was collected in item #1 through #13. The researcher decided to program the on-line survey in such a way as to assure that the respondents completed each of the first thirteen items. If an item had not been completed, a message informed the respondent to complete the missing information and resubmit. If a respondent answered "no" to item #5 through #13, the respondent had the option to continue and complete the rest of the survey or stop at this point and submit the partially completed survey. Allowing the respondent the choice to continue or submit the survey would reveal the number of respondents who had no interest and no experience with on-line learning and did not wish to explore any additional information on the subject.

Survey Returns

Of the 135 instructors who were notified of the UW-Stout link to the on-line survey, 74 respondents visited the link, completed and submitted the on-line survey. The rate of response was 55%, which was well above the expectations of the researcher and the response rate of 22% from an on-line survey of an earlier WITC study (Pennings, 2001). All e-mails announcing the surveys were delivered to the destination e-mail addresses without any e-mails returned as undeliverable. All surveys were completed within 11 days, which was the amount of time the survey was available. One respondent notified the researcher three days after the closing of the survey to report that the UW-Stout server would not accept their survey results. The individual was notified of the closing date for the survey with an explanation of why the results could not be submitted. Table 2, located on the following page, contains a detailed list of the sample population of instructors from each WITC campus and the total number of individuals who completed and submitted the on-line survey. Specific data concerning the number of responses from each specific campus was not available due to the general nature of the survey question. The researcher decided that if the respondents were asked to specify the campus where they are employed, they may have been less likely to participate in the on-line survey. Item #55 of the survey provided a place for respondents to add questions, comments, or suggestions about the survey or the subject of on-line learning. This feedback is located in Appendix H.

Although the survey contained information guaranteeing the confidentiality of the survey results, seven WITC instructors chose to respond to the researcher independent of the on-line survey to share their thoughts or to announce their participation in the survey.

It should also be noted that since the researcher is employed at WITC, many instructors communicated with the researcher in person to share their thoughts or announce their participation and how they encouraged others to participate.

Table 2

Survey Response Detail

Survey Population	Instructors Notified	Number of Responses	Response Rate Percentage
WITC Rice Lake	48	No specific data	No specific data
WITC New Richmond	35	No specific data	No specific data
WITC Superior	34	No specific data	No specific data
WITC Ashland	18	No specific data	No specific data
Total	135	74	55%

Since announcement note cards containing shiny pennies were distributed to the full-time instructor's mailboxes at the four campuses, it is not known whether they may have acted as a reminder to watch for the forthcoming survey, although many individuals commented on the uniqueness of the note card. The combination of using note cards and e-mail to announce the survey may have informed a larger group of respondents than using either method by itself.

Area of Instruction

Question #1 of the survey gathered information in the instructor's area of instruction. All areas of full-time instruction were contained within the first five choices

and a text box was provided for other areas not listed. According to Table 3, 66.2% of the total respondents were involved in the instructional areas of Business and Trade and Technical. General Education ranked third adding 16.2% to the total. Under the "Other" heading, one respondent entered *employment skills* as their area of instruction. The results of area of instruction are located below in Table 3.

Table 3

Frequency of Computer Usage

Program Subject Area	Number of Responses	Percent
Business	25	33.8
Trade and Technical	24	32.4
General Education	12	16.2
Health	7	9.5
Personal Service	5	6.8
*Other	1	1.4
Total	74	100.0

* A job listing for Other is listed in Appendix H.

Computer Usage

To determine the amount of computer usage by WITC instructors, question #2 provided information of their daily computer habits. According to Table 4 on the following page, approximately 80% of WITC instructors use a computer more than twice daily as compared with approximately 20%, who use a computer daily. Of the three

choices, no respondent chose “less than daily” as their answer. It was not determined by this question whether or not the instructor accessed or only had access to a computer on their respective campus or at another location such as their home.

Table 4

Frequency of Computer Usage

Frequency	Number of Responses	Percent
More than twice daily	59	80.8
Daily	15	19.2
Less than daily	--	--
Total	74	100.0

Instructor’s Education Level

Question #3 gathered demographic information concerning the highest level of education obtained by each WITC instructor. The levels of education were determined by using the Wisconsin Indianhead Technical College pay scale for full-time instructors. The categories are written exactly as they appear in the WITC pay scale document. The majority of the respondents had obtained a Master’s degree with 36.5%, while those earning a Master’s degree + 10 were ranked second with 16.2%. Surprisingly, there were no individuals at the non-degree or +40 credit level. Due to the recent concern over Wisconsin Technical College Instructor accreditation, many instructors may be continuing their education to reach the Master’s degree level and beyond, which may account for the lack of participants in the non-degree or +40 credit levels. A listing of detailed information can be found on the following page in Table 5.

Table 5

Highest Level of Education Obtained

Education	Number of Responses	Percent
Master	27	36.5
Master +10 credits	12	16.2
Baccalaureate +20 credits	8	10.8
Baccalaureate	8	10.8
Master +20 credits	7	9.5
+80 credits	5	6.8
Education Specialist or Doctoral Degree	4	5.4
Baccalaureate +10 credits	3	4.1
Non-degree	--	--
+40 credits	--	--
Total	74	100.0

Years as a Full-time Instructor

Question #4, the last of the demographic survey items, gathered information concerning the number of years each survey respondent taught as a full-time instructor. The result showed that 54% of the total respondents had taught 9 years or less. Instructors who had taught 25 years or more accounted for 16.2%, while those with 10 years to 14 years teaching experience accounted for 14.9%. A listing of information, concerning years as a full-time instructor, is located on the following page in Table 6.

Table 6

Number of Years as a Full-time Instructor

Number of Years	Number of Responses	Percent
3 years or less	20	27.0
4 years to 9 years	20	27.0
25 years or more	12	16.2
10 years to 14 years	11	14.9
15 years to 19 years	7	9.5
20 years to 24 years	4	5.4
Total	74	100.0

Instructor On-line Experience and Goals

In order to collect information for a study of instructor interest and experience concerning on-line issues, question #5, # 6, and #7 were designed to gather information concerning the instructors experience with on-line course participation, development, and instruction. The findings from each of these questions show us that almost twice as many respondents had not taken an on-line course, developed an on-line course, or instructed an on-line course. To collect information concerning the level of interest among the instructors to become involved in on-line learning, question #8, #9, and #10 ask if the instructor was interested in taking an on-line course, developing an on-line course, and instructing an on-line course. Approximately 70% of the respondents were interested in developing and instructing an on-line course. A slightly lesser population of 61% was

interested in taking an on-line course. Finally, question #11, #12, and #13, ask respondents if they would be interested in learning or would like more information concerning taking an on-line course, developing and on-line course, or instructing an on-line course. Again, the questions concerning on-line development and instruction revealed that approximately 70% of those who responded to the survey would like to learn more about on-line development and instruction. A slightly smaller group (63.5%) was interested in learning more about taking on-line courses. Since all respondents had to complete the first thirteen items in order to submit the survey, the reader should note that the percent and the valid percent are identical due to the fact that all data was collected for all items. The results of experience and goals are located below in Table 7 and continue on the following page.

