

An Analysis of Employees' Perception  
Toward Their Readiness For On-Line Learning

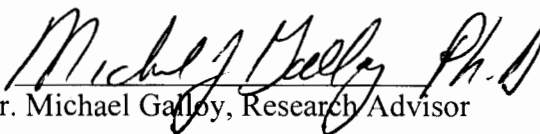
by

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ABSTRACT

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Today's learning environment is rapidly changing. This can be a challenge for employees who have not been exposed to technology in the same rapid manner. Life long learning is stressed in the business sector. Trainers are responsible for utilizing the technologies available to develop and administer materials that will enhance the employees learning experience. These same tools are needed to keep the employees skills up to date. Technology has provided another method of reaching multiple audiences at any given time. The survey for this study was developed and delivered to a sample of employees forced to move into the technology arena of computer-based learning. The

survey questions focus on the employees' perception of their readiness in moving toward computer-based training at Wisconsin Public Service.

If learners are expected to excel in the technical format, we must first understand the perceptions that employees' have about computer based training.

## Acknowledgments

I dedicate the efforts of this thesis to my loving family, my husband Gregg, my son Dustan and my daughter Leah. Without their continuous support I would not be writing this paper today. Out of love and commitment they accepted my devotion of many nights and weekends spent away from the family in pursuit of a life long goal, a degree in the educational field. My love and commitment to education took me on a six-year journey that accomplished four degrees, a minor and two certifications. Ending the journey with a Master's degree is a gift to myself and a gift of self-satisfaction. The friendships I have made will remain in my heart forever as we walk across the graduation stage, knowing we accomplished our dreams together.

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## Table of Contents

	Page
Abstract	ii
List of Tables	vii
List of Figures	viii
Chapter I: Introduction	1
Statement of the Problem	2
Purpose of the Study	3
Research Questions	3
Significance of the Study	4
Limitations of the Study	4
Assumptions of the Study	4
Definition of Terms	5
Chapter II: Literature Review	7
Getting Ready for E-Learning	9
Cost Effectiveness	9
Leadership Support	10
Communication	11
Technical Requirements	12
Technical Skills	12
Change Management	13
Critical Success Factors	15

Resistance	20
Summary	21
Chapter III: Methodology	23
Introduction	23
Population	23
Instrumentation	24
Validation of Survey Document	24
Data Collection	25
Data Analysis	25
Chapter IV: Results	26
Demographic Information	26
Demographic Summary	29
Chapter V: Summary, Conclusions, and Recommendations	40
Research Design	40
Conclusions and Recommendations	41
References	51
Appendix A: Cover Letter	53
Appendix B: Survey Instrument	55

## List of Tables

		Page
Table 1	Age Demographic Data	27
Table 2	Gender Demographic Data	27
Table 3	Position Demographic Data	28
Table 4	Years of Service Demographic Data	28
Table 5	Education Demographic Data	29
Table 6	Communication	30
Table 7	Computer Skills	31
Table 8	E-learning Process	32
Table 9	E-learning Layout	32
Table 10	E-learning Support	33
Table 11	E-learning Knowledge	34
Table 12	E-learning: An Alternative	36

## List of Figures

		Page
Figure 1	Communication	41
Figure 2	Computer Skills	42
Figure 3	E-learning Process	44
Figure 4	E-learning Layout	45
Figure 5	E-learning Support	46
Figure 6	E-learning Knowledge	47
Figure 7	E-learning: An Alternative	49



## Chapter I: Introduction

Wisconsin Public Service (WPS), a gas and electric utility company, is stepping out of the norm in terms of training and development. The year 2005 will introduce a new approach to training using a blended format consisting of computer-based training in addition to instructor led courses. Technology has advanced over the years and it is the responsibility of trainers to understand the capabilities the technology has to offer quality training. The need for training to be delivered to multiple audiences, in multiple locations, in a timely manner, is being pushed to the forefront in the utility industry. This is a result of deregulation and competition within the utility industry. WPS lives in a conservative business culture. Many employees have successfully performed routine tasks for many years that do not require computer skills. Introducing computer-based training is unfamiliar territory for many employees and is a challenge in itself. Technology presents a new and advanced way of doing business.

The current training consists of an instructor-led format. The need to reach 19 office locations in multiple cities limits the amount of training and instructors available. Traveling between locations becomes an issue that takes up valuable training time. The multiple locations and training sessions drain the training budget as a result of traveling, food and accommodation expenses.

