

STUDY THE FEASIBILITY OF IMPLEMENTING EMPLOYER-PREFERRED  
ALTERNATIVE DELIVERY METHOD(S) FOR SHORT-TERM,  
OCCUPATIONAL SPECIFIC, EMPLOYEE TRAINING

by

Karen E. Holstein

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Joseph A. Benkowski  
Research Advisor

The Graduate College  
University of Wisconsin – Stout  
July 31, 2001

**The Graduate School  
University of Wisconsin-Stout  
Menomonie, WI 54751**

ABSTRACT

<u>HOLSTEIN</u> (Writer) (Last Name)	<u>KAREN</u> (First Name)	<u>E.</u> (Initial)	
Study the Feasibility of Implementing the Employer-Preferred Alternative Delivery Method(s) for short-Term, Occupational Specific, Employee Training (Title)			
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Technology is revolutionizing the art of instruction and employee training. Moreover, it is impacting traditional delivery methods for short-term, occupational specific, employee training in higher education. Alternative delivery method(s) provide educational experience for learners anyway, anyplace, and anytime. For Lakeshore Technical College to remain the quality educational provider of choice in its District, alternative delivery methods for employee training must be a serious consideration.

The purpose of this study was to obtain input from customers about factors influencing declining seminar and workshop enrollments at the College during the 2000-2001 academic term. The primary focus was on finding out what mode(s) of alternative delivery was preferred by employers to meet their short-term employee training needs. The research results will assist the College in identifying solutions to returning seminar and workshop enrollments to their proper level or higher.

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# CHAPTER I

## Introduction

Lakeshore Technical College (College), located within the geographic boundaries of Manitowoc and Sheboygan Counties and parts of Ozaukee and Calumet Counties, is one of sixteen technical colleges in the State of Wisconsin. The College's mission is to provide quality and accessible learning opportunities for initial and continued employment that are consistent with identified student and community needs. Moreover, these quality and accessible learning opportunities change, as customer needs change and organizations experience impacts of a global marketplace. The changing marketplace occurs within the local community and extends statewide and in some instances nationally.

From July 1998 through June 30, 2000, Lakeshore Technical College had experienced increased revenue and Full-time Equivalency (FTE) student growth in the seminar and workshops training area as noted in Table 1. This training served the short-term, occupational specific, working adult market.

The College experienced a revenue increase of \$18,446 or 24.32 percent in 1998-1999 over 1997-1998. Moreover, the College experienced another revenue increase of \$35,111 or 31.64 percent in 1999-2000 over 1998-1999. Beginning in July 2000 and concluding on June 30, 2001, there had been a significant decline in seminar enrollments and revenues and the following data demonstrates this decline:

TABLE 1

Lakeshore Technical College Comparative FTE and Revenue Data

<b>Activity</b>	<b>1997-1998</b>	<b>1998-1999</b>	<b>1999-2000</b>	<b>2000-2001</b>
FTE's		15.78	21.99	10.97
Revenue	\$57,401	\$75,847	\$110,958	\$77,402

Seminar and workshop activity and cancellations were monitored during the academic term; however, it was difficult to determine what factors were influencing the problem until early in 2001. For example, nursing continuing education had been highly supported in the past by medical providers and nurses. However, the five workshops scheduled during the 2000-01 academic term, based on the Nursing Advisory committee's input and prioritization, were cancelled due to very low enrollment. Feedback about the cancellations was mailed to the advisory committee members two times during 2000-2001. A Nursing Director from one of the major hospitals in the area responded to the feedback via the researcher. Input was given about the significant nursing shortage in the area and the inability to release workers for training because of double duty shifts. Moreover, the testimony demonstrated how the nurses were receiving needed training—videos, CD-ROM's, and Internet training.

It was critical that the College obtain information about the factors influencing the significant decline in seminar and workshop FTE's and revenue. For this reason, a formal research plan was implemented. Data was obtained from the Lakeshore Technical College District employers via a targeted survey. The primary focus of the research was

twofold. It looked at factors that caused the seminar and workshop FTE and revenue problem, and the employer-preferred alternative delivery mode(s) for short-term, occupational specific, employee training.

In order to provide clarity to the research undertaken, additional information was developed and included in this chapter. A discussion follows relating to the problem statement (and purpose), the research objectives and significance of the study, limitations, assumptions, and definitions.

### Problem Statement

For the 2000-2001 academic term, Lakeshore Technical College has evidenced a 52 percent decline in seminar/workshop enrollments for short-term, occupational specific employee training for working adults. A number of factors appeared to influence the significant decline in seminar/workshop enrollments--a worker shortage in the College community; a downturn in the economy impacting product sales with subsequent layoffs; the vast amount of information available on the Internet is challenging the preferred delivery mode for short term, occupational specific, employee training; and there is an increase in the number of educational providers--competitors offering similar training.

The purpose of this research project was to obtain data about this problem from business and industry sources in the College community. The primary focus of the survey was twofold—what factors influenced the decline in seminar and workshop enrollments and revenues; and what was the employers preferred mode(s) of alternative delivery methods to provide short-term, occupational specific employee training. The data should validate whether the College should restructure the delivery methods used to provide

training to working adults. The research results assisted the College in identifying solutions to returning seminar enrollments to their proper level or higher. The outcome was to maintain the College's position in the Lakeshore community as the quality educational provider of choice for short-term employee training.

The problem created the climate for a research study and the purpose fueled it. Thus, the research objectives were framed.

### Research Objectives

Four research objectives were developed to not only guide the study but to elicit information needed to resolve the problem. The objectives included:

1. Obtain and analyze data, and report findings of employer training habits and needs.
2. Obtain and analyze data, and report findings of factors influencing training activities of employers.
3. Obtain and analyze data, develop a demographic profile of respondents, and report findings.
4. Draw conclusions and make recommendations to restore the seminar and workshops enrollment and revenues to at least the level obtained in 1999-2000.

Information presented thus far, assisted in the development of the significance of the study.

### Significance of the Study

The significance of the study is to determine the feasibility of implementing the employer-preferred alternative delivery method(s) for short-term, occupational-specific

employee training. Data collection from the survey will lead to data analysis, findings, and recommendations for the College to improve quality and accessible learning opportunities.

Significant consideration was given to whether the College should restructure how working adults are trained via employer preferred alternative delivery methods. If the solutions to the problem are implemented, seminar enrollments should return to their proper level or higher.

If the recommendations for improving seminar and workshop FTE's and revenues are not approved, it is likely that the continuation of the seminar and workshop piece of Lakeshore Technical College's educational programming will be eliminated. This will have a significant impact on the seminar/workshop and conference center budget. Dollars will be reallocated to more important program funding at the College. Current staff (approximately 2.25 FTE staff) could be laid off or reallocated to other positions. The College will lose its position of quality educational provider of choice for short-term, occupational specific, employee training via seminars and workshops. In addition, limitations included other restrictions.

#### Limitations

Delimitations became apparent when the research project was clarified and the timeline was developed. Therefore, the limitations were written as follows:

1. There may be other factors identified in the survey that are not of primary significance of the study.

2. There are limited resources with the study such as time constraints, limited staff assistance, and follow up results.
3. The College may not have the resources to set up this study to become a longitudinal project.
4. There is non-value to survey outside the boundaries of the Lakeshore District.

Once the limitations were written, the assumptions were developed to guide the research study.

#### Assumptions

The assumptions of the study included:

1. Distance education and the interactivity of the instructional multimedia technology are growing rapidly and will have a significant role in employee training in the future.
2. The Lakeshore Technical College has little control over economic factors that may negatively influence working adult training enrollments and revenues.
3. Related research may be conducted simultaneously with this study.
4. Resources will direct decisions of the Executive Committee relative to the recommendations of this study.
5. There is no guarantee that seminar and workshop enrollments will improve or be restored to the 1999-2000 level or higher if the College fails to act on the recommendations of the study.

One other activity was completed for the reader's clarity—definitions of terms.

### Definition of Terms

Following were the terms identified and referred to throughout the research study.

The terms include:

Asynchronous: of, used in, or being digital communication (as between computers) in which there is no timing requirement for transmission and in which the start of each character is individually signaled by the transmitting device.

Computer-Based-Training (CBT): Refers to any instructional event that can be accessed via a standalone computer.

CD-ROM: A compact disc, which is a polycarbonate with one or more metal layers capable of storing digital information, on which a large amount of digitized read-only data can be stored. Like audio CDs, CD-ROMs come with data already encoded onto them. The data is permanent and can be read any number of times, but CD-ROMs cannot be modified.

Content On Demand (COD): This term implies delivery of an offering, packaged in a media format, anywhere, anytime via a network. Variants include audio on demand and video on demand.

Courseware: Is software designed to be used in an educational program.

Distance Education: A planned learning that normally occurs in a different place from teaching and as a result it requires special techniques of course design, other technology, special instructional techniques, special methods of communication by electronic and other technology, and special organizational and administrative arrangements.

E-Learning: Broadly defined, it refers to any form of education and training that is a network-enabled transfer of skills and knowledge delivered by CD-ROM, the Internet, satellite broadcast, video or interactive television.

FTE: Is defined as full-time equivalent. It is commonly used in education for numerically stating the total number of equivalent (full- and part-time) students or staff.

Floppy disk: Are often called floppies or diskettes. They store data and are portable, because you can remove them from a disk drive. The most common sizes for storing data from PCs are 720K (double-density) and 1.44MB (high-density). Macintoshes support disks of 400K, 800K, and 1.2MB.

Instructor-Led Training (ILT): A scheduled event conducted by an instructor, either in a classroom or through network delivery.

Interactive: Interacting with a human user, often in a conversational way, to obtain data or commands and to give immediate results or updated information.

Internet: The Internet is a large computer network linking smaller computer networks worldwide. Users are considered on-line when they are connected to a computer service through a modem.

Integrated Services Digital Network (ISDN): Is an international communications standard for sending voice, video, and data over digital telephone lines or normal telephone wires. ISDN supports data transfer rates of 64 KBPS (64,000 bits per second).

Learner: Anyone who accesses information to increase his or her skills and knowledge.

Median: Refers to the middle, or designating a middle number in a series.

Mode: Is a manifestation, form, or arrangement of being; specifically, a particular form or manifestation of an underlying substance. Mode is a particular functioning arrangement or condition, such as a computer operating in parallel mode. Mode is also the most frequent value of a set of data; or a value of a random variable for which a function of probabilities defined on it achieves a relative maximum.

On-line: Is turned on and connected. Users are considered on-line when they are connected to a computer service through a modem. That is, they are actually on the line.

SIC: Refers to Standard Industry Code, a code for business industry identification.

Synchronous: Of, used in, or being digital communication (as between computers) in which a common timing signal is established that dictates when individual bits can be transmitted, in which characters are not individually delimited, and which allows for very high rates of data transfer.

Video: A videocassette or videotape, especially one containing a recording of a movie, music performance, or television program.

Videoconferencing: Is conducting a conference between two or more participants at different sites by using computer networks to transmit audio and video data. Each participant has a video camera, microphone, and speakers mounted on his or her computer. As the two participants speak to one another, their voices are carried over the network and delivered to the other's speakers, and whatever images appear in front of the video camera appear in a window on the other participant's monitor.

Web-Based Training (WBT): Any instructional event that can be accessed via the World Wide Web.

World Wide Web: Is a system of Internet servers that support specially formatted documents. The documents are formatted in a language called HTML (*HyperText Markup Language*) that supports links to other documents, as well as graphics, audio, and video files. This means you can jump from one document to another simply by clicking on hot spots. Not all Internet servers are part of the World Wide Web.

In summary, chapter one introduced readers to the problem at the Lakeshore Technical College and the setting of the research. For clarity, a problem statement and purpose, research objectives, significance of the study, limitations, assumptions, and definitions also were included.