Table 7

Personal Experience and Goals

Experience and Goals Question	Yes	No
Have you ever taken an on-line course?		
Number	24	50
Percent	32.4	67.6
Have you developed an on-line course?		
Number	23	51
Percent	31.1	68.9
Have you instructed an on-line course?		
Number	22	52
Percent	29.7	70.3

(table continues)

Table 7 (continued)

Personal Experience and Goals

Experience and Goals Question	Yes	No
Are you interested in taking an on-line course?		
Number	45	29
Percent	60.8	39.2
Are you interested in developing an on-line course?		
Number	51	23
Percent	68.9	31.1
Are you interested in instructing an on-line course?		
Number	52	22
Percent	70.3	29.7
Are you interested in learning about taking on-line courses?		
Number	47	27
Percent	63.5	36.5
Are you interested in learning about developing on-line courses?		
Number	52	22
Percent	70.3	29.7
Are you interested in learning about instructing on-line courses?		
Number	52	22
Percent	70.3	29.7

Instructor Level of Interest and Goals

The frequency categories in the remaining items of the survey were assigned a numerical rating for the purpose of calculating mean and standard deviation. The scale of numerical ratings of interest is as follows: 1 = no interest, 2 = limited interest, 3 = moderate interest, 4 = much interest, 5 = extreme interest. The scale of numerical ratings

of guidance is as follows: 1 = no guidance, 2 = minimal guidance, 3 = some guidance, 4 = extensive guidance. The scale of numerical ratings of importance is as follows: 1 = not important, 2 = slightly important, 3 = moderately important, 4 = very important, 5 = extremely important. The scale of numerical ratings of need is as follows: 1 = no need, 2 = little need, 3 = moderate need, 4 = great need, 5 = extreme need. The calculation of mean is the average of the responses in the five frequency categories for each competency. The calculation of standard deviation is an indication of how tightly all of the responses for a specific item are clustered around the mean. In other words, the higher the standard deviation, the more variance in responses. Therefore, lower standard deviations are more desirable as a sign of validity. The mean and standard deviation for each item surveyed is presented in this chapter.

The frequency categories for the level of interest section were combined to present the instructors' responses in two categories: no interest and any amount of interest. Since the researcher felt that the selection of any level of interest revealed a curiosity by the respondent, whether it was in the category of limited interest, moderate interest, much interest, or extreme interest, all levels of interest were included in the "any amount of interest" group. It should also be noted that some survey data was missing due to the seven respondents who answered "no" to item #5 through #13 and did not continue to complete the survey; therefore, the percent displayed in Table 7 through 11 is the valid percent, which is the percent of total respondents who answered that item.

In order to gather information concerning the level of instructor interest, item #14 through #29 dealt with the respondents' level of interest to various on-line activities. A 5-point Likert scale was used to rate each item (no interest, limited interest, moderate

interest, much interest, and extreme interest). Many of these same interest items were asked in question #5 through #13 but upon using the Likert scale, the respondent could break down the actual level of interest, clarifying their position.

Items that mentioned on-line development and learning opportunities such as developing and instructing an on-line course for WITC, learning more about on-line course development and instruction, and participating in an on-line course for instructors, received a response in the any amount of interest category that ranged between 92.5% and 94%.

Items that mentioned using various types of instruction methods and materials to develop on-line courses such as using a textbook tutorial to create an on-line course, working with a committee to create an on-line course, using a CDROM tutorial to create an on-line course, and working with a mentor to create an on-line course received a slightly lower amount of interest, ranging from 85.1% to 86.6%. The method of on-line development that obtained the highest amount of interest (89.6%) was working with a mentor to create an on-line course.

Items that mentioned activities that would aid in the development and instruction of on-line courses such as instructing an on-line training course for instructors, acting as a staff mentor for on-line course development, designing course templates for creating on-line courses, documenting on-line course guidelines, and reviewing current on-line courses for improvement received the lowest percentages of interest, ranging from 64.2% to 73.1%. One interesting observation is that developing an on-line course, but not instructing it received a lower percentage of interest (68.7%) than instructing an on-line course but not developing it (78.8%). It was not determined by this item whether

instructors are not interested in being employed as on-line course developers without the opportunity of instructing on-line courses or because they also wanted the opportunity to instruct the on-line courses they developed.

It should be noted that the majority of the items in Table 8 received higher standard deviation values than any other table in this study which may indicate some inconsistencies in responses. A listing of data for the items concerning the level of interest is located below in Table 8.

Table 8

Level of Interest

Level of Interest Item	No Interest	Any amount of interest	Mean	Standard Deviation
Developing an on-line course for WITC				
Number	5	62	3.57	1.270
Percent	7.5	92.5	--	--
Learning more about on-line course development				
Number	4	63	3.61	1.205
Percent	6.0	94.0	--	--
Instructing an on-line course for WITC				
Number	5	62	3.60	1.244
Percent	7.5	92.5	--	--
Learning more about on-line course instruction				
Number	4	63	3.67	1.198
Percent	6.0	94.0	--	--
Developing an on-line course, but not instructing it				
Number	21	46	2.33	1.272
Percent	31.3	68.7	--	--

(table continues)

Table 8 (continued)

Level of Interest

Level of Interest Item	No Interest	Any amount of interest	Mean	Standard Deviation
Instructing an on-line course, but not developing it				
Number	14	52	2.65	1.246
Percent	21.2	78.8	--	--
Participating in an on-line training course for instructors				
Number	5	62	3.37	1.265
Percent	7.5	92.5	--	--
Instructing an on-line training course for instructors				
Number	22	45	2.46	1.439
Percent	32.8	67.2	--	--
Using a textbook tutorial to create an on-line course				
Number	9	58	2.69	1.062
Percent	13.4	86.6	--	--
Working with a committee to create an on-line course				
Number	10	57	2.85	1.294
Percent	14.9	85.1	--	--
Using a CDROM tutorial to create an on-line course				
Number	9	58	2.75	1.106
Percent	13.4	86.6	--	--
Working with a mentor to create an on-line course				
Number	7	60	3.28	1.229
Percent	10.4	89.6	--	--

(table continues)

Table 8 (continued)

Level of Interest

Level of Interest Item	No Interest	Any amount of interest	Mean	Standard Deviation
Acting as a staff mentor for on-line course development				
Number	24	43	2.46	1.428
Percent	35.8	64.2	--	--
Designing course templates for creating on-line courses				
Number	24	43	2.37	1.347
Percent	35.8	64.2	--	--
Documenting on-line course development guidelines				
Number	24	43	2.31	1.293
Percent	35.8	64.2	--	--
Reviewing current on-line courses for improvement				
Number	18	49	2.54	1.283
Percent	26.9	73.1	--	--

Instructor Level of Guidance

Survey item #30 through #41 dealt with the respondents' level of guidance to complete a list of tasks. A 5-point Likert scale was used to rate each item (not sure of amount of guidance, no guidance, minimal guidance, some guidance, and extensive guidance). The frequency categories for the level of guidance section were combined to present the instructors' responses in two categories: no guidance and any amount of guidance. Since the researcher felt that the selection of any level of guidance revealed a need by the respondent, whether it was in the category of minimal guidance, some guidance, or extensive guidance, all levels of guidance were included in the "any amount of guidance" group. The category of "not sure of amount of guidance" was omitted from

the table since the respondents' reasons for selecting that category are not clear. Additional research is necessary to explore the reasons for selecting that category.