Computer-based training provides the opportunity to reach all nineteen offices without the trainer leaving the office. Computer-based training can quickly be worked into an employees schedule throughout the company benefiting just in time training. Consistency of lesson plans and assessments add to the benefits of reaching the employees through computer-based training.

Employee support, known as Power-Users, is available to employees throughout the computer-based training initiative. The Power-Users are trained prior to the implementation of computer-based training.

Training is delivered to employees who have a wide range of age, gender, technical abilities, and years of work experience. Each component presents a different challenge that needs to be addressed and requires a strong change management initiative.

In an effort to utilize the technologies available WPS administers training courses through a Learning Management System (LMS). The LMS software system assigns on-line classes to employees for different reasons. Training requests may be received for refresher training, additional skills needed or career advancement. The Learning Management System is a tool that holds or manages training courses. There are training modules within each course that addresses objectives of the course.

#### *Statement of the Problem*

After several years of preparation to develop a culture for computer-based training, are Wisconsin Public Service (WPS) employees ready to accept the new technology?

The implementation of computer-based training requires employees to have the necessary computer skills and understanding of how to use an on-line format. Little research has been done to determine the perceptions WPS employees have toward their readiness for implementing the new training structure.

The results of the study provide valuable information to determine the training and communication needs in the efforts to implement future computer-based training at Wisconsin Public Service. Computer-based training is the direction chosen by WPS and

is the responsibility of the trainers to provide quality training, delivered in a non-traditional format, that supports multiple work schedules.

### *Purpose of the Study*

The purpose of this study is to determine the perceptions WPS employees have toward computer-based training and their readiness to accept the technology change. The study results identify the areas of focus for future efforts in delivering computer-based training.

### *Research Questions*

The following research questions are addressed by the data collected through this study:

1. Did communication efforts make the employees aware of the initiative to implement computer-based training?
2. Did employees have the computer skills needed to navigate the curriculum?
3. Did employees have difficulties navigating through the e-learning layout and process? Example: Access, sign-up, completing the course and skill builders.
4. Did employees feel there was adequate support in place to sustain the adoption of computer-based learning?
5. Did employees have prior experience with computer-based training?
6. Did employees feel e-learning would be an effective alternative to instructor led training?

### *Significance of the Study*

The need for employees to be crossed trained becomes increasingly demanding as the business needs continue to change. This has put a significant strain on the training

department's time and ability to deliver the amount of training being requested.

Computer-based training can help support the requests by delivering the curriculum on a self-paced format to employees.

This study will help management determine the employees' perception of the transition toward computer-based training and any need for further communication on the initiative. The collected data can be used in future initiatives as a base when evaluating employees' perception of technology-based training. The evaluation can provide data to understand the growth and acceptance employees are making toward technology and learning. Future initiatives can utilize this data to display and understand the gap of where the employees perception of computer-based training was at today and at a later date by surveying the employees with the same questions.

#### Limitations of the Study

The limitations of the study are:

1. The study is limited to a random sampling of Wisconsin Public Service employees.
2. The survey results are limited to the number of completed and returned surveys.
3. The study is limited to data collected from employees with varying levels of exposure to computer-based training.

#### Assumptions of the Study

The following assumptions were made:

1. This study assumes employees answered the questions openly and honestly.

2. The study assumes the curriculum for the computer-based training was delivered to all employees in a standard format.
3. The study assumes that all employees have access to company communications.

### *Definition of Terms*

*Blended Format.* Training curriculum delivered in both methods of Instructor led and computer based.

*Computer Based Training.* Also known as E-learning, curriculum delivered by computer technology.

*Down-Time.* Unproductive work time due to equipment problems or lower work load.

*Instructor Led Training (ILT).* Curriculum delivered by an instructor.

*Just In Time Training.* Training delivered on demand.

*Learning Management System (LMS).* Computer software that manages and track all types of learning — from self-paced e-Learning courses to traditional classroom instruction and other offline learning events such as workbooks, and audio or video tapes. Training can be delivered to geographically dispersed employees or customers when or where they need it, and have remote access to management tools that allow you to track and report on your training programs.

*Likert Scale.* A rating scale measuring the strength of agreement with a clear statement. Often administered in the form of a questionnaire used to gauge attitudes or reactions.

*Monopoly.* The exclusive possession of a market by a supplier of a product or a service for which there is no substitute.

*Power-User.* A WPS employee trained prior to a training initiative to provide support to coworkers.

*Random Sampling* - process or method of drawing a representative group of individuals or cases from a particular population.

*Utility Deregulation.* Legislatures and the public utility commissions of many states have opened retail competition for electricity supply. The measures allow consumers of electricity to choose their supplier of electricity, (generation), while the delivery of the power, (transmission and distribution), will still be the responsibility of the incumbent, (regulated), power company (Good Energy, 2005).