## CHAPTER II

### Review of the Literature

#### Introduction

For the 2000-2001 academic term, Lakeshore Technical College had experienced a 52 percent decline in seminar and workshop enrollments for short-term, occupational specific employee training for working adults. A number of factors appeared to have influenced the significant decline in seminar and workshop enrollments – a worker shortage in the Lakeshore community; a downturn in the economy impacting product sales with subsequent layoffs; the vast amount of information available on the Internet is challenging the preferred delivery mode for short-term, occupational specific, employee training; and there was evidence of an increase in the number of educational providers--competitors offering similar training in the College community.

The purpose of this research project was to obtain input about this problem from business and industry sources in the community. The primary focus of the research was twofold—what factors influenced the decline in seminar and workshop enrollments and revenues; and what was the employer’s preferred mode(s) of alternative delivery methods to provide short-term, occupational specific employee training. The data should validate whether the College should restructure the delivery methods used to provide training to working adults.

The research results assisted the College in identifying solutions to returning seminar enrollments to their proper level or higher. The outcome was to maintain the College's position in the Lakeshore community as the quality educational provider of choice for short-term employee training. The problem and purpose for the project framed the research objectives.

Research objectives were specified to not only guide the study but to elicit information to resolve the problem. The objectives include:

1. Obtain and analyze data, and report finding of employer training habits and needs.
2. Obtain and analyze data, and report findings of factors influencing training activities of employers.
3. Obtain and analyze data, develop a demographic profile of respondents, and report findings.
4. Draw conclusions and make recommendations to restore the seminar and workshops enrollment and revenues to at least the level obtained in 1999-2000.

The review of the literature began with the researcher evaluating books, journals, periodicals, and position papers on the subjects studied. Library databases were used to identify related reference material. In addition, a number of books were selected for reference.

The literature was perused to obtain a comprehensive understanding of the subject studied. Included were factors impacting short-term, occupational specific employee training; and the growing demand and use for distance education provided via alternative delivery methods. The data led credence to considerations the College needed to make

regarding resolution of the problem, and remaining the educational provider of choice in the Lakeshore Technical College District.

The literature was organized for reader understanding and clarity. Topics were delineated as follows: History of distance education; technology in the 21<sup>st</sup> century; issues with technology; business practices/successes using distance education; and what was learned.

### History of Distance Education

For most of history, including the Industrial Age, the standard educational setting has been an instructor standing in front of a group of people. Draves (2000) indicated this is the most common learning design in society, whether it is for college credit classes, noncredit courses, training in business and industry, high school instruction, or even a Sunday school class. It is also known that learners learn in a variety of ways, at different times, and from many sources. This is why other learning designs also evolved in the Industrial Age such as self-study workbooks, video, computer-based training (CBT), interactive videodisc (IVD), compact disc-read only memory (CD-ROM), digital versatile disc (DVD), and the personal computer (PC).

Computer-based training (CBT) was developed for a select few who had money and was highly experimental in the early 1960's Perry (2000). Much of the early CBT was accomplished on mainframe computers, like the U.S. Army's Plato courseware administered on large Cyber computers. Others used microcomputers, complete all-in-one hardware and software systems. Text was used to deliver content; however, there was virtually no narration, graphics were quite primitive and appeared as images made from

the lines used to make a box, there were few sound effects, and virtually no narration.

Another earlier technology, interactive videodisc (IVD), started its experimental phase in the early 1970's. The design co-joined interactivity and the computer. Thus, it took advantage of linear motion video. Moreover, text became secondary. The videodisc (movie-like learning) narrated, or talked, to the student. Videodisc then became more favorable than reading text.

The personal computer (PC) evolved around 1980, which allowed a larger percentage of the workforce to obtain access to computer technology. Individualized courseware began to emerge as PC's immigrated to corporate desktops. Also, authoring tools used to create courseware started to emerge. More interactive features were developed such as motion video with sound, enhanced graphics, audio narration, sound effects, and music.

Multimedia was evidenced in the late 1980's and early 1990's. New video and audio compression, 2- and 3-D images in a variety of file types, and more fonts attracted more companies to use CBT's as a part of their strategic training plan.

Central Processing Units (CPU's) were improved to provide faster delivery of content and more interactive activities for students. Significant storage space for multimedia courseware improved with the development of the compact disc-read only memory (CD-ROM). However the current up-and-comer, digital versatile disc (DVD), has up to 17 GB (gigabytes) of storage space that is over 20 times the capacity of CD-ROM's.

Near the end of the 20<sup>th</sup> century, much training was deferred to the Internet. It then was referred to as web-based training (WBT). Interpretation of the literature suggests WBT promises to be the true distance learning delivery system of the future. What is the bird's eye view for distance education in the new millennium?

### Technology in the 21<sup>st</sup> Century

There is a significant amount of literature implying that e-learning is here to stay and is the wave of the future. In 1999, businesses added the "e" in front of a lot of words such as e-commerce, e-business, e-shopping, e-transactions, and now e-learning. It is currently the most common buzzword for distance learning. O'Brien (2000) refers to e-learning as technology-based learning. Broadly defined, it refers to any form of education and training delivered by CD-ROM, the Internet, satellite broadcast, video or interactive television. More typically, e-learning has come to indicate web-based or online delivery of education and training.

A New National Survey on Higher Education Distance Learning was conducted in December 1999 by the National Center for Education Statistics of the United States Department of Education. This report focused on distance education at postsecondary education institutions for 1997-98. The study showed:

1. Almost 44 percent of all higher education institutions offered distance-based courses, an increase of one-third since 1994-95.
2. Public postsecondary institutions more likely offered distance learning: 78 percent public four-year, 62 percent public two-year contrasted with 19 percent four-year and 5 percent of private two-year institutions.

3. Total enrollments of 1,363,670 were found in postsecondary, credit-granting distance learning courses; slightly more than half (690,700) were in public two-year colleges.
4. Most of the growth in distance courses used asynchronous computer-based technology, primarily over the Internet.
5. Tuition and fees tended to be the same as for campus-delivered classes.
6. Approximately eight (8) percent of all two- and four-year postsecondary institutions offered college-level degree or certificate programs designed to be completed entirely via distance education.

Technology is revolutionizing the art of instruction. With the rapid advancements occurring in technology enhanced instructional delivery, it is difficult to stay current with terminology and techniques. The impact of technology on the delivery of courses, programs, and degrees in higher education has only begun. O'Banion (1997) states that: "In the future, if advances in technology continue at the current pace, learning will become commonplace. These sweeping changes will happen because of the unique nature of technology to build on itself." His prediction for the future of the learning college incorporates the following eight concepts:

1. The learning college places learning first and provides educational experience for learners anyway, anyplace, anytime.
2. Technology is ubiquitous in American culture, a way of life for the young and increasingly a way of life for older adults.
3. Technology is a time- and place-free medium and usually an ism-free medium

(meaning that technology frees us from traditional limitations of time and place and from sexism, racism, ageism etc.).

4. Technology can assess differences, individualize instruction, test for progress, record achievement, and transfer results to other sources.
5. Technology can provide access to great amounts of information including the most recently discovered knowledge.
6. Technology can manage and coordinate complex arrangements and activities.
7. Technology can extend and expand a sense of community and connectedness.
8. Technology can challenge, stimulate, and even create new forms and connections.

There is a market demand for online training for employees. It is estimated that technology-assisted training will represent half of all training methods by the year 2002 McGee, (1999). The appeal to industry is the cost savings such training affords. For example, PNC Bank Corp in Pittsburgh recently installed a system for self-paced online training through which it expects to save as much as 40 percent per user in training expenses. MCI WorldCom slashed approximately \$3 million in travel, facility, and labor costs over a year by offering 20 of its classes over the Web. The company expected to increase this to 50 percent in 1999 Greengard, (1999). By switching from classroom to Web-based training, some companies have realized up to 75 percent savings in their training budgets, making this mode of training especially appealing to companies that have large number of employees to train Cole-Gomolski, (1999). Some of the savings realized through web-based training include: instructor fees, materials, office equipment costs, and cost of lost time on the job when employees are training. Remember, however,

that not all technologies are fool proof. In other words, with the rapid transformation of technology and the continual improvements demanded by consumers, there are many issues to consider before implementing any of the sophisticated multimedia technologies available in today's marketplace.

### Issues With Technology

This technology revolution will change the very fabric of higher education as the transition is made from the industrial model of education to the information age model. The college of the future will be a very different place because radical changes are being brought about by the use of technology to enhance teaching and learning. O'Banion (1997) reports that the American Federation of Teachers (AFT) is already challenging its membership to resist courses taught on the Internet, through videoconferencing and with other technologies. The AFT also urges its members to seek restrictions on the number of distance education credits granted to students. And to oppose programs that are taught entirely with technology and to bargain for contracts that will protect instructors who choose not to use the new technologies.

As Kerker (2000, July-August) states, "The extravagantly optimistic extrapolations regarding e-learning may prove entirely false, even though the requirement for educated professionals to keep up will grow at an exponential rate." It seems that e-learning focuses on cost, saving time away from the office and displacing instructor-led programs. This approach is wrong. The right approach is to provide employees with the skills required to carry out strategic and tactical objectives. This means that the design of learning programs to provide the employees with the requisite skills should be of primary

consideration. Moreover, it implies that web-based training may not be the type of delivery appropriate to all types of training needed. For instance, learners may take from a given course only the content they feel they need to improve a specific skill or learn a certain task.

There is a great deal of concern about dropout rates for online training. The issue is so large that the American Society of Training and Development (ASTD) chose to study this problem in 2000. It was cosponsored by the Masie Center, a learning and technology think tank in Saratoga Springs, NY, to test a primary hypothesis: Why do learners, when offered technology-based training, still prefer classroom-based training; or abandon technology based training after only a few sessions? In other words, if you build it, why won't they come? Or, having come, why won't they stay. Many trainers have already suspected that dropout rates are high when learners have poor incentive to learn; lack accountability for completing classes; experience problems with technology; and lack of attention due to poorly designed courseware.

ASTD, in the 1999 State of the Industry Report, showed that instructor-led training is on the decline in leading-edge firms, while use of digital instructional technology continues to rise. The report also stated that classroom training remains the dominant form of instructional delivery among the leading-edge firms (58 percent) and among benchmark companies (77 percent) despite the continued rise of instructional technologies such as CBT and Web-based training. Evidence indicates that managers still prefer to communicate face-to-face, even if it involved travel expense.

Distance learning via the Internet can be disastrous if appropriate study is not conducted first. According to Ellis (2000), “Models that fail consist of coursework developed for a live classroom that is simply posted on the Internet and expected to work.”

Lines are blurring between distance education and traditional classroom learning. Defining online and offline instruction is an outmoded paradigm. Today’s question is how to use technology, rather than whether to use it. Tulloch (2000, November), suggests that in order to understand instructional objectives the following questions need to be answered:

1. How can I use technology to enrich the classroom-learning environment?
2. How can I become a more skilled coach or manager of a learning environment?
3. How can I help my students take responsibility for their own learning?
4. How can I measure outcomes in this brave new academic world?

Kruse, (2000) sums up avoiding common pitfalls when migrating to Web-based training. He uses five perils to illustrate the common pitfalls in the following table:

TABLE 2

Web-Based Training: Five Perils

<u>Number</u>	<u>Perils</u>
1	Will the WBT replace printed manuals? This often leads to training manuals that would better serve learners in printed form.
2	Substitute CD-ROMs with WBT. CD-ROMs are excellent for programs that depend on multimedia. Video or CD-ROMs are still better than the average web-based viewing experience.
3	Technology may not be available to learners--The three cardinal rules of Web-based training are: 1. Identify technical limitations of learners' computers early in the process. 2. Design for the lowest common denominator. Test the design early.
4	Design a weak user interface. Student confusion is with menus, unclear buttons, or illogical links, not content. Solve frequent interface problems by--minimizing the need for scrolling windows; don't let learners get lost with hyperlinks; use consistent visual cues; and provide guidance and feedback.
5	Does the WBT eliminate human facilitators? Organizations are moving towards online training that involves asynchronous training programs, or self-paced training modules that are delivered without additional support or guidance from a live instructor. Include a human element in the instructional experience to provide encouragement, guidance, and assistance when needed to obtain optimal results.