Survey item #30 through #33 asked the respondents the amount of guidance they would need to complete tasks performed while using the Internet. The task of sending e-mail messages using the Internet required almost no guidance from those who responded as only 9% reported needing any amount of guidance. As tasks required more knowledge and experience, the results showed a higher level of guidance was needed to perform them. These tasks include using instant messaging or chat rooms via the Internet (47.7%) and posting comments using a discussion board via the Internet (39.4%).

Item #34 through #37 asked the respondents to rate the level of guidance they would need to use Microsoft Word, Excel, and PowerPoint. In this same grouping, respondents were asked to rate the level of guidance using Blackboard software to create an on-line course. Since these software programs are most commonly used when creating on-line courses, the information gathered would reflect the amount of prior knowledge instructors would have before becoming involved with on-line course development and instruction. The results showed that using Microsoft Word to create documents required the least amount of guidance (9%) while using Microsoft PowerPoint to create slide presentations was listed as the next least amount of guidance (23.9%). About half of the respondents (47.8%) needed some guidance while using Microsoft Excel to create spreadsheets, but the task of using the Blackboard web site to create on-line courses required a much larger amount of guidance (70.8%).

The amount of guidance respondents needed when developing an on-line course in their area of instruction and instructing an on-line course in their area of instruction

were almost identical with 78.8% and 80.0%, respectively. Results also showed that respondents required a slightly higher level of guidance to participate in an on-line course for instructors (74.6%) than to participate in an on-line course as a student (60.3%).

It important to note that three items in Table 9 earned the lowest standard deviation values of the survey. Those items are sending e-mail messages using the Internet (.354), using Microsoft Word to create documents (.409), and attaching files to e-mail messages using the Internet (.548). The low percentage of guidance listed for these items along with the low standard deviation value would indicate that the majority of respondents already possess many basic computer skills, which are needed to develop and instruct on-line courses.

The results of the instructor's level of guidance are located below in Table 9 and continue on the following pages.

Table 9

Level of Guidance

Level of Guidance Item	No guidance	Any amount of guidance	Mean	Standard Deviation
Sending e-mail messages using the Internet				
Number	61	6	1.10	.354
Percent	91.0	9.0	--	--
Attaching files to e-mail messages using the Internet				
Number	59	8	1.18	.548
Percent	88.1	11.9	--	--
Using instant messaging or chat rooms via the Internet				
Number	34	33	1.80	1.003
Percent	52.3	47.7	--	--

(table continues)

Table 9 (continued)

Level of Guidance

Level of Guidance Item	No guidance	Any amount of guidance	Mean	Standard Deviation
Posting comments using a discussion board via the Internet				
Number	40	27	1.70	.992
Percent	60.6	39.4	--	--
Using Microsoft Word to create documents				
Number	61	7	1.12	.409
Percent	91.0	9.0	--	--
Using Microsoft Excel to create spreadsheets				
Number	35	32	1.91	1.069
Percent	52.2	47.8	--	--
Using Microsoft PowerPoint to create slide presentations				
Number	51	16	1.45	.892
Percent	76.1	23.9	--	--
Using the Blackboard web site to create an on-line course				
Number	19	47	2.60	1.235
Percent	29.2	70.8	--	--
Developing an on-line course in your area of instruction				
Number	14	53	2.65	1.102
Percent	21.2	78.8	--	--
Instructing an on-line course in your area of instruction				
Number	13	54	2.52	1.047
Percent	20.0	80.0	--	--
Participating in an on-line training course for instructors				
Number	16	41	2.30	.994
Percent	25.4	74.6	--	--

(table continues)

Table 9 (continued)

Level of Guidance

Level of Guidance Item	No guidance	Any amount of guidance	Mean	Standard Deviation
Participating in an on-line course as a student				
Number	25	40	1.98	.975
Percent	39.7	60.3	--	--

Level of Importance

Survey item #42 through #46 dealt with the respondents' level of importance to selected on-line activities. A 5-point Likert scale was used to rate each item (not important, slightly important moderately important, very important, and extremely important). The frequency categories for the level of importance section were combined to present the instructors' responses in two categories: not important and any amount of importance. Since the researcher felt that the selection of any level of importance revealed a concern by the respondent, whether it was in the category of slightly important, moderately important, very important, or extremely important, all levels of importance were included in the "any amount of importance" group.

All five items in Table 10 received high percentages in the any amount of importance category. Although all items placed in the 90-100 percentile range, providing training for on-line course instruction (100%) and providing training for on-line course development (98.5%) also received the lowest standard deviation values of the group with .971 and 1.071, respectively. It is also important to note that 91% of the survey respondents felt that it was important for on-line developers and instructors to take an on-

line course, although it is not known whether this should be completed before developing or instructing an on-line course.

The data listing for the level of importance is located below in Table 10.

Table 10

Level of Importance

Level of Importance Item	Not important	Any amount of importance	Mean	Standard Deviation
Developing on-line courses for WITC				
Number	3	64	3.48	1.106
Percent	4.5	95.5	--	--
Providing training for on-line course development				
Number	1	65	4.06	1.071
Percent	1.5	98.5	--	--
Providing training for on-line course instruction				
Number	--	67	4.10	.971
Percent	0.0	100.0	--	--
On-line course developers should take an on-line course				
Number	6	61	3.94	1.192
Percent	9.0	91.0	--	--
On-line course instructors should take an on-line course				
Number	6	61	3.78	1.241
Percent	9.0	91.0	--	--

Level of Need

Item #47 through #54 dealt with the level of need on a select group of on-line support items. A 5-point Likert scale was used to rate each item (no need, little need, moderate need, great need, and extreme need). The frequency categories for the level of need section were combined to present the instructors' responses in two categories: no need and any amount of need. Since the researcher felt that the selection of any level of need revealed a concern by the respondent, whether it was in the category of little need, moderate need, great need, or extreme need, all levels of need were included in the "any amount of need" group.

The items in Table 11 collected information pertaining to the necessity of development, training, documentation of course development guidelines, encouragement from staff and administration, feedback, on-line course reviews, and guidelines for current and future on-line courses. As a group, the items in Table 11 averaged higher mean values and lower standard deviations than any of the other areas in the survey. All items received a percentage of either 98.5% or 100% in the any amount of need category and their standard deviation values ranged from .778 to .926. The majority of items in this last grouping reflected a great need with a very low standard deviation. One interesting observation worth noting is that even though the majority of responses were in the moderate, great, and extreme need levels, there was one respondent who felt that there was "no need" in 6 of 8 of the items.