*Wisconsin Public Service (WPS).* A gas and electric utility company.

## Chapter II: Review of Literature

### *Introduction*

Implementing computer-based training into an environment of traditional instructor led training requires trainers to be involved in a lot of change. Trainers are given a chance to re-invent the role of educating the workforce. Technology has brought training to the strategic planning table (Werner, 2004).

Wisconsin Public Service (WPS), introduced blended learning in 2005 to a select group of employees, replacing the traditional instructor led training. WPS has a conservative culture developed through years of employees performing a task or job the same way. Times have changed WPS working as a monopoly to a competitive environment embarking on deregulation. Employees need the opportunity to access information as needed, learn new skills and apply the skills immediately on the job. Blended learning is the approach WPS training is moving towards creating a reusable learning tool.

Chapter Two will explore the process of implementing computer-based training and the issues associated to changing from traditional instructor led training (ILT) to computer based training (E-learning).

This study will provide direction for future conversion efforts associated to employee acceptance and transitioning instructor led courses to computer-based training within Wisconsin Public Service.

### *Getting Ready for E-Learning*

Computer-based training is becoming the competitive edge for many businesses. The business world is in a steady, aggressive technology change. Business needs require

employees to understand technology and manage customer relationships. Customer relationships require WPS to maintain records that can be shared electronically by all employees. Blended learning will support business needs and bring employees' technical abilities to a higher level of understanding preparing the company for future growth in a competitive environment where training can be administered to all employees as needed.

According to research, Minton (2000) asks:

With this much change in corporate training, is your organization prepared to make the leap toward e-learning? Answering the following seven questions and properly planning to embrace e-learning will help achieve near-term benefits and engage the workforce.

The Seven Key Questions You Need to Answer

1. Do you understand the changes e-learning will bring to your organization?
2. Is e-learning part of your organization's integrated training strategy?
3. Is there appropriate leadership throughout the organization to support e-learning?
4. Are the organization support systems in place to sustain the adoption of e-learning?
5. Is your technology capable of delivering e-learning predictably and effectively?
6. Are individual learners prepared for distance learning?
7. Do you have an overall Change Management plan in place to transition your organization to e-learning? (p.1)



### *Cost Effectiveness*

Corporations who implement e-learning easily see cost savings. Training being delivered on-line from one single location reduces corporate training travel budgets. Trainers' time assigned to stand up training can be substantially reduced with e-learning providing additional savings when the trainers' time is moved to other training needs. Moving the manuals to an on-line format will reduce printing costs of training manuals and the flexibility of updating materials in one location will eliminate out dated materials in different locations. Scheduled downtimes can now be turned into valuable training times when employees sign into a lesson during the unproductive down time. The e-learning format can shave weeks off the training delivery timeline freeing the trainer time up to provide additional training needs of additional employees (Minton, 2000).

Employees will see the benefits of increased knowledge retention by being ensured the tools and knowledge needed to work effectively will readily be available through refresher training available online. E-learning and the nature of the media provide rapid course development. This same rapidness ensures key messages are delivered quickly and up-to-date. E-learning addresses a portion of the development needs of an organization. A comprehensive approach is still needed for employee development (Minton, 2000).

Leslie Salyer (2004) argues the point of hidden costs. Salyer believes online learning may look like a cost saver on paper, but in reality may end up costing more than instructor-led training. The cost of having to rework content to adapt for online learning may have to appeal to multiple levels of experience. Increased development time needs to be considered compared to immediate adjustments when presenting in a classroom. The

learner will still require a mentor and this may require a one to one relationship compared to a classroom going through the process all at the same time. Salyer also notes the extra costs associated with implementing the online learning when technical requirements are not addressed upfront. Suddenly there are extra hidden costs that were not planned for (Salyer, 2004).

### *Leadership Support*

The overall goals of an organization need to be addressed when transferring specific competencies to an individual. Leadership is undoubtedly the primary force for a successful implementation. The support should be visible, and sustained for new training implementations. Without the support, acceptance for E-learning will be slow if not impossible to achieve. Leaders are responsible to provide an environment that embraces change. This is done through change behavior, development and use of performance incentives, and then through sustained behavior, buy in and acceptance (Minton, 2000).

Minton (2000) has this to say about organizational support:

Like any change management effort, large or small, there are three organizational levers that either facilitate or hinder acceptance of organizational change.