There appeared to be numerous issues with technology that organizations need to study and consider before using multimedia to deliver courses. However, organizations also need to hear about success stories with distance education.

Best Practices/Business Successes Using Distance Education for Employee Training

There were numerous reports of employer implemented training strategies and training programs conducive to using distance education that produced significant positive results. Moreover, it was critical to consider best practices of e-learning successes in order to understand what the College should consider in distance education options.

Some of the business successes were cited. They included: Achieve Global, credit unions, Delta Airlines, the hospitality industry, National Environmental Health Association, and property management.

Cisco Systems, Eastman Kodak, International Business Machines (IBM), Miller Brewing, Motorola University, and National Cash Register (NCR) conducted an intensive research study spanning eleven large-scale domestic and foreign companies with the most significant e-learning success stories. The study documented best practices and the state-of-the-art execution of enterprise-wide, e-learning. Findings of the study set forth criteria for rating e-learning in terms of quality, quantity, and business impact, which will benefit the entire e-learning community. Best practice organizations focus on maximizing value rather than perception of learning as a cost. This resulted in an increased demand for skills and knowledge delivered in less time with access and speed. In other words, it is all about getting more training to more employees—anytime, anywhere, and at less cost.

Following are some best practice criteria:

1. Invest significantly in planning and strategy development tailored to your organization's specific needs.
2. Develop or adapt a clear, purposeful vision of learning, knowledge, performance, and how technology can activate this vision.
3. Ensure executive-level commitment and significant involvement.
4. Develop an e-learning budget (30 percent of the training budget) and expect a possible increase to 50 percent in the future.

5. Select an e-model that integrates and complements rigorously developed, sophisticated courseware with rapidly deployed time-sensitive information.
6. If selecting a commercial management system, make sure it can be tailored to meet the organizations needs.
7. Select authoring and other tools for a variety of development, delivery and conversion purposes.
8. Use a blended instruction approach by providing a broad-brush set of tools that can add value to all the traditional learning modes—from classroom experiences to learning from books.
9. Keep classroom-based training as the best delivery approach for certain types of high-level learning and a preference of some learners.
10. Select a quality “lean” instructional design model that serves speed and immediacy.
11. Select instructors that that have education and experience with e-learning. Involve them in an e-learning team to integrate strategy, learning design, technology, and production skills.
12. Enlist the Instructional Technology department to partner with and provide service for e-learning.
13. Engage learners by giving them easy access to compelling information in ideal-sized nuggets.
14. Consider industry-wide learning object standards.
15. Adapt content and practices to deal effectively with cultural and disability issues.

16. Use e-learning in all topic areas.
17. Use a variety of communication vehicles for the purpose of persistent and targeted communication—to instructors, employees, and stakeholders.
18. Monitor and continuously improve implementation, identify learning needs, process changes, instructional technical, training staff assignments, and skills.

Some organizations have succeeded in implementing e-learning in 2000, AchieveGlobal cross-trained their sales and marketing staff. Moreover, part of the training involved learning how to offer clients a blended solution combining products delivered via classroom instructors, CD-ROM, satellite, videotape, and books with new Web-based courseware. Another strategy was to continue revenue growth after a flat 1999. These changes have already paid dividends. According to president and CEO Brian Sellstrom, “The company experienced 17 percent quarter-on-quarter revenue growth for the period ending March 31, 2001.

Credit unions are also starting to use WBT. They have shown great technological savvy over the past decade. They decided to use WBT to teach regulatory and compliance-oriented materials that involve practical, sequential, factual actions such as counting money, getting through a menu of options, etc. Their philosophy about WBT training focuses on the ability to deliver instruction anytime and anywhere—at work, at home, on the road, in a library.

Ted Lehne, Delta Airline’s manager of instructional technology, wanted to reduce the time and money it took to train customer-service personnel. Training costs are a major factor because the workforce is dispersed across 115 airports. Prior to online

training, employees had to travel to one of five training centers. One year after implementing on-line learning, 70 percent of Delta's customer-service workforce received annual required FAA training via the Internet. Instruction time was reduced from six to eight hours to an hour or less. Employees have given rave reviews on the delivery of the training. E-learning saved the airline a significant amount of money reducing lost work time for training and eliminated travel costs.

Marriott International Property Managers and food and beverage operations at the Holiday Inn and Radisson Hotels and Resorts Worldwide, to name a few, are jumping on the e-learning bandwagon. Their vision is effective employee training as the key to successful food-safety programs at hotels. It is because of the worldwide nature of the hospitality industry that consideration for Web-based training made sense and will reduce training costs.

The National Environmental Health Association (NEHA) is in the business of educating environmental health professionals. Training resources include: Relevant and useful material in the NEHA journal, annual conferences, books, continuing education courses, etc. According to the U.S. Bureau of Labor Statistics, occupational health and safety training is administered to 58 percent of all employees, making it the largest of all measured training categories among American businesses. Employers annually provide more than 500 million hours of this type of training at a total cost of \$12.8 billion. It is for these reasons that NEHA decided it was time to get involved in WBT. Approximately 12 courses are currently available in this format. Continuing education is a direct shoe in for WBT.

Asirvatham, (2000), indicated that currently we are in a very tight labor market where companies struggle to hire and retain skilled workers. Providing company training in terms of time, resources, and geography is a task. Heather Jones, a training director for the Atlanta-based apartment REIT Gabes Residential said, “To develop an effectively trained workforce while minimizing costs and productivity losses, many companies are integrating newer technologies into their overall educational strategies.” “Technology is going to be the cornerstone and foundation of training—there is no getting around it!” This poses the question, how should organizations approach distance education options for employee training?

#### What Was Learned

Valerie Beer (2000), in her book The web learning fieldbook: Using the World Wide Web to build workplace learning environments, summarizes the state of the WBT succinctly:

The World Wide Web is the universal interface to the world’s digital library. As such, it has great potential for education because it gives learners, instructors, and instructional designers unprecedented access to information and to the experts who create it. However, it is imperative that you think carefully about using the Web in your work place learning environment so that it does not become just another medium that promised (and failed) to save education, to dramatically reduce training costs, to provide just-in-time training, and to satisfy all the other expectations that educators and learners have had about technology. (p. XV)

The harsh reality for the 21<sup>st</sup> century is that if you don't have access to a PC or the Internet, you won't participate in communication, education, business, commerce, and entertainment, etc. From a training viewpoint, education and communication go hand-in-hand whether it happens in a classroom face-to-face or a virtual classroom.

Numerous types of employee training were evidenced in the literature review such as technical, regulatory, customer service, continuing education for professionals, certifications, food handling safety and the like. To meet the demands required of businesses in today's highly competitive market, companies must provide ongoing training to their employees. The issues of accountability, job responsibility, and training outcomes are coming to the forefront now. Businesses are now providing training as a means to increase worker productivity, performance, and retention.

Statistics indicate that distance education is growing by leaps and bounds and is here to stay. In 1997-98, it was reported that 44 percent of all higher education institutions offer distance education courses, an increase of 33 percent over 1994-95.

A number of organizations reported significant savings from implementing WBT for employee training. And for students, course fees were about the same cost as campus-delivered courses.

If organizations plan to stay in business, it would appear inevitable that the World Wide Web becomes a major part of their business strategy. The global competitive marketplace will demand it. Yet many questions need to be asked and answered before jumping on the distance education bandwagon. The key "best practice criteria" (18) from the global companies study tells it all--about project planning and management.

Numerous references (follows Chapter V) were used to interpret the data. The literature review was completed. The next step was to look at the research procedures to understand how the data was collected and analyzed.

## CHAPTER III

### Research Methods

#### Introduction

This chapter presents the process that was used to investigate factors influencing the significant decline in seminar and workshop FTE's and revenues at the Lakeshore Technical College, during the 2000-2001 academic term. Moreover, data was obtained on employer preferences for meeting their employee training needs via alternative delivery methods.

Objectives of the research were developed to elicit the data needed from business and industry sources in the Lakeshore Technical College District to determine solutions to the problem and meet the desired outcomes of the study. The analyzed data and correlations found, if any, would validate whether the College should make decisions to restructure their current delivery methods when providing employer training via seminars and workshops. The research results will assist the College in identifying solutions to returning seminar enrollments to their proper level or higher. The outcome of the study was to maintain the College's position in the Lakeshore community as the quality educational provider of choice for short-term employee training.

This chapter focused on four specific areas. First, the Lakeshore Technical College District was described. Second, the research design was discussed. Third, the population and sample were identified. Finally, instrumentation was explained. This included the data needed, sources of data, the data collection process, justification of validity and reliability, and justification of the data in relationship to this study.

### Lakeshore Technical College

Lakeshore Technical College (College), located within the geographic boundaries of Manitowoc and Sheboygan Counties and parts of Ozaukee and Calumet Counties, is one of sixteen technical colleges in the State of Wisconsin. The College's mission is to provide quality and accessible learning opportunities for initial and continued employment that are consistent with identified student and community needs. Moreover, these quality and accessible learning opportunities change, as customer needs change and organizations experience impacts of a global marketplace. The changing marketplace occurs within the local community and extends statewide and in some instances nationally.

### Research Design

The descriptive survey method of research (See Appendix A and B) was used to collect and process the data that was obtained in this study. This method of research simply looks intently, with accuracy, at the phenomena of the moment and then describes precisely what the researcher sees. This research method is also referred to as the “normative survey.”

This design was employed because of the researcher’s ability to observe, tabulate, analyze, and measure (Non-Interval Ordinal Scale) data on employer training needs, habits, activities, and demographics of the respondents. Moreover, certain data sets were compared and contrasted to determine whether any correlations existed that could prove useful in developing the recommendations. These results are found in the conclusions and implications in Chapter V.

The data collection revolved around seventeen research questions arranged in three parts. The problem directed the development of the survey questions. The questions were pre-tested by the researcher via an employer interview. Changes were made after the interview to enhance the clarity of the instrument for meaning, flow, timing, and respondent interest and attention to the survey.

Part one of the survey focused on employer and employee training habits. Part two looked at factors influencing the training employers provide for their employees. Part three elicited information about the survey respondents to provide a demographic profile.

The descriptive survey instrument and an accompanying letter were administered to the Chief Executive Officers in the sample population. Confidentiality of the responses was ensured in the accompanying letter (Appendix A).