The results of the level of need are in Table 11, which are located on the following page.

Table 11

Level of Need

Level of Need Item	No need	Any amount of need	Mean	Standard Deviation
Developmental support for on-line course development				
Number	--	67	4.03	.778
Percent	0.0	100.0	--	--
Training for on-line course development				
Number	1	66	4.00	.841
Percent	1.5	98.5	--	--
Training for on-line course instruction				
Number	1	66	3.97	.870
Percent	1.5	98.5	--	--
Documenting on-line course development guidelines				
Number	1	66	3.93	.926
Percent	1.5	98.5	--	--
Encouragement and support from staff and administration				
Number	1	66	3.99	.879
Percent	1.5	98.5	--	--
Feedback during all phases of on-line course development				
Number	1	66	3.84	.863
Percent	1.5	98.5	--	--
Reviewing on-line courses for continual improvement				
Number	--	67	3.93	.785
Percent	0.0	100.0	--	--
Guidelines for current and future on-line courses				
Number	1	66	4.09	.883
Percent	1.5	98.5	--	--

CHAPTER 5

Summary, Conclusions, and Recommendations

This chapter will consist of three parts: a summary containing a brief restatement of the problem, conclusions based on the findings of the study, and recommendations related to this study and for future studies.

Summary

WITC continues to evolve to meet the needs and expectations of students through the ability to offer flexible learning opportunities while using the latest theories and technologies. The purpose of this study was to determine the level of instructor interest and experience concerning the development of on-line courses at Wisconsin Indianhead Technical College to continue to fulfill those needs and expectations. WITC needs to document the level of interest and experience concerning the development of web-based on-line courses by full-time instructors to create an academic consistency between classroom courses and web-based on-line courses. This study may be the first step to addressing this documentation, which may serve as a basis for WITC on-line instructor training and development.

From this purpose, five objectives were specified to provide a direction for the study.

The objectives of this study were to:

1. Determine the level of instructor interest concerning the development of on-line courses.
2. Determine the level of instructor experience to develop on-line courses.
3. Determine the level of instructor experience to facilitate on-line courses.

4. Determine the need for WITC to provide support for on-line course development.
5. Determine the need for WITC to provide training for on-line course development.

The sample population consisted of full-time instructors employed at the four campuses in the district of the Wisconsin Indianhead Technical College; WITC Ashland, WITC New Richmond, WITC Rice Lake, and WITC Superior. It was determined that since the study explored the interest and experience concerning on-line course development, data would be collected in the same manner, which was through an electronic on-line survey during the Spring Semester of 2003.

An on-line survey, consisting of 55 items, was created by the researcher and posted on the University of Wisconsin-Stout web server. Next, an introductory e-mail containing a link to the survey was sent to 135 full-time WITC instructors at their campus e-mail address. The survey data was analyzed using SPSS software to generate frequency counts, percentages, mean, and standard deviation depending on the survey item. Demographic information was also compiled and provided. Survey findings were listed in tables and presented in the same order as they appeared on the on-line survey.

Conclusions

Each of the five objectives of this study will be addressed separately and provided with a conclusion. A listing of the objectives of this study and the survey items which address these objectives are found in Table 1.

Research Objective Number One: Determine the level of instructor interest concerning the development of on-line courses.

The study provided information which revealed that even though approximately 68% of the respondents had never taken an on-line course, the majority of respondents were interested in taking, developing, and instructing an on-line course. The majority of respondents were also interested in learning more about taking, developing, and instructing an on-line course. See Table 7 for a complete listing of Personal Experience and Goals.

To further examine a refined level of interest, Table 8 displays a listing of the level of interest using a 5-point Likert scale. The data shows that the majority of respondents had a moderate to extreme level of interest to develop an on-line course for WITC, learn more about on-line course development, instruct an on-line course for WITC, learn more about on-line course instruction, and work with a mentor when creating an on-line course. Some items show that the majority of respondents had no interest to a moderate level of interest when developing an on-line course but not instructing it, instructing an on-line course but not developing it, and using a textbook tutorial, CD-ROM tutorial, or committee to create on-line courses. Other items, which may have been viewed as support positions for on-line developers and instructors, also provided responses at the no interest to moderate interest level. These items were instructing an on-line training course for instructors, acting as a staff mentor, designing on-line course templates, documenting on-line course development guidelines, and reviewing current on-line courses for improvement. While few instructors may wish to become a mentor or resource for on-line course development at this time, this number may change with the organization and standardization of on-line course development.

According to data collected, it is the researcher's belief that there is a major interest in taking, developing, and instructing on-line courses at WITC.

Research Objective Number Two: Determine the level of instructor experience to develop on-line courses.

The study provided information that was directed specifically at the knowledge and abilities of WITC instructors to develop on-line courses. Approximately 69% of the total number of respondents had not developed an on-line course, but may possess the basic computer knowledge to develop an on-line course. Table 9 lists the level of guidance the respondent would need to complete basic tasks to develop an on-line course. The duties that needed virtually no guidance were sending e-mail messages using the Internet, attaching files to e-mail messages using the Internet, and using Microsoft Word to create documents, which received an approximate valid percent of 90%. These items earned a very low standard deviation, which confirms a low level of guidance. Items such as using the Blackboard web site to create an on-line course, developing an on-line course, instructing an on-line course revealed a level between minimal guidance to some guidance. Finally, the average response for participating in an on-line course as an instructor and the average response for participating in an on-line course as a student was minimal guidance. Evidence displayed in the level of guidance table shows that the majority of respondents do not need a high level of guidance to perform many of the tasks which are common in on-line course development. While some guidance may be needed, it appears as though a basic understanding of computers and their applications is prevalent among the WITC instructors who responded to the survey. It is the researcher's

belief that WITC instructors possess a basic knowledge of computers and computer applications to develop on-line courses.

Research Objective Number Three: Determine the level of instructor experience to facilitate on-line courses.

The study provided some information that provided an overall generalization of the level of instructor experience to facilitate on-line courses. Approximately 69% percent of the respondents had not developed an on-line course and the majority of respondents felt that they needed minimal guidance to some guidance when instructing an on-line course in their area of instruction. Although the evidence is not strong, it does lead the researcher to believe that there is a low level of instructor experience to facilitate on-line courses.

Research Objective Number Four: Determine the need for WITC to provide support for on-line course development.

The study provided information to determine the need to provide support for on-line course development by asking the respondent to measure the level of importance and the level of need to select items. According to the results shown in Table 10, it is the researcher's belief that the level of importance of the development of on-line courses as well as the level of importance to provide training for the development and instruction of on-line courses is very important. The data also shows that respondents feel that both on-line developers and on-line instructors should take an on-line course. Respondents may feel that the added experience of being an on-line student may help them to become better on-line course developers and instructors.

Additional information to complete this objective is gathered from Table 11. These final survey items again earn scores at the very important level, while all show a standard deviation of .926 or less. According to data gathered in Table 10 and Table 11, the researcher believes there is a great to extreme need to provide developmental support for on-line course development, training for on-line course development and instruction, documentation of on-line course guidelines, and guidelines for current and future on-line courses. The information also favors the moderate need to extreme need for encouragement and support from staff and administration, feedback during all phases of on-line course development, and reviewing of on-line courses for continual improvement. The researcher believes according to this information, there is a very great need for WITC to provide support for on-line course development.

Research Objective Number Five: Determine the need for WITC to provide training for on-line course development.

The study provides information to the need for training for on-line course development through the same set of items used to complete Objective Four. According to the data in Table 10 and Table 11, there is strong evidence of the need for training. The majority of respondents rated training for on-line course development and training for on-line course instruction in the moderate need to extreme need levels with a standard deviation of .841 and .870 respectively. Table 11 shows higher mean values with lower standard deviations than any other area of the survey. The researcher believes according to this information that there is a very great need for WITC to provide training for on-line course development.

Recommendations Related to this Study

Information obtained through the on-line survey created for this study combined with information gathered during the literature review has provided the insights for the following recommendations.

1. The full-time instructors at WITC should be encouraged to use their computers and their computer applications to enhance daily communication and instruction. The results of the study show that some instructors use their computer daily as compared to many who use their computer more than twice daily. Just as on-line developers and/or instructors must be comfortable with current technology and possess a willingness to try new technology as it becomes available, so should administrators, staff, and faculty members. If administrators encourage faculty to use technology, they in turn must become familiar with software programs and Internet applications. This may also be viewed as a positive showing of support for instructors as they also learn to incorporate new technology into their everyday activities. According to Darrell Butler of Ball State University's Department of Psychology, "Once faculty are convinced that a technology's worth using, it's easier for them to find the time" (cited in Allen, 2002, p. 4).
2. Since Blackboard is the primary platform for WITC on-line course delivery, an abbreviated version of an on-line course could be offered to WITC instructors to expose them to the same learning environment that an on-line WITC student would receive. The results of the study showed that there was a major interest in on-line courses whether the individual was a student, a

developer, or an instructor. In addition, the study also shows that many WITC instructors are not familiar with the Blackboard web site and may need guidance to create on-line courses. If the instructor was interested in on-line learning, this sample course would provide answers to their questions as they assume the role of an on-line student. It may also help minimize the intimidation that on-line course development and instruction may create. Diana Zilberman, director of distance learning for Baltimore City Community College, has created a program that helps faculty experience on-line learning by putting them in the role of the student. “I realized that the best way for an instructor to learn how to teach online is to experience being an on-line student first,” Zilberman said (cited in Lorenzetti, 2002, p. 3). The course length could be extended with corresponding curriculum and the instructor could learn how to become an on-line developer and/or instructor. The sample course could be presented during a staff development workshop. Conducting summer workshops would provide an opportunity for more faculty to participate, therefore allowing them the chance to evaluate the appropriateness on-line learning for the classroom course they teach (Bower, 2001). On-line course development and instructional workshops may also encourage instructors who would like to be involved in on-line course development and instruction in the future.

3. Mentors should be assigned to WITC instructors who are developing or instructing an on-line course. The study showed that the most favorable method of creating on-line courses from the choices available was working

with a mentor to create an on-line course. Since there are a few WITC instructors who have already developed and instructed on-line courses, many of these individuals would be a valuable resource for future on-line course development as mentors, course reviewers and proofreaders, and course template designers. Mentors at Ball State University have met with new on-line course developers as a group to initiate discussions on what worked, what didn't, and the problems they experienced (Allen, 2002).

4. Blackboard should be used to enhance classroom instruction as a prerequisite to developing and instructing an on-line course. According to Rosenkrans (2001), a way to promote on-line learning is to have educators incorporate on-line learning coursework and activities into regular classroom instruction. Instructors may use the Blackboard web site to enhance classroom activities and expose students to the Internet and on-line learning. This would also give the student the ability to communicate with the instructor and other students outside of classroom hours. Reference materials, handouts, and assignments can be posted on the web site and accessed twenty-four hours a day, 7 days a week from outside the confines of WITC. If some of these traditional classroom courses are selected to be offered on-line in the future, most of the on-line course development will have been completed and the majority of materials will have been tested. Also, the instructor will have the experience of communicating with and instructing students via the Internet. Buchanan (1999) believes that new on-line instructors should be "trained and confident

before they enter the on-line classroom" and should not learn to teach during their first on-line class experience (¶ 22).

5. The coordination of all on-line course training and development at WITC should be organized in order to obtain a consistency within the district campuses. The study reveals a definite need to train on-line course developers and instructors, to develop and document standards and guidelines for on-line course development, for continual encouragement and support from staff and administration, for continual feedback during all phases of on-line course development, for continual reviewing of on-line courses for positive improvement, and for reasonable requirements for current and future on-line courses. According to Wilson (1998), effective training and support programs should be developed by first assesses the experiences and concerns of the pioneering on-line faculty. While each campus may address some of these items, there may be a large amount of information yet to be shared between campuses. The district-wide coordination of WITC on-line learning could successfully promote the sharing of on-line experiences and information, save time and money by minimizing the possible duplication of on-line course development tasks by the four WITC campuses, and provide the necessary standardization and documentation for current and future on-line developers and instructors.
6. Clear guidelines and standards need to be created for WITC's on-line learning program to point all developers and instructors in a positive direction. On-line course development and instructional standards and guidelines are necessary

to insure that distance learning courses and their classroom counterpart both contain comparable learning objectives. Questions, comments, and suggestions were obtained from those respondents who completed the survey. This input is located in Appendix H, which lists on-line survey respondent submitted text for the last item of the on-line survey. The range of opinions listed showed a strong concern for the future of on-line course development and instruction at WITC. Feedback could be obtained from on-line developers/instructors and students a minimum of twice a semester and used by these same developers and instructors to improve classes. Also, on-line instructors could meet as a group at least once a month to share ideas and suggestions. Administrators and staff could also attend to share their thoughts and help support and encourage on-line faculty. Another positive source of feedback would be to periodically invite WITC on-line students to attend the meetings to share their thoughts and concerns. On-line learning can be intriguing and frightening for the student as well as the instructor (Perrin & Mayhew, 2000).

Recommendations for Further Study

Additional recommendations by the researcher for future study of on-line learning at WITC are:

1. It may prove beneficial to the development of WITC's on-line educational program to research the level of interest and experience among the full-time WITC instructors once a year for the next five years. On-line learning at WITC is still growing and evolving as new courses are being created and

offered to the public each semester. As on-line learning continues to gain popularity, the level of interest and experience of WITC instructors may change and the results of further study may provide additional insight to improving on-line course construction and instruction.

2. A more comprehensive review/study could be performed to include full-time and part-time adjunct instructors. The sample population of this study consisted of full-time WITC instructors, which may have limited the information obtained in the survey. According to the survey, 54% of the total respondents were full-time instructors for 9 years or less. In some learning institutions, many faculty members may have graduated from universities more recently and therefore, may possess more computer knowledge and experience (Cummings & Buzzard, 2002). There may be other part-time instructors who are interested in and/or involved in on-line development and instruction. This group of individuals may provide additional insights to enhance on-line course development and instruction at WITC. According to Lois Eichman, Vice President of Instructional Services at WITC Shell Lake (personal communication, February 27, 2003, part-time on-line developers and instructors play an important part in WITC's on-line course offerings.