#### Population and Sample

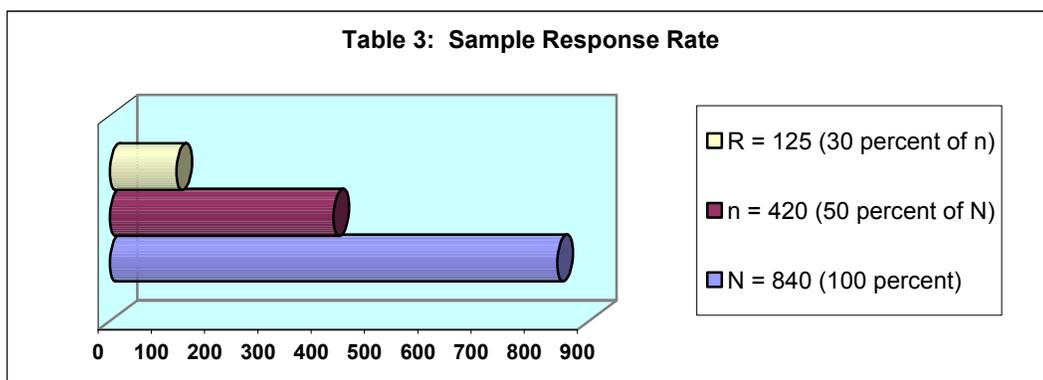
The population was identified by reviewing the Society for Human Resource Management's business and industry identification/code listed on the its membership application. Eleven business industry identifications were selected based on the best representation of employers in the College District, and to achieve the best possible outcomes for the study. An "other" choice was also provided with a write-in option. Codes included: Manufacturing (Non-Durable Goods), manufacturing (Durable Goods), utilities, services (Profit), services (Non-Profit), health, construction, wholesale/retail trade, finance, government, high-tech, and other-specify. A mailing list, containing 840 (N=840 or 100 percent) employers, was generated by selecting the eleven identified SIC (Standard Industry Code) codes. The next step involved selecting the sample.

A random sample method was used to reduce the population size in order to manage it within the timeframe of the project. The random sample method eliminated every other company that appeared on the mailing list. In effect, 50 percent of each SIC code was eliminated. This determined the sample at 420 (n=420 or 50 percent) companies.

The survey (Appendix B) and accompanying letter were developed, printed, and administered to the sample by mail in mid May 2001, with a survey response requested on or before June 6, 2001. A number of follow up calls were made to ensure the best possible response rate. Surveys returned were tabulated daily to stay within the timeline for completion of the research study. There were a total of 125 responses (R=125 or 30 percent). All responses from the survey were tabulated. Population, sample and the response rate are shown in (Table 3). A copy of the survey results will be mailed to the respondents after completion of the research study in August 2001.

TABLE 3

Population, Sample, and Response Rate



### Instrumentation

This section addresses the means by which the research data was developed, collected, validated, determined reliable, and justified by the problem, limitations, and common practices in the field. Data was collected from other than just the survey respondents. The researcher, who initially determined the significance of the problem, collected and analyzed data from internal operations at the College. Once the analysis was completed, a decision was made to conduct a more comprehensive study of the problem. In addition, data was obtained from a comprehensive literature review by checking out books on the subject matter, using data- base searches at various libraries, and via the researcher's office computer.

The data needed to identify solutions to resolving the research problem was collected and tabulated from seventeen questions presented in a survey instrument. The survey was sectioned into three parts or data sets.

Part one of the survey was designed to provide information to meet research objective one: Obtain and analyze data, and report the findings of employer training needs and habits. Eight questions were included in this section. The first question provided four possible responses and focused on the percent of training conducted internally by the employer. Question two provided eight possible responses to the identification of employer training delivery methods currently in place. Question three had the same number of possible responses as question two and focused on employer training delivery methods planned for in the next three years. Question four provided for four possible responses to how employers provide supplemental support to employees for

video, CD-ROM, and Internet training. Question five provided five possible responses regarding support needed for employees using the Internet for training. Questions six, seven, and eight requested respondents to rank order their responses to the questions. Question six provided eight possible responses to significant ways employees learn and retain information. Question seven provided eight possible responses to the employer's preferred mode of training delivery methods in the next three years. Question eight provided five possible responses for training locations that best meet employee training needs.

Part two of the survey focused on meeting research objective two: Obtain and analyze data, and report findings of factors influencing training activities of employers. Three questions were included in this section. Question one identified a choice of six factors influencing the training employers provide for their employees. Question two provided a yes or no response as to whether the employer had a training budget. Question three requested respondents to rank order, one being high and four being low, four ways that employer needs for employee training are met if employees cannot be released from work to attend external training activities.

Part three of the survey was designed to gather demographic information on the survey respondents. Questions in part three also met research object three: Obtain and analyze data, develop a demographic profile of respondents, and report findings. There were six questions in this section. Question one requested the company name. Question two provided five possible responses for the title of the person completing the survey. Question three provided twelve choices for the business industry identification/code.

Question four identified information about the company size Data from this question was used to determine whether the respondent represented a business or industry employer that was small (under 100 employees), medium-size (100 – 500 employees), or large (over 500 employees). Question five provided five possible choices that focused on primary age group of the respondent's employees. Finally, question six was a request for additional comments that respondents considered valuable to this research project.

The survey concluded with an inquiry to the respondent whether he or she would like a copy of the results of the survey. If the response was yes, the respondent was asked to provide necessary contact information.

Research objective four: Compare and contrast certain demographics and training needs, habits, and activities of employers to determine if any correlations exist, will be addressed after the analysis and findings of all survey questions.

Finally, the last research objective was addressed in Chapter Five of this study. Research objective five: Draw conclusions and make recommendations to restore the seminar and workshop enrollment and revenues to at least the level obtained in 1999-2000.

The processes used to elicit results of the data were three-fold. The first process involved setting up and formatting a Microsoft Excel spreadsheet to tabulate all responses received and then inputting the data into a statistical software program used in the Planning and Research Department at the College. The Planning and Research Department used its own process to employ the statistical software program to elicit the desired results of the researcher. The analysis was presented in the form of frequency,

mode, median, and cross tabs to identify any correlations that existed between certain data sets identified by the researcher for further analysis. The last process involved the researcher's review and interpretation of the results in order to present it in this report.

With any type of measurement, validity and reliability of the results of the data are crucial to resolving the problem. Content validity was used to focus on the accuracy with which an instrument measured the factors or situations under study. This was addressed by the pre-testing of the survey instrument. The researcher then made changes in the wording and structure of the instrument to improve the clarity of the instrument for meaning, order, flow, timing and respondent interest and attention to the survey. The data collected did answer the intent of the questions; therefore the content was valid.

Reliability of the data was also addressed. It dealt with the accuracy of the instrument used in the measurement. The data indicated that the respondents' responses were highly reliable. The responses, particularly those in the "other" category, indicated that the respondents appeared to interpret the questions and response choices in a similar manner.

The analyses of the data provided the basis for identifying possible causes of the problem—that of the significant decrease in seminar/workshop enrollments and revenues. The next phase, developing potential solutions to the problem, could then be addressed. All research questions were answered and the four research objectives were met by the data collection, analysis, findings, conclusions, and the recommendations to fix the problem.

The data collected supported the limitations. Not of primary concern, were other factors identified in the survey. Moreover, the survey had little value if administered outside the College District boundaries. Limited staff resources and the project timeline impacted the amount of time for follow up activities to increase the response rate above 30 percent. And last, the College may not have the resources to set up this study to become a longitudinal project.

## CHAPTER IV

### Results

#### Introduction

In this chapter the data collected in the research study were described and analyzed. The data represented responses from select Lakeshore Technical College District business and industry sources who participated in the survey.

The purpose of this research project was to obtain data about this problem from business industry sources in the College community. The primary focus of the survey was twofold—what factors influenced the decline in seminar and workshop enrollments and revenues; and what was the employers preferred mode(s) of alternative delivery methods to provide short-term, occupational specific employee training. The data validated whether the College should restructure the delivery methods used to provide training to working adults. The research results assisted the College in identifying solutions to returning seminar enrollments to their proper level or higher. The outcome was to maintain the College's position in the Lakeshore community as the quality educational provider of choice for short-term, occupational-specific employee training.

Data collected did not enable the calculation of the population variance. However, characteristics such as size and type of business industry identification varied. Size ranged from under 100 employees to over 500 employees.

There were eleven varied business industry types included in the survey as follows: Manufacturing (Non-Durable Goods), Manufacturing (Durable Goods), Utilities, Services (Profit), Services (Non-Profit), Health, Construction, Wholesale/Retail Trade, Finance, Government, and High-Tech. One “Other-Specify” choice was also offered.

The analysis of the data revolved around answering the first three research objectives in the form of questions involving all questions included in the survey as follows:

1. What are the participating employers training needs and habits?
2. What factors influenced training activities of employers?
3. What is the demographic profile of the survey participants?

The data were described in more detail under each research question. All findings were narrated and, where possible, illustrated in table format. The headings for tables and titles are contained within the table and not noted separately. A code was developed for ease of use and explanation when various data were described from the survey as follows:

- P=Part and will be followed by a numerical number 1, 2, or 3
- Q=Question and will be followed by a numerical number from 1 to 8

### Presentation of the Findings

#### PART ONE

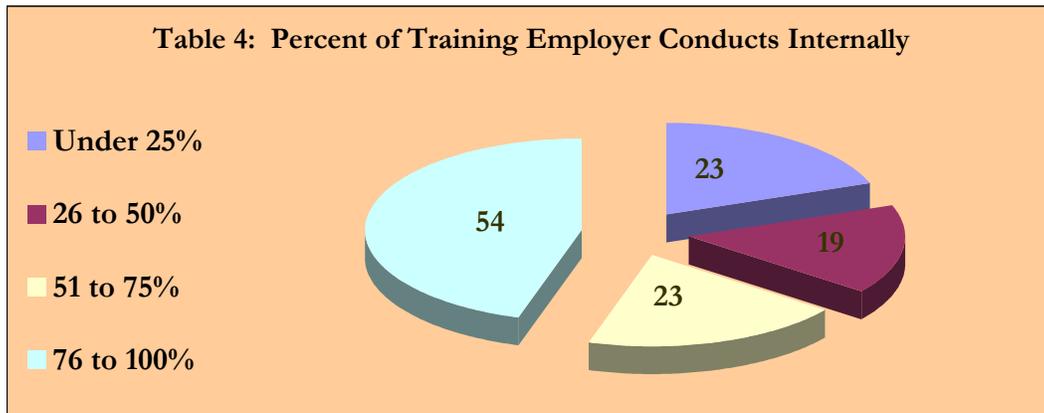
#### Research Question 1: What are the participating employers training needs and habits?

P1-Q1: What percent of training do you conduct internally using your own trainers?

Four possible choices (a-d) were provided for employer response. There were a total of 119 (95.2 percent) usable responses, as illustrated in (Table 4).

Responses to choices a-d were as follows:

- a. Under 25%, 23 (19.4%)                      c. 51-75%, 23 (19.4%)  
 b. 26-50%, 19 (15.9%)                      d. 76-100% 54 (45.3%).



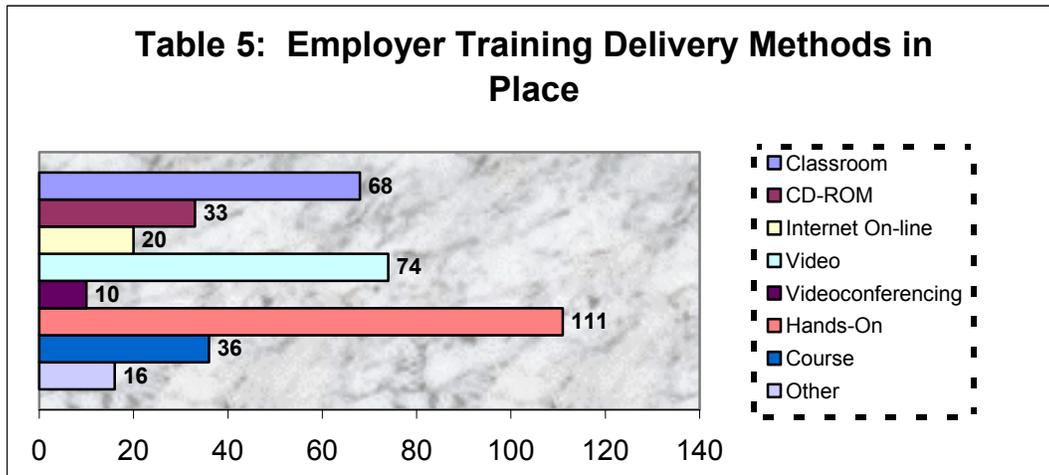
P1-Q2: What training delivery methods do you currently have in place?

Eight possible choices (a-h) were provided for employer responses. Employers could respond to more than one choice. There were a total of 125 (100 percent) usable responses, as illustrated in (Table 5). Responses to the choices a-h were as follows:

- a. Classroom 68 (54.4 %)                      e. Videoconference 10 (8%)  
 b. CD-ROM 33 (26.4%)                      f. Hands-On 111 (88.8%)  
 c. Internet 20 (16 %)                      g. Course 36 (28.8 %)  
 d. Video 74 (59.2 %)                      h. Other - Specify 16 (12.8%)

The Hands-On delivery method was the highest. Video came in second highest, Classroom was third, Course came in fourth, CD-Rom was fifth, Internet came in sixth, Other-Specify was seventh, and Videoconferencing came in last.

The Other-Specify choice indicated other employer deliver methods and included: Bring in vendor, ETN/satellite, mannequins/computer projection, manuals, outside seminars, and teleconference.



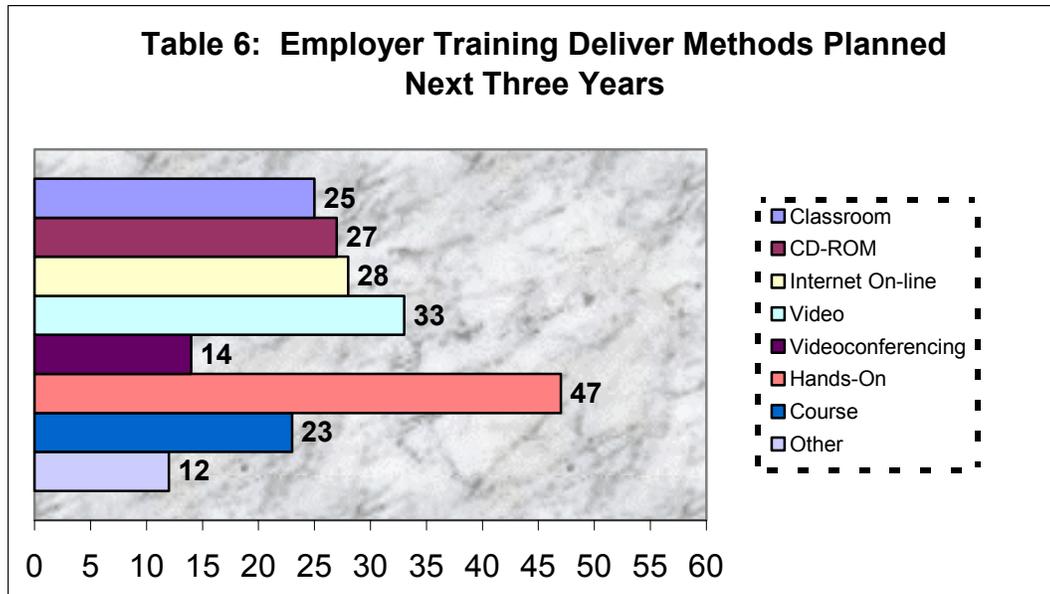
P1-Q3: What training delivery methods are you planning to implement in the next three years?

The same eight possible choices (a-h) in question two were also provided for employer response in question three. Furthermore, employers could respond to more than one choice. There were a total of 125 (100 percent) usable responses, as illustrated in (Table 6). Responses to the choices a-h were as follows:

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| a. Classroom <u>25</u> (20%)          | e. Videoconference <u>14</u> (11.2%) |
| b. CD-ROM <u>27</u> (21.6%)           | f. Hands-On <u>47</u> (37.6%)        |
| c. Internet On-Line <u>28</u> (22.4%) | g. Course <u>23</u> (18.4%)          |
| d. Video <u>33</u> (26.4%)            | h. Other - Specify <u>12</u> (9.6%)  |

The Hands-On delivery method came in highest. Video came in second highest, Internet On-line was third, CD-ROM came in fourth, Classroom was fifth, Course came in seventh, and Videoconferencing came in last. The Other-Specify choice allowed

employers to note other training delivery methods considered in the next three years including: Hire consultants, seminars, and web/telephone.



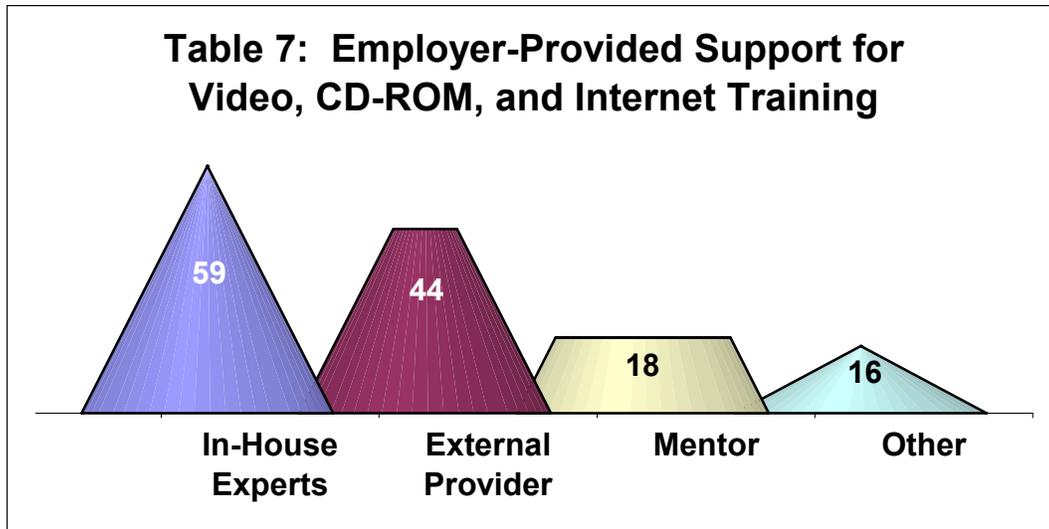
P1-Q4: How do you provide supplemental support for Video, CD-ROM, and Internet On-line training for your employees?

Four possible choices (a-d) were provided for employer response. Furthermore, employers could respond to more than one choice. There were a total of 125 (100 percent) usable responses, illustrated in (Table 7). The responses to the choices a-d were indicated as follows:

- a. In-House Experts      59 (47.2%)
- b. Mentor                      18 (14.4%)
- c. External Provider      44 (35.2%)
- d. Other-Specify            16 (12.8%)

In-House Experts provided the highest supplemental support. External Provider was second, Mentor came in third, and Other was last. The Other-Specify choice

indicated other types of employer supplemental support that included: Corporate trainer, national office, off-the-shelf training material, and written policies and procedures.



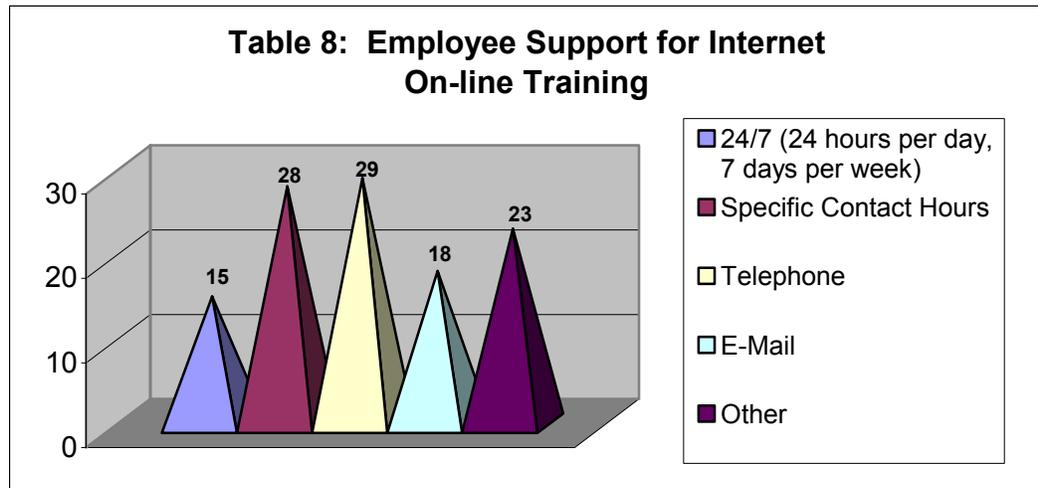
P1-Q5: What support do your employees need for Internet On-line training?

Five possible choices (a-e) were provided for employer response. Furthermore, employers could respond to more than one choice. There were a total of 113 (90.4 percent) usable responses, as illustrated in (Table 8). Responses to the choices a-e were as follows:

- |                                    |                                    |
|------------------------------------|------------------------------------|
| a. 24/7 <u>15</u> (13.3%)          | d. E-mail <u>18</u> (15.9%)        |
| b. Contact Hours <u>28</u> (24.8%) | e. Other–Specify <u>23</u> (20.3%) |
| c. Telephone <u>29</u> (25.7%)     |                                    |

Telephone support for Internet On-line training was the highest; closely followed by Specific Contact Hours; Other–Specify was third, E-mail came in fourth; and 24/7 (24 hours per day, 7 days per week) came in last.

The Other-Specify choice indicated other types of support needed for Internet On-line training and included: Computer, help desk, and assigned staff. In addition, eight other responses indicated no use of On-line training.



P1-Q6: What are the most significant ways your employees learn and retain information?

Eight possible choices were provided for employer response. The responses were requested in rank order (mode) with 1 being highest and 8 being lowest. There were a total of 118 (94.4 percent) usable responses. The responses are presented in rank order as follows:

f. Hands-On	1	b. CD-ROM	<u>5</u>
a. Classroom	<u>2</u>	c. Internet On-line	<u>6</u>
g. Course	<u>3</u>	e. Videoconference	<u>7</u>
d. Video	<u>4</u>	h. Other	<u>8</u>

As indicated, Hands-On was ranked the highest followed by Classroom. The Course choice came in third, Video was fourth, CD-ROM came in fifth, while Internet On-line came in sixth, followed by Videoconference, and Other came in last.

The Other – Specify choice indicated other ways employees learn and were summarized as follows: In-House training, seminars, team sharing, and trade associations and vendors.

P1-Q7: What is the company's preferred mode of delivery in the next three years?

The same eight possible choices in question six were also provided for employer response in question seven. The responses were requested in rank order (mode) with 1 being highest and 8 being lowest. There were a total of 114 (91.2 percent) usable responses. The responses are presented in rank order as follows:

f. Hands-On	<u>1</u>	b. CD-ROM	<u>5</u>
a. Classroom	<u>2</u>	c. Internet On-line	<u>6</u>
g. Course	<u>3</u>	e. Videoconference	<u>7</u>
d. Video	<u>4</u>	h. Other	<u>8</u>

As indicated, Hands-On was ranked the highest followed by Classroom. The Course choice came in third, Video was fourth, CD-ROM came in fifth, while Internet On-line came in sixth, followed by Videoconference, and Other came in last. The Other – Specify choice indicated the company's preferred mode of delivery and were summarized as follows: Trade Associations and vendors, seminar, team sharing, hired consultants, mentoring, and in-house training.

P1-Q8: What training locations best meet your employee needs?

Five possible choices were provided for employer response. The responses were requested in rank order (mode) with 1 being highest and 5 being lowest. There were a total of 113 (90.4 percent) usable responses.