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APPENDIX A

WITC Campus Mailbox Survey Notice

A few days from now you will receive an e-mail in your WITC e-mail account requesting you to fill out a questionnaire for an important research project I am conducting for the requirements of the Master's Degree in Career and Technical Education at University of Wisconsin – Stout.

It concerns the level of instructor interest and experience concerning the development of on-line courses at WITC. The study is an important one that will be used to help WITC develop a sense of direction for future on-line course development.

With your help, this research can be successful.

Thank you,
Glenn S. Sokolowski
Mechanical Design, WITC Rice Lake Campus

[This notice was printed on a 3" x 5" note card and a shiny United States penny was glued to the lower right hand corner of the card.]

APPENDIX B

Letter Explaining the Distribution of Note Cards in WITC Instructor Mailboxes

[Addressed to the mailroom assistant at each WITC campus],

I will be contacting you shortly to inform you of the distribution date of the enclosed announcement cards. To confirm the date, I will call you directly and also send an e-mail to your WITC account.

After you learn of the distribution date, please place one of the enclosed cards in the WITC Rice Lake Campus mailbox of each WITC instructor listed below.

[This area contained a table listing the full-time WITC instructors for each campus.]

Ashland – 18 full-time instructors
New Richmond – 35 full-time instructors
Rice Lake – 48 full-time instructors
Superior - 34 full-time instructors
Total of 135 full-time WITC instructors

I greatly appreciate your help toward the success of my research paper. If you have any questions concerning the distribution of the announcement cards, you may contact Lois Eichman, Vice President of Instructional Services, WITC Shell Lake, at leichman@witc.edu or by phone at (800) 243-9482 ext. 2212.

Thank you,

Glenn S. Sokolowski
Mechanical Design - WITC Rice Lake/Ladysmith
gsokolowski@witc.edu

APPENDIX C

WITC Campus E-mail Survey Notice

This week you will receive an e-mail in your WITC e-mail account requesting you to fill out a questionnaire for an important research project I am conducting for the requirements of the Master's Degree in Career and Technical Education at University of Wisconsin – Stout.

It concerns the level of instructor interest and experience concerning the development of on-line courses at WITC. The study is an important one that will be used to help WITC develop a sense of direction for future on-line course development.

With your help, this research can be successful.

Thank you,
Glenn S. Sokolowski
Mechanical Design - WITC Rice Lake/Ladysmith

APPENDIX D

First E-mail Message to Full-Time WITC Instructors

Dear full-time WITC instructor,

You may remember me as the 1998 WITC District Ambassador and as a mechanical design student at WITC Rice Lake. Currently, I am currently employed at WITC Rice Lake as a part-time instructor teaching both classroom and on-line courses. Concurrently, I am working on my thesis, "A Study of the Level of Instructor Interest and Experience Concerning On-line Courses at Wisconsin Indianhead Technical College," for my Master's degree at UW-Stout. I am writing to ask for your assistance to complete the following survey to aid in my research.

On-line course development and instruction continue to evolve within each Wisconsin Indianhead Technical College as well as the colleges in the Wisconsin Technical College System. As the popularity of on-line courses increases, the need for interested on-line course developers and instructors also increases.

The information you provide in this survey will be used to help WITC develop a sense of direction for future on-line course development. It may also provide the necessary information needed to determine the level of instructor interest and experience concerning on-line course development, create and provide adequate on-line course development training, and provide adequate developmental assistance through resource materials and support personnel.

I promise make every effort to guarantee the confidentiality of your input by securing all collected survey data. I also promise not to share any information obtained by this survey for any reasons other than its expressed intended purpose and will not publish any data that may identify you by your survey input. Your involvement in completing this survey is voluntary but your input is important for the success of this research.

Please take time to carefully complete the following questions by clicking on the link enclosed. After you have completed the survey, select the "submit" button and your survey information will be electronically sent without any personal identifiers to UW-Stout Publications to be processed.

Thank you for your valuable assistance toward the success of this study. If you would like to be notified of the results of this study, send an e-mail to gsokolowski@witc.edu.

Glenn S. Sokolowski
Mechanical Design – WITC Rice Lake/Ladysmith

Please click the link below to begin the survey:

http://www.uwstout.edu/survey/witc/witc.htm

APPENDIX E

Survey

The Level of Instructor Interest and Experience Concerning the Development of On-line Courses at WITC Survey

I understand that by returning this survey, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

NOTE: Questions or concerns about participation in the research or subsequent complaints should be addressed to Glenn Sokolowski, phone (715) 532-3774, the researcher, or Juli Taylor, phone (715) 232-1443, the research advisor. Questions about the rights of research subjects can be addressed to Sue Foxwell, Human Protections Administrator, UW-Stout Institutional Review Board for the Protection of Human Subjects in Research, 11 Harvey Hall, Menomonie, WI 54751, phone (715) 232-1126.

Please read the following statements and questions and indicate your personal response to each.

Please be sure to click the "Submit" button at the very bottom of the page only once when you are finished. Thank you.

Demographics

1. *Select the program subject area that best describes your area of instruction at WITC:*

- ☐ Business
- ☐ Health
- ☐ General Education
- ☐ Personal Service
- ☐ Trade and Technical
- ☐ Other _____

2. *Select your frequency of computer usage:*

- ☐ Less than daily
- ☐ Daily
- ☐ More than twice daily

3. *Select the highest level of education you have obtained:*

- ☐ Non-degree
- ☐ +40 credits
- ☐ +80 credits
- ☐ Baccalaureate
- ☐ Baccalaureate +10 credits
- ☐ Baccalaureate +20 credits
- ☐ Master
- ☐ Master +10 credits
- ☐ Master +20 credits
- ☐ Education Specialist or Doctoral Degree

4. Select the number of years you have been a full-time instructor:

- ☐ 3 years or less
- ☐ 4 years to 9 years
- ☐ 10 years to 14 years

- ☐ 15 years to 19 years
- ☐ 20 years to 24 years
- ☐ 25 years or more

Personal Experience and Goals

For the remaining questions, please use the following as an operational definition of an on-line course.

An on-line course is an educational experience where all course materials and communications are shared via the Internet.

Complete each question in this section by selecting either yes or no:

5. Have you ever taken an on-line course?	☐ Yes	☐ No
6. Have you developed an on-line course?	☐ Yes	☐ No
7. Have you instructed an on-line course?	☐ Yes	☐ No
8. Are you interested in taking an on-line course?	☐ Yes	☐ No
9. Are you interested in developing an on-line course?	☐ Yes	☐ No
10. Are you interested in instructing an on-line course?	☐ Yes	☐ No
11. Are you interested in learning about taking on-line courses?	☐ Yes	☐ No
12. Are you interested in learning about developing on-line courses?	☐ Yes	☐ No
13. Are you interested in learning about instructing on-line courses?	☐ Yes	☐ No

If you answered **"no" to <u>all</u>** of the questions above, you have the option to continue or stop at this point.
If you wish to stop here, please click the *submit* button at the end of this survey.