Following are the rank order responses:

- |                      |          |                 |          |
|----------------------|----------|-----------------|----------|
| a. Company Site      | <u>1</u> | c. Home         | <u>4</u> |
| b. Employee's Office | <u>2</u> | e. Global Sites | <u>5</u> |
| d. Off-Site Location | <u>3</u> |                 |          |

## PART TWO

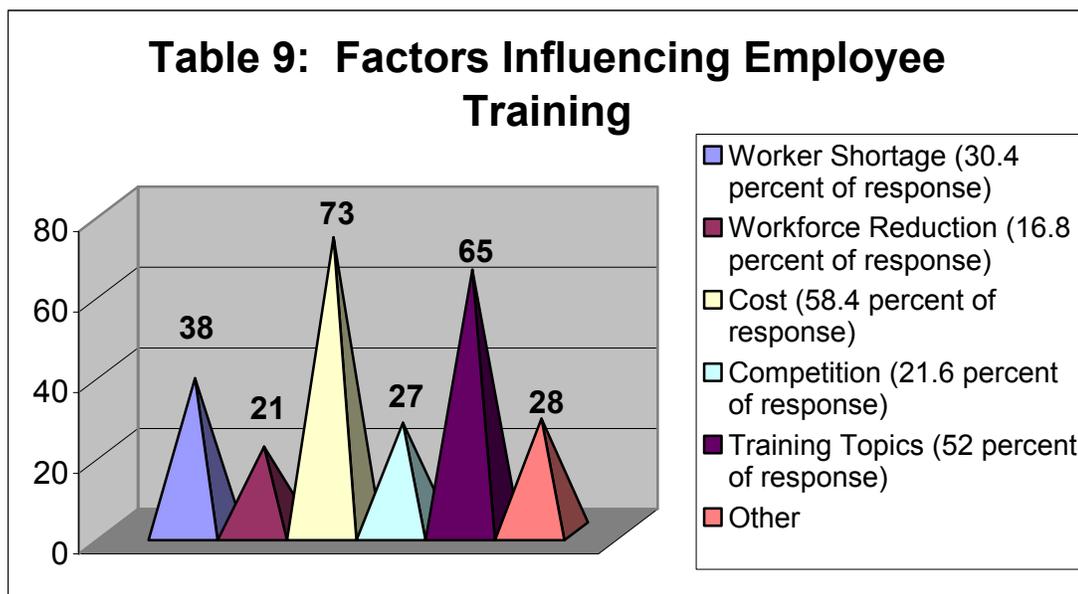
### Research Question 2: What factors influenced training activities of employers?

#### P2-Q1: What factors influence the training you provide your employees?

Six possible choices (a-f) were provided for employer response. Employers could respond to more than one choice. There were a total of 125 (100 percent) respondents with 252 usable responses (multiple choices) illustrated in (Table 9). Following were the choices:

- |                     |                   |                    |                          |
|---------------------|-------------------|--------------------|--------------------------|
| a. Worker Shortage  | <u>38</u> (15.1%) | d. Competition     | <u>27</u> (10.7%)        |
| b. Workforce Reduce | <u>21</u> (8.1%)  | e. Training Topics | <u>65</u> ( <b>26%</b> ) |
| c. Cost             | <u>73</u> (29%)   | f. Other-Specify   | <u>28</u> (11.1%)        |

Cost was the highest factor that influenced employer provided training followed closely by Training Topics. Worker Shortage came in third, while Other-Specify was fourth, Competition came in fifth, and Workforce Reduction was last. The Other – Specify choice indicated the other factors that influenced employer provided training and was summarized as follows: Versatility and flexibility of employees; attitude; changes in systems and software; changing technology; government mandated; limited external training; limited time; OSHA regulations; quality delivery of services; scheduling times; size of business and facility; scheduling conflicts; timing; and turnover.



P2-Q2: Do you have a training budget?

There were two choices of response and were limited to yes or no. There were a total of 121 (96.8 percent) usable responses. Of the usable responses, no was the highest with 51.2 percent and yes had a close 48.8 percent as follows:

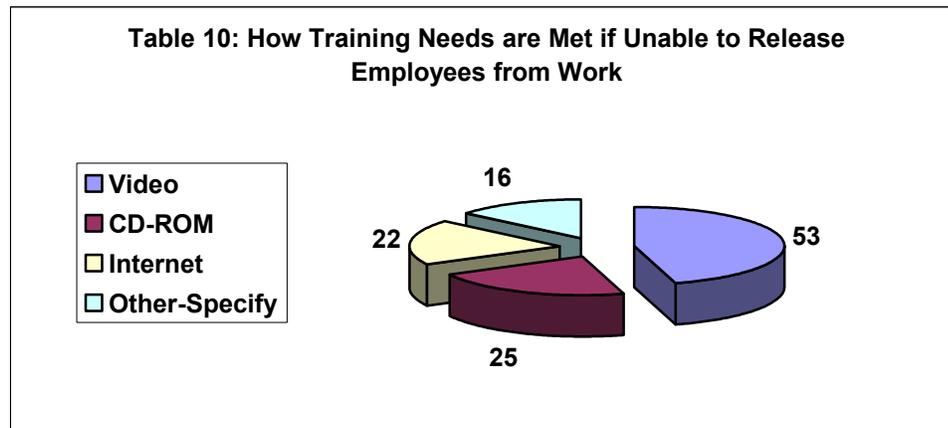
a. Yes            59 (48.8%)            b. No            62 (51.2%)

P3-Q3: How do you meet your employee training needs if you cannot release them from work to attend external training activities?

Four possible choices (a-d) were provided for employer response. Employers also could respond to more than one choice. There were a total of 116 (92.8%) usable responses, as illustrated in (Table 10). The responses were requested in rank order (mode) with 1 being highest and 4 being lowest and is summarized as follows:

a. Video            1 (53)            c. Internet            3 (22)  
 b. CD-ROM            2 (25)            d. Other-Specify            4 (16)

The Other-Specify choice noted other comments summarized as follows: Not an option as all must be trained, train on-site, train on-the-job, and employees are allowed to attend away from work.



### PART THREE

Research Question 3: What is the demographic profile of the survey participants?

P3-Q1: What is your company name?

The data from this question was not included in order to ensure the confidentiality of the participating employers.

P3-Q2: What is the title of the respondent?

Although the letter and survey were sent to the Chief Operating Officer (COO), the researcher had assumed it would be passed to someone else in the company to complete. Therefore several title choices were provided. There were a total of 122 (97.6 percent) usable responses.

Following are the choices and responses:

a. President or CEO	<u>32</u>
b. Vice President	<u>12</u>
c. Director, Human Resources	<u>19</u>
d. Director, Training	<u>10</u>
e. Other-Specify	<u>49</u>

The highest employer response was Other-Specify. Twenty or almost half of the Other responses noted variations of managers and supervisors that were interchangeable. A number of these titles reflected the following areas: Finance, business, lab, office, projects, general, program and operations, safety and environmental, and nursing. A few of the other titles included: Chief of Police, Controller, Clinic Director, CNA Instructor, Director of Manufacturing, Treasurer, Executive Director, and Superintendent.

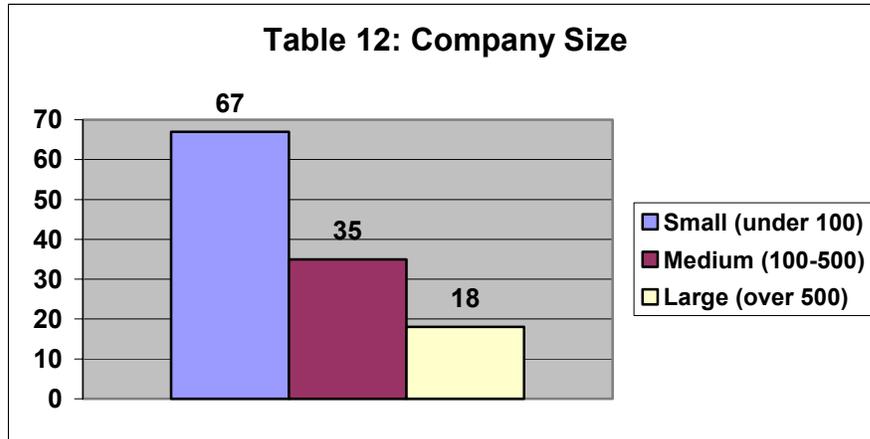
P3-Q3: What is your Business Industry Identification/Code?

Twelve possible choices (a-l) were provided for employer response. There were a total of 125 respondents. However, because there were multiple choices provided usable responses were 135. The problem occurred in the manufacturing area. Two choices of a. Manufacturing (Non-Durable), and b. Manufacturing (Durable Goods) were provided. Ten respondents in this area marked both choices a. and b., as they made no distinction between the two. The percents shown in (Table 11) were calculated based on the 135 usable responses. The following (Table 11) illustrates the business industry identification, number of responses, and percent of response:

<b>Table 11: Business Industry Identification</b>		
<b>Business Industry ID</b>	<b>Responses</b>	<b>Percent of Response</b>
a. Manufacturing (Non-durable)	19	14.1%
b. Manufacturing (Durable Goods)	25	18.5%
c. Utilities	0	0%
d. Services (Profit)	21	15.6%
e. Services (Non-Profit)	9	6.7%
f. Health	17	12.6%
g. Construction	8	5.9%
h. Wholesale/Retail Trade	12	8.9%
i. Finance	3	2.2%
j. Government	10	7.4%
k. High-Tech	2	1.5%
l. Other	9	6.6%

#### P3-Q4: Company Size

Question four elicited information about company size. It asked the respondent to write-in the number of regular full- and part-time employees. There were a total of 120 (96%) usable responses. The respondents' answers were slotted into one of three company size descriptors: Small (under 100), medium (100-500), and large (over 500). Small companies showed the highest response at 67 (55.8%). Medium-size companies came in second with 35 (29.2%) responses. Large companies were last with 18 (15%) responses. (Table 12) illustrates the responses according to size as follows:

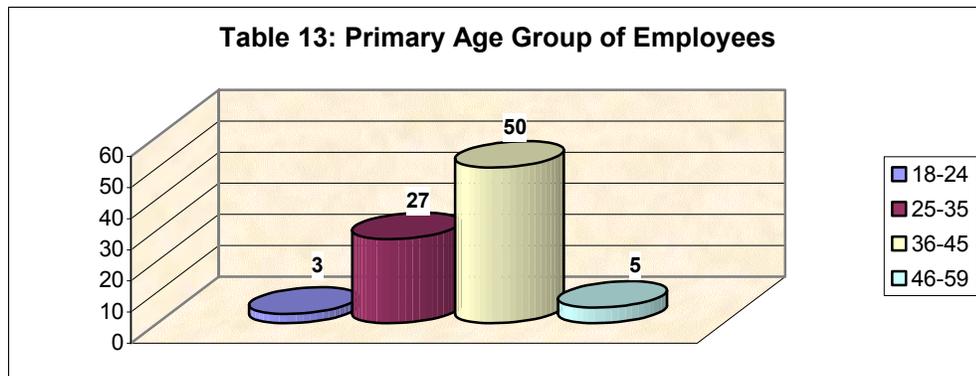


P3-Q5: What is the primary age group of your employees?

Five possible choices (a-e) were provided for employer response. There were a total of 85 (68 percent) usable responses as illustrated in (Table 13). Responses to choices a-e were as follows:

- |          |                   |          |                 |
|----------|-------------------|----------|-----------------|
| a. 18-24 | <u>3</u> (3.5%)   | d. 46-59 | <u>5</u> (5.9%) |
| b. 25-35 | <u>27</u> (31.8%) | e. 60+   | <u>0</u> (0%)   |
| c. 36-45 | <u>50</u> (58.8%) |          |                 |

The majority of the employers indicated the primary age group of their employees was 36-45. Next was the age group 25-35. The third and fourth age groups, 46-59 and 18-24, came in significantly lower at 5 and 3 respectively.



P3-Q6: Please add any additional comments that you feel would be valuable to this research project. These comments are noted in (Table 14).

<b><u>TABLE 14: EMPLOYER SURVEY COMMENTS</u></b>	
1	Having instructors available to offer two to three hours of specific training in Plumbing/HVAC topics including safety. Also, having courses approved for continuing education credit is a great motivator.
2	We are very small; no physical area available for training and really not necessary – hands on is the best way to learn here.
3	There are no formal programs available for our industry that I am aware of.
4	The 230 are on-site. We actually employ over 2000 worldwide.
5	We also employ a large number of Assoc. ages 16-18 as part-time Assoc.
6	Technical skills (computer training), as well as training in interpersonal relations, are key areas for development of training.
7	Lakeshore Tech provides excellent training for medical assistants. They are very confident and I wish for the program to continue.
8	We also utilize our insurance company to provide training.
9	Our employees currently attend LTC night classes. We don't have the time or money for in-house training. Since their function as machinists is hands-on, it works best for them to train at LTC.

The last section of the survey elicited more detailed participant information. It was based on whether the participant requested a copy of the survey results. There were a total of 105 (84 percent) usable employer responses. Responses to the yes or no choices are as follows:

a. Yes            56 (53.3%)                      b. No            49 (46.7%)

The yes choice yielded the highest response with 53.3 percent. Almost 50 percent of the respondents were not interested in the results of the survey.

Other confidential information was requested from the respondents who would receive the survey results. Due to the nature of the information, it was not included.

In summary, a significant amount of data was collected on employer demographics and their training needs, habits, and activities. The information will assist the College in the future to improve the seminar and workshop FTE's and revenues.

There were 17 questions in the survey. Part One of the survey established facts on percent of training conducted internally; training delivery methods currently in place and planned in the next three years; the type of supplemental support employers provided for training delivery methods; the supplemental support that was required for Internet On-line training; the most significant ways employees learn and retain information; and training locations that best met employee needs.

Part Two of the survey elicited facts about employer training activities. They included: Factors that influenced training activities; whether the employer had a training budget; and meeting training needs when workers could not be released from work for training purposes.

Part Three of the survey's focal point requested demographic information to profile the participants. Information collected centered around the Business Industry Identification/Code (SIC); company size—small, medium or large; and primary age group of the company's employees.

Numerous questions throughout the survey provided and Other-Specify choice that respondents used frequently to add supporting information to the question. Some of the information was not shared due to the confidential nature of it.

Finally, the data was further analyzed in Chapter V to answer research question four by drawing correlations, if any, and conclusions. In addition, recommendations requesting actions were developed. These were necessary for retaining and improving the seminar and workshops vehicle for delivering short-term, occupational specific employee training and to remain the quality educational provider of choice in the Lakeshore community.

## CHAPTER V

### Summary, Conclusions, and Recommendations

#### Introduction

This research study was undertaken to gather data from business and industry sources in the Lakeshore community to determine the factors influencing the 52 percent decline in seminar and workshop FTE's and revenues during the. Then, the data was analyzed and the results were used to identify solutions to resolve the problem.

The purpose of the research study was to examine what could be done to remedy the problem of the significant decline in FTE's and revenues, during the 2000-2001 academic term, in the seminar and workshop program area of the College. The data collection was critical to obtaining information about the factors influencing the problem in order to resolve it and restore FTE's and revenues to at least the level in 1999-2000. The outcome of the study was to maintain the College's position in the community as the quality educational provider of choice for short-term, occupational specific employee training.

This chapter focused on the conclusions and recommendations of the research study. Topics reiterated the statement of the problem and summary of the study procedures. It then proceeds to discuss the conclusions and implications and recommendations. Last, it concludes with recommendations for future research and the researchers final remarks.

#### Statement of the Problem

For the 2000-2001 academic term, Lakeshore Technical College has evidenced a 52 percent decline in seminar/workshop enrollments for short-term, occupational specific

employee training for working adults. A number of factors influenced the significant decline in seminar/workshop enrollments--a worker shortage in the College community; a downturn in the economy impacting product sales with subsequent layoffs; the vast amount of information available on the Internet is challenging the preferred delivery mode for short term employee training; and there is an increase in the number of educational providers--competitors offering similar training.

### Summary of Study Procedures

#### Population Sample

Eleven Business Industry Identification/Codes (SIC) were selected to represent the population of the study. An "other" choice response was also provided with a write-in option. The codes selected business and industry sources that best represented the Lakeshore Technical College District. Codes included: Manufacturing (Non-Durable Goods), manufacturing (Durable Goods), utilities, services (Profit), services (Non-Profit), health, construction, wholesale/retail trade, finance, government, high-tech, and other-specify. A mailing list was generated from using the above business industry identifications (SIC). The population contained 840 (N=840 or 100 percent) employers. The next step involved selecting a sample for project manageability.

A random sample method was employed and reduced the population size to a manageable sample within the project timeframe. The random sample method eliminated every other company that appeared on the mailing list. In effect, 50 percent of each SIC code was eliminated. This determined the sample at 420 (n=420 or 50 percent) companies.

The survey instrument and accompanying letter were administered to the sample, by mail, in mid May 2001, with a survey response requested on or before June 6, 2001. A number of follow up calls were made to ensure the best possible response rate. There were a total of 125 responses (R=125 or 30 percent) received.

### Instrumentation

The researcher designed the survey instrument to obtain information about employer training needs, habits, activities and demographics. The survey was divided into three parts or data sets that included a total of seventeen questions. Moreover, each data set's focal point was to answer research questions one, two, and three.

Part one of the survey obtained data on eight questions to answer Research Question 1: What are the participating employers training needs and habits? There was three questions in part two that gathered data to answer Research Question 2: What factors influenced training activities of employers? Part three concluded the survey with six questions that determined the survey participants' characteristics and answered Research Question 3: What is the demographic profile of the survey participants? There were two remaining research questions to be answered.

The fourth research question was designed to determine, correlations if any, that existed between two sets of data. It was applied after parts one, two, and three of the data collection were completed. It answered Research Question 4: What correlations exist, if any, between the demographic data and the employers' training needs, habits, and activities?

The last research question dealt with conclusions and recommendations regarding the data collected. The following questions were addressed in this chapter--Research

Question 5: What conclusions can be drawn from the analysis of the data that will restore the seminar and workshops FTE's and revenues to at least the level obtained in 1999-2000?

### Data Collection

Data collection addressed the means by which the research data was developed, collected, validated, determined reliable, and justified by the problem, limitations, and common practices in the field. Data was collected from several sources. The researcher, who initially determined the significance of the problem, collected and analyzed data from internal operations at the College. Moreover, data was obtained from a comprehensive literature review that included: Books, periodicals, and journals. Finally, data was collected on employer training needs, habits, and activities using a survey instrument.

The processes used to elicit results of the data were three-fold. The first process involved setting up and formatting a Microsoft Excel spreadsheet to tabulate all responses received and then inputting the data into a statistical software program used in the Planning and Research Department at the College. This department used its own process to employ the statistical software program to achieve the desired results of the researcher. The analysis was presented in the form of frequency, mode, and median and correlations, if any were identified. The last process involved the researcher's review and interpretation of the results that were presented in this chapter.

With any type of measurement, validity and reliability of the results of the data are very important to resolving the problem. Validity is concerned with the soundness and the effectiveness of the measuring instrument. Content validity focused on the

accuracy with which an instrument measured the factors or situations under study. This was addressed by the pre-testing of the survey instrument. The researcher then made changes in the wording and structure of the instrument to improve the clarity of the instrument for meaning, order, flow, timing and respondent interest and attention to the survey. The data collected did answer the intent of the questions; therefore the content was valid.

Reliability of the data was also addressed. It dealt with the accuracy of the instrument used in the measurement. The data indicated that the respondents' responses were highly reliable. The responses, particularly those in the "other" category, indicated that the respondents appeared to interpret the questions and response choices in a similar manner.

The analyses of the data provided the basis for identifying possible causes of the problem of the significant decrease in seminar and workshop enrollments and revenues. The next phase, developing potential solutions to the problem, could then be addressed.

All research questions were answered and the four research objectives were met by the data collection, analysis, findings, conclusions, and the recommendations to fix the problem.

The data collected in the study supported the limitations. In other words, there were other factors identified in the survey that were not of primary concern. The survey would have had little value if administered outside the Lakeshore Technical College District boundaries. Limited staff resources and the project timeline did not allow for more follow up to increase the response rate above 30 percent. And last, the College may not have the resources to set up this study to become a longitudinal project.

### Conclusions and Implications

The following conclusions were drawn by answers to the first four research questions:

#### Research Question 1: What are the participating employers training needs and habits?

1. More than half of the respondents (61.3%) indicated that they conducted from 51-100 percent of employee training internally using their own staff trainers. Several conditions influenced internal training such as cost, training topics, worker shortage, and size of company. There were six response choices to the factors of which three choices were significant enough to have implications. Cost came in the highest with 73 (29%) responses. Training topics were second with 65 (26%) responses. And worker shortage came in third with 38 (15.1%) responses. These three factors totaled 176 (69.4%) of the 252 total responses. The response rate for size of company was significant in “under 100 employees” or small companies at 67 (55.8%). Often, small companies do not have money to cover training costs and rely on internal staff to conduct the training. Unique training and unavailability of it in the marketplace also have impacted the percent of training conducted internally.

A multiple comparison was made between current training delivery methods; training delivery methods planned in the next three years; and the significant way employees learn and retain information. The ranking method, one being highest and eight being lowest, demonstrated the multiple comparisons. Hands-On, the top choice and Video the second highest choice are the top choices for training delivery methods now and in the future. The hands-on method is also the

preferred choice as supported by the literature. Further supported by the literature, is the fact that Internet On-Line training was indicated as the wave of the new millennium for employee training. If employers don't implement compatible technology, the company will risk going out of business. The illustration showed that the Internet was the third highest choice of delivery method in the future as compared to a lower choice of six in current methods. There is a correlation between the most significant ways employees learn and retain information and the current delivery methods in place. The comparative rankings were almost identical as shown in (Table 15). If however, employers follow the preferred mode(s) of delivery methods identified in the next three years, employees would have to be trained on how to use the new technology delivery methods.

<b>Table 15: Comparison: Employer Training Delivery Methods Now, in 3 Years, and Employees Learning</b>			
<b>Choices</b>	<b>Ways Employees Learn (Ranked)</b>	<b>In Place (Ranked)</b>	<b>In 3 Years (Ranked)</b>
a. Classroom	2	3	5
b. CD-ROM	5	5	4
c. Internet On-Line	6	6	3
d. Video	3	2	2
e. Videoconference	7	7	7
f. Hands-On	1	1	1
g. Course	4	4	6
h. Other-Specify	8	8	8

2. Well thought out support systems for alternative delivery training methods are critical. Without the appropriate support system in place, the training will fail and the potential for customer loss is significant. Employers were given five choices of support for Internet training—24/7 (24 hour a day/7 days a week), contact hours, telephone, e-mail, and other-specify. First, employers (29 or 25.7%) preferred the telephone. Contact hours came in second with 28 (24.8%) responses. Other was third and comments included: Computer, help desk, and assigned staff. Next was e-mail with 18 (15.9%) responses. When the Internet is used for training, employers wanted as close to instant feedback for their employees, thus the telephone and contact hours were rated the highest.
3. Training location is a critical factor of training. From five choices provided to respondents, company site came in first, followed by employee's office, off-site location, home, and global sites. In the past, employers released employees from work more frequently to attend external training. Cost is a significant factor in training and supported by the literature. There are many advantages to training employees on-site. If a worker shortage had impacted the company, employees will not be released from work. Travel costs were eliminated. A reduction in overall training time occurred based on the type of delivery method and content i.e. video, CD-ROM, Internet, written manuals and the like. The employee's office has or will become a place for work, education, and conferencing with the advance in and availability of the technology in place and planned for the future.