If you answered **"yes" to <u>any</u>** of the questions above, please continue below.

Level of Interest

Rate your level of interest in the items below:	**No Interest**	**Limited Interest**	**Moderate Interest**	**Much Interest**	**Extreme Interest**
14. Developing an on-line course for WITC	☐	☐	☐	☐	☐
15. Learning more about on-line course development	☐	☐	☐	☐	☐
16. Instructing an on-line course for WITC	☐	☐	☐	☐	☐
17. Learning more about on-line course instruction	☐	☐	☐	☐	☐
18. Developing an on-line course, but not instructing it	☐	☐	☐	☐	☐
19. Instructing an on-line course, but not developing it	☐	☐	☐	☐	☐
20. Participating in an on-line training course for instructors	☐	☐	☐	☐	☐
21. Instructing an on-line training course for instructors	☐	☐	☐	☐	☐
22. Using a textbook tutorial to create an on-line course	☐	☐	☐	☐	☐
23. Working with a committee to create an on-line course	☐	☐	☐	☐	☐
24. Using a CDROM tutorial to create an on-line course	☐	☐	☐	☐	☐
25. Working with a mentor to create an on-line course	☐	☐	☐	☐	☐
26. Acting as a staff mentor for on-line course development	☐	☐	☐	☐	☐
27. Designing course templates for creating on-line courses	☐	☐	☐	☐	☐
28. Documenting on-line course development guidelines	☐	☐	☐	☐	☐
29. Reviewing current on-line courses for improvement	☐	☐	☐	☐	☐

Level of Guidance

Rate the level of guidance you may need to complete the tasks below:	**Not sure of amount of guidance**	**No guidance**	**Minimal guidance**	**Some guidance**	**Extensive guidance**
30. Sending e-mail messages using the Internet	☐	☐	☐	☐	☐
31. Attaching files to e-mail messages using the Internet	☐	☐	☐	☐	☐
32. Using instant messaging or chat rooms via the Internet	☐	☐	☐	☐	☐
33. Posting comments using a discussion board via the Internet	☐	☐	☐	☐	☐
34. Using Microsoft Word to create documents	☐	☐	☐	☐	☐
35. Using Microsoft Excel to create spreadsheets	☐	☐	☐	☐	☐
36. Using Microsoft PowerPoint to create slide presentations	☐	☐	☐	☐	☐
37. Using the Blackboard web site to create an on-line course	☐	☐	☐	☐	☐
38. Developing an on-line course in your area of instruction	☐	☐	☐	☐	☐
39. Instructing an on-line course in your area of instruction	☐	☐	☐	☐	☐
40. Participating in an on-line training course for instructors	☐	☐	☐	☐	☐
41. Participating in an on-line course as a student	☐	☐	☐	☐	☐

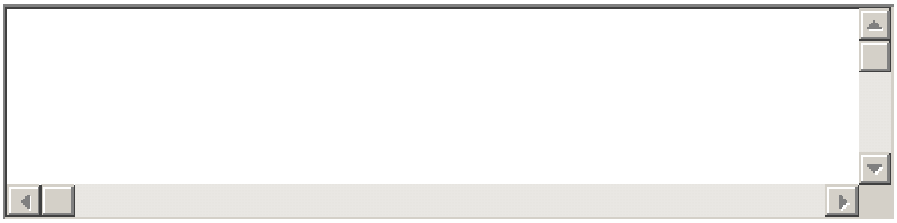
Level of Importance

Rate the level of importance you would place on the items below:	**Not Important**	**Slightly Important**	**Moderately Important**	**Very Important**	**Extremely Important**
42. Developing on-line courses for WITC	☐	☐	☐	☐	☐
43. Providing training for on-line course development	☐	☐	☐	☐	☐
44. Providing training for on-line course instruction	☐	☐	☐	☐	☐
45. On-line course developers should take an on-line course	☐	☐	☐	☐	☐
46. On-line course instructors should take an on-line course	☐	☐	☐	☐	☐

Level of Need

Rate the level of need at WITC you would place on the items below:	**No Need**	**Little Need**	**Moderate Need**	**Great Need**	**Extreme Need**
47. Developmental support for on-line course development	☐	☐	☐	☐	☐
48. Training for on-line course development	☐	☐	☐	☐	☐
49. Training for on-line course instruction	☐	☐	☐	☐	☐
50. Documenting on-line course development guidelines	☐	☐	☐	☐	☐
51. Encouragement and support from staff and administration	☐	☐	☐	☐	☐
52. Feedback during all phases of on-line course development	☐	☐	☐	☐	☐
53. Reviewing on-line courses for continual improvement	☐	☐	☐	☐	☐
54. Guidelines for current and future on-line courses	☐	☐	☐	☐	☐

55. Please enter any comments you may have concerning the development of on-line courses at WITC:



Thank you for your time and input!

Submit Form | Reset Form

Glenn S. Sokolowski, researcher.

Revised: 04/22/03

APPENDIX F

Follow-up Reminder E-mail Message to Full-time WITC Instructors

Dear full-time WITC instructor,

A few days ago, I sent an e-mail to you requesting your cooperation in completing an on-line survey for my thesis, "A Study of the Level of Instructor Interest and Experience Concerning On-line Courses at Wisconsin Indianhead Technical College," for my Master's degree at UW-Stout.

I would like to extend a sincere thank you if you took time to complete the survey. Your input is very valuable and will aid in the success of my study. If you have not completed the survey, I am writing to again ask for your assistance to complete the following survey to aid in my research. You have been selected because of your knowledge and experience as a full-time WITC instructor.

Please take time to carefully complete the following questions by clicking on the link enclosed. After you have completed the survey, select the "submit" button and your survey information will be electronically sent without any personal identifiers to UW-Stout Publications to be processed.

Thank you for your valuable assistance toward the success of this study.

Glenn S. Sokolowski
Mechanical Design – WITC Rice Lake/Ladysmith

Please click the link below to begin the survey:

http://www.uwstout.edu/survey/witc/witc.htm

APPENDIX G

Final E-mail Message

Dear full-time WITC instructor,

The collection of data is almost complete but I still need a few more full-time WITC instructors to participate in the on-line survey, for my thesis, “A Study of the Level of Instructor Interest and Experience Concerning On-line Courses at Wisconsin Indianhead Technical College,” for my Master’s degree at UW-Stout.

If you have already completed the survey, thank you very much. Your input is very valuable and will aid to the success of my research.

If you have not had the time to complete the on-line survey, please take a few minutes now. The survey contains radio buttons which will allow you to complete the survey quickly and easily. As a reminder, the survey will only be available until 4:00 pm, Friday, May 2, 2003.