Research Question 2: What factors influenced training activities of employers?

1. Employers were asked if they had a training budget. Over half of the respondents- 62 (52.2%) indicated there was no budget. This response implied that little if any training is outsourced or that employees are not paid to attend external training activities such as a seminar or a course.
2. Further support for conclusion one above was demonstrated in the employer response on how they trained employees if they didn't release them from work. Also supported by the literature, Video, CD-ROM, and Internet were identified as primary delivery methods for employee training.

Research Question 3: What is the demographic profile of participants?

1. There was a good mix of business and industry respondents for the representative sample. The four most significant response choices included manufacturing both durable and non-durable goods; services for profit, and healthcare.
2. More emphasis should be placed on the results of the respondents in the medium to large size companies. Because the response rate for small companies was 67 (55.8%), it was quite significant in this study. Furthermore, small companies have not been strong training customers' for the College. As mentioned earlier, small companies usually do not have a training budget. Therefore, a significant amount of employee training is conducted internally. Traditional delivery methods aren't appropriate for small companies as there is little if any money to cover training costs, travels, and lost work-time. Moreover, video should be considered as the primary training delivery method. Secondary consideration

should be given to CD-ROM and the Internet for delivery methods, only if the small companies had the related computer hardware and software in place.

3. Age group of employee may have an impact on the training delivery method used. Five choices were provided to respondents. Employers marked the primary age group of their employees as 36-40. This age group ranked the highest response at 50 (58.8%). The next highest age group marked was 25-35 with 27 (31.8%) responses. The future development of training delivery methods need to focus on the primary age groups affected and the most significant ways these groups of employees learn.

#### Recommendations

Based on the results of the research study, the literature review and the responses of the survey participants indicated a significant preference for hands-on, video, and classroom delivery methods for employee training. Lakeshore Technical College has consistently provided short-term, occupational specific employee training in these formats. However, several other delivery methods should be considered for experimentation on a pilot basis and then if results are favorable, implemented. It is imperative that training topic, course content and quality of delivery is not compromised in the alternative delivery methods selected, and appropriate support systems are in place to provide quality education and satisfied customers. Special attention should be paid to courses that are not appropriate for alternative technology delivery methods such as soft skills training and certain continuing education courses maintaining licensure or certification that are controlled by external enforcing agencies.

There are a few factors however, that need to be considered by the College to improve FTE's and revenues. Several significant factors included: Cost of training, training topics, worker shortage, competition, and delivery methods appropriate to accommodating these factors. Following are recommendations to address these factors:

1. Hire the Learning Resource Network (LERN) to study and fix the pricing procedure and the cost of seminars and workshops as compared to the College's competitors.
2. Take action to reduce instructional and indirect cost factors.
3. Identify training topics applicable to video, Internet, and CD-ROM delivery.
4. Study external providers, systems, and costs for the alternative delivery methods recommended.
5. Study appropriate support systems, providing excellent customer service, for the alternative delivery methods recommended.

#### Recommendations for Future Research

The limitations and results of this study suggest further areas for research regarding seminar and workshops as a viable, successful educational program for the College. Future studies include:

1. A replication of this study should be considered every three years to check the market factors influencing short-term, occupational specific employee training. The same survey instrument could be used with modification. This includes:  
Limiting the questions specifically to "need to know;" and using a measurement that will ensure the results the research needs.

2. A study of on-line competitors, one within the Wisconsin Technical College System, and one outside this system comparable to reputable Community Colleges similar in demographics.

#### Final Remarks

Based on the literature review and the validity and reliability of the data collected and analyzed, the results provided the College with solutions to the seminar and workshop FTE and revenue problem. However, if the recommendations are not acted on, the problem won't go away. That may mean the elimination of this business unit.

Over 50 percent of the participating respondents indicated yes to a copy of the survey results. This is indicative of a group of employers that are interested in meeting training needs and identifying trends as noted collectively by other participants. The researcher determined this as a means whereby, the College and employers can work together to provide the quality training and customer service needed, while maintaining its' position of quality educational provider of choice in the Lakeshore Technical College District community.

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## APPENDIX A

May 22, 2001

Dear Chief Operating Officer:

You have been selected to provide valuable insight into current research on the background, interests, and direction Lakeshore Technical College should take to meet employee training needs in the future through preferred alternative delivery methods. The population selected in the survey represents businesses and industries in the Lakeshore Technical College District.

All specific information will be kept confidential and will be used only for statistical analysis. The results of the survey data will determine the feasibility for the College to develop alternative delivery methods for employee training. **Under no circumstances will your name be used in connection with any of the information presented.**

Your prompt attention to this survey will be greatly appreciated. Thank you for your participation and I look forward to hearing from you!

Sincerely,

Karen E. Holstein  
Training Director--Seminars/Workshops  
Business and Industry Services

PLEASE RETURN YOUR COMPLETED  
SURVEY IN THE ENCLOSED  
BUSINESS REPLY ENVELOPE BY:  
JUNE 6, 2001

## APPENDIX B

**Human Research Subjects Consent Form**

I understand that by returning this questionnaire, 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 first to: The researcher--Karen E. Holstein, Lakeshore Technical College, 1290 North Avenue, Cleveland, WI 53015-1414, phone 1.920.693.1144 or to the research advisor Dr. Joseph Benkowski, UW-Stout, 278A Jarvis Hall, Menomonie, WI 54751, phone 1.715.232.5266; and secondly, to Dr. Ted Knous, Chair, UW-Stout Institutional Review Board for the Protection of Human Subjects in Research, 11 HH, UW-Stout, Menomonie, WI 54751, phone 1.715.232.1126.

APPENDIX C  
Employer Survey

Preference for Alternative Delivery Methods for  
Employee Training

The purpose of this survey is to study the feasibility of implementing the employer-preferred alternative delivery methods for short-term, occupational-specific employee training. Completion of the survey will lead to data analysis, findings, and recommendations for Lakeshore Technical College to improve quality and accessible learning opportunities via employer preferred alternative delivery methods in the Lakeshore community. ***Please take a few minutes to answer the survey questions and return the survey in the enclosed postage-paid envelope on or before June 6, 2001.***

**PART ONE**

**Please Mark (X) or Write In the Appropriate Answer(s):**

1. What percent of training do you conduct internally using your own staff trainers?
  - a.  Under 25%
  - b.  26-50%
  - c.  51-75%
  - d.  75-100%
  
2. What training delivery methods do you currently have in place?
 

a. <input type="checkbox"/> Classroom	b. <input type="checkbox"/> CD-ROM	c. <input type="checkbox"/> Internet On-Line
d. <input type="checkbox"/> Video	e. <input type="checkbox"/> Videoconferencing	f. <input type="checkbox"/> Hands-On
g. <input type="checkbox"/> Course	h. <input type="checkbox"/> Other – Specify _____	
  
3. What training delivery methods are you planning to implement in the next three years?
 

a. <input type="checkbox"/> Classroom	b. <input type="checkbox"/> CD-ROM	c. <input type="checkbox"/> Internet On-Line
d. <input type="checkbox"/> Video	e. <input type="checkbox"/> Videoconferencing	f. <input type="checkbox"/> Hands-On
g. <input type="checkbox"/> Course	h. <input type="checkbox"/> Other – Specify _____	
  
4. How do you provide supplemental support for Video, CD-ROM, and Internet On-line Training for your employees?
 

a. <input type="checkbox"/> In-House Experts	b. <input type="checkbox"/> External Provider
c. <input type="checkbox"/> Mentor	d. <input type="checkbox"/> Other – Specify _____
  
5. What support do your employees need for Internet On-line Training?
 

a. <input type="checkbox"/> 24/7 (24 hours per day, 7 days per week)	b. <input type="checkbox"/> Specific Contact Hours
c. <input type="checkbox"/> Telephone	d. <input type="checkbox"/> E-Mail
e. <input type="checkbox"/> Other – Specify _____	

**PART ONE CONTINUED**

**Please Rank Order According To Text Box Instructions:**

6. What are the most significant ways your employees learn and retain information?

- a. \_\_\_ Classroom    b. \_\_\_ CD-ROM    c. \_\_\_ Internet On-Line  
 d. \_\_\_ Video    e. \_\_\_ Videoconferencing    f. \_\_\_ Hands-On  
 g. \_\_\_ Course    h. \_\_\_ Other – Specify \_\_\_\_\_

Rank Order  
1 = Highest  
8 = Lowest

7. What is the company's preferred mode of training delivery in the next three years?

- a. \_\_\_ Classroom    b. \_\_\_ CD-ROM    c. \_\_\_ Internet On-Line  
 d. \_\_\_ Video    e. \_\_\_ Videoconferencing    f. \_\_\_ Hands-On  
 g. \_\_\_ Course    h. \_\_\_ Other – Specify \_\_\_\_\_

Rank Order  
1 = Highest  
8 = Lowest

8. What training locations best meet your employee training needs?

- a. \_\_\_ Company Site    b. \_\_\_ Employees' Office    c. \_\_\_ Home  
 d. \_\_\_ Off-Site Location    e. \_\_\_ Global Sites

Rank Order  
1 = Highest  
5 = Lowest

**PART TWO**

**Please Mark (X) or Write In the Appropriate Answer(s):**

1. What factors influence the training you provide for your employees?

- a.  Worker Shortage    b.  Workforce Reduction    c.  Cost    d.  Competition  
 e.  Training Topics    f.  Other – Specify \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

2. Do you have a training budget?

- Yes     No

**Please Rank Order According To Text Box Instructions:**

3. How do you meet your employee training needs if you cannot release them from work to attend external training activities?

- a. \_\_\_ Video    b. \_\_\_ CD-ROM    c. \_\_\_ Internet On-line  
 d. \_\_\_ Other – Specify \_\_\_\_\_

Rank Order  
1 = Highest  
4 = Lowest

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**PART THREE**

<b>Please Mark (X) or Write In the Appropriate Answer:</b>
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1. Company Name \_\_\_\_\_
2. Title
  - a.  President or CEO    b.  Vice President    c.  Director, Human Resources
  - d.  Director, Training    e.  Other-Specify \_\_\_\_\_
3. Business Industry Identification/Code
 

a. <input type="checkbox"/> Mfg. (Non-Durable)	b. <input type="checkbox"/> Mfg. (Durable Goods)	c. <input type="checkbox"/> Utilities
d. <input type="checkbox"/> Services (Profit)	e. <input type="checkbox"/> Services (Non-Profit)	f. <input type="checkbox"/> Health
g. <input type="checkbox"/> Construction	h. <input type="checkbox"/> Wholesale/Retail Trade	i. <input type="checkbox"/> Finance
j. <input type="checkbox"/> Government	k. <input type="checkbox"/> High-Tech	l. <input type="checkbox"/> Other
4. Company Size  
 \_\_\_\_\_ Number of Regular Full- and Part-time Employees
5. What is the primary age group of your employees?
 

a. <input type="checkbox"/> 18 – 24	b. <input type="checkbox"/> 25 – 35	c. <input type="checkbox"/> 36 – 45	d. <input type="checkbox"/> 46 – 59	e. <input type="checkbox"/> 60+
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6. Please add any additional comments that you feel would be valuable to this research project.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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Would you like a copy of the results of this survey?  Yes  No

**If you answered Yes, please provide the following information:**

**Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
 \_\_\_\_\_

**May we contact you if this research requires further clarification?**  Yes  
 No

**If you answered Yes, please include the following:**

**Telephone Number:** (Work):(\_\_\_\_\_) \_\_\_\_\_ **Best time to call:** \_\_\_\_\_

**E-Mail Address:** \_\_\_\_\_