Thank you for taking time to participate in the survey during this busy time of the semester.

Please click the link below to begin the survey:

http://www.uwstout.edu/survey/witc/witc.htm

Sincerely,

Glenn S. Sokolowski
Mechanical Design – WITC Rice Lake/Ladysmith

APPENDIX H

On-line Survey Respondent Submitted Text

Item #1

Select the program subject area that best describes your area of instruction at WITC:

1. Other - employment skills

Item #55

Please enter any comments you may have concerning the development of on-line courses at WITC:

1. Management of online tools and grading is a great need. Dealing with cheating is an extreme need in on-line courses! Time is also a great need!

2. On-line courses should be dictated by documented demand, not "created demand" by an administration that just wants to be perceived as "on board" the digital train.

3. In the Trade and Technical Department so many of the courses are hands-on that on-line delivery may not be practical. However, for those classes that are lecture-based I see on-line delivery as a huge asset as students can work the classes around their own work/family schedules. I am eager to start the development of an on-line class, but feel that I don't have the time and knowledge at this point.

4. Since more and more on-line offerings will become available, we need to take a professional approach to our courses if we are to be competitive.

5. The online course arena is very competitive. For WITC to compete here we will have to provide financial, training, and develop standards that currently are

minimal at best. Leave the online world to the corporations, they have the money, the time and standards set in place. If you don't believe me go out and look at all of the online training courses that are out there and then think of how we can compete with that. Secondly our students in general are not online learners for the most part. One of my counterparts web-enhanced several of his courses, they have turned into a disaster. Students come to me and one of my co-instructors to get help because they are completely lost. If online courses are to be pursued, the learners have to be identified first of all to see if they can be successful in that learning environment. Careful considerations have to be made during the development of the online courses. Very well defined standards need to be developed and followed. Constant monitoring of students/instructors has to be maintained. Lastly during a budget crunch time the development of online courses that will serve few makes much sense. Keep hands on learning hands on or you will loose [*sic*] them.

6. I am retiring this year--this should explain my answers.

7. WITC needs a statement of strategic dircection [*sic*] for on-line course development and delivery at the Shell Lake level and guidelines for departments to determine the priority for on-line course development, delivery and instructor training.

8. I am planning on developing an on-line course this summer. Can I call on you for help? I have never used blackboard but I am taking the class on the 19th. [*name removed to preserve confidentiality*]

9. My concern is for the students who may not be offered courses in a traditional classroom setting. Not all students have the self discipline to complete online classes and their learning style is not typing on a computer for interaction.

10. Funding, support to help in the development, time

11. I developed and learned to teach online with very little support/encouragement and no training with viable examples to follow. This was a tremendous effort on my part and the effort was not compensated to the degree of difficulty and time involved. In addition, I am told that after all of that effort, because enrollment tends to be low at startup of anything new, that because of budget constraints, these online courses are the first courses to get axed. That does not make any sense in light of the new learning college tenets which include meeting students at their point of need 24/7. So either we give online instruction/development its full due of time, resources and financial/administrative support, or we should scrap the whole project. We can't continue to say one thing -- offer formats which meet individual student needs -- and then say, no that costs too much money.

12. Since I'm so comfortable with computers and with on-line course development and on-line course instruction, personally I don't have a need for tutorials or mentoring/help in developing or instructing on-line courses. However, many, many instructors DO need this help. If WITC (read: Shell Lake) wants more courses made available on-line, Blackboard mentors are needed not just on every campus but in every department. Also, there needs to be a written handbook called, perhaps, "Guidelines for Blackboard Instructors at WITC." A handbook that would answer questions such as, "What is the standard format at WITC for creating a student's Blackboard login name?" and "What buttons are instructors at WITC required to use on their Blackboard course Web site?" and "What information should be found under each button?" Answers to common questions like these would help promote consistency among Blackboard

instructors and courses, district-wide. As I look at other Blackboard sites around our district, I am amazed (and even appalled) at the disparity of quality and consistency among our on-line instructors' Web sites. Some instructors use the "Course Documents" button to hold their syllabus. Other instructors use the obvious "Syllabus" button while still others use the less obvious "Course Information" or "Course Materials" button. So many different lables [*sic*] must get very confusing to students enrolled in more than one Blackboard course at the same time. For instance, if a student must click through several buttons to find the instructor's assignments (because they could easily be located under "Course Materials," "Course Documents, "Assignments," or even on the Discussion Board), frustration will increase. With increased frustration comes increased attrition rates. If we have consistency among instructors, though, there will be less confusion and lower attrition rates.

13. As I read your definition of an on-line course it said that ALL communication took place via the internet which means I have almost no experience with that definition of on-line. If the definition were almost all communication, in other words, the courses that I have extensive experience with have been internet enhanced not purely on-line. I hope that I read it right becuase [*sic*] it makes a huge difference. I think internet enhanced course [*sic*] are much more valuable than purely on-line courses whcih [*sic*] strike me as being too cold as you never get to make actual face to face contact with your classmates or the instructor.

14. I don't want to see us evolve to the point that the only option is on-line courses for students. We still have a population of students that this is NOT the most appropriate learning environment for them.

15. like wow man, crazy survey!

16. Nearby colleges and universities have already put courses on-line in my field so I feel behind them in this area of instruction.

17. I would love to further develope [*sic*] and tech online but my time is very limited because of extra teaching.

18. Somwhat [*sic*] concened [*sic*] about the vanishing in person instructor and the value of that to the student.

19. I strongly support the availability of on-line courses. For many students, this is a viable option to give them the flexibility they need to manage their school, work and family commitments. However, current courses should not be replaced by on-line offerings. The Learning College should continue to foster multiple intelligences through multiple instructional methods. Classroom courses should continue to be offered as well as on-line. Student enrollment should determine the method of instruction- not economics.

20. I developed one of the first courses in the Learning Space software for online courses. There was no development support, financially or with training: It was a "learn as you go" experience, and that was frustrating. I'm not famniliar [*sic*] with the Blackboard format, but assume it can't possibly be as challenging to master as Lotus' Learning Space. I think it is imperative that contract language be developed and in place w/ guidelines and parameters for development, instruction, and ongoing improvements to provide the best experience for both staff and students.

21. I would love to be able to offer on-line coursework. The amount of time needed to establish these courses is not available to me at this time. I don't know what

tasks could be pushed off the "plate" at this time to make room for on-line course development and implementation. It seems like a task that would require outside support that is not available right now.

22. Trade courses that require hands on will be a challenge. I can see this as a feeder for whats [*sic*] comming [*sic*] to trade courses.

23. Instructors need T I M E to train, participate, develop, assess and mentor. Not just another let's do this without thought and time given to the process.

24. Regretfully, most of the on-line courses are more of the same old, same old....that is boring...following the behaviorists' model of motivation and involvement....there is a new paradigm relative to learning and involvement that is centered on Maslow's theories that avoids the mechanical constraints of the behaviorists' as well as the extremes of the other than concsious [*sic*]... we know this, but we continue to teach and test using the same old restraints in thinking and thought.