- Performance
- Organizational Design; and
- Communications Planning, Execution and Feedback. (p. 4)

Activities related to performance planning, measurement, and evaluations are handled through performance management. These processes need to be in place at both individual and group levels. Leadership's role is to recognize,

reward and reinforce behaviors of the employees. Meaningful, positive and negative, consequences need to be tied to behaviors of the employee (Minton, 2000).

Joel P. Henning (2000) states, “Staff groups spend most of their time soothing, selling, and seeking sponsorship instead of focusing on what they offer the business” (p. 2).

The solution is to stop trying to please the client in exchange for approval, be a business rather than a function. Senior management is the banker not the customer. Senior management can provide capital to address a client’s business problem and require a return on the capital (Henning, 2000).

### *Communication*

Joel P. Henning (2000) states “Skip the kick off. People don’t need excitement; they need to be educated” (p. 7).

The employees should see a demo and be educated in what is available in e-learning. The learners need to hear of successes others have had with e-learning and how e-learning can solve problems with easy access to areas of education. Kick-offs provide an opportunity for employees to feed on one another with negative responses toward the initiative (Werner, 2000).

Communication is the channel to deliver credibility and urgency to messages when implementing E-learning into the organization. Feedback from learners documenting their opinions or concerns can be used as a tool during the implementation. The communications efforts usually take more time and planning than anticipated. Responding to feedback requires a quick response and the information will be helpful in tweaking the strategies and updating implementation plans (Minton, 2000).

### Technical Requirements

A concern of implementing E-learning is the requirements of the technical equipment to deliver the format. Substantial bandwidth and current browser versions are required for a successful implementation. Without adequate equipment, E-learning is susceptible to technological difficulties. This obstacle is a hurdle when using older computer equipment, which many homes have installed. The costs associated to a 24/7 help line is often over looked when implementing E-learning technology (Minton, 2000).

The technology for E-learning has requirements. There is necessary hardware, telecommunication requirements, browser requirements and access to software. All of the technical requirements need to be addressed to avoid distrust and frustration from the users. The employees' home PC may not be suitable for on-line learning (Minton, 2000).

### Technical Skills

The knowledge of individual's technical skills varies. Web based learning taps different skill sets than traditional classroom training (Minton, 2000).

Minton (2000) found that:

E-learning is not without distracters, however, web-based training cannot be the only means of corporate training. E-learning addresses only some of the development needs of the organization. (p. 2)

The learner may lose the collaboration from which his/her learning style may lean towards. A set of computer skills for the learner needs to be assessed. Windows and internet navigation is the basic requirement needed for a comfort zone of e-learning and the comprehension of the materials.

PC training is required for individuals not up to speed with the technology. A learner can acquire the training through classroom, on the job training, or self paced tutorials. A help desk should be prepared to answer individual questions regarding the technology (Minton, 2000).

### *Change Management*

A change management plan is important to a successful E-learning implementation. Identifying and allocating resources allows for collaborative thought on critical issues. The Change Management plan will help to uncover roadblocks, and determine key steps needed to ensure acceptance of the implementation. The plan will also ensure the key steps are completed and accountable. Employees need to see the connection between their job duties and the training. Communication is important to fill this gap. The learner should be given time to ask questions to bring the training efforts into perspective (Minton, 2000).

Joel P. Henning supports proposing e-learning as a business strategy and not a training project. Henning believes this will diminish the stereotype of trainers biggest concern is whether learners like e-learning to a business strategy trainers are supporting (Henning, 1997).

An organization implementing web-based training will need roughly two months to develop and kick-off a change management plan. This estimate is based on the right levels of leadership on the team and two to four hours a day are devoted to the project. In addition to this time line, support personnel will be required to take on appropriate tasks associated to the plan (Minton, 2000).

A minimum of \$10 billion dollars was stated as being spent in 2003 on e-learning efforts. Reflection and planning for implementation will focus the efforts and more effectively deploy resources, and ultimately enhance organizational acceptance (Minton, 2000). Across the board companies are introducing E-learning technologies (Werner, 2000).

As stated in the words of Tom Werner, “Cultures don’t change when everyone is forced to do something at the same time. Cultures change when pockets of people find success and the word spreads” (Werner, 2000, p. 6).

There are pros and cons to the new e-learning trend, which requires looking at how implementing the new training technologies will affect the organization and the employees (Werner, 2000).

Marc Hequet (2003) used exclusive research data from 296 corporations collected by Training Magazine and International Data Corporation to state the following information:

#### What Has Limited The Use of E-Learning At Your Organization?

1. Don’t Know 6%
2. Market Confusion - 15%
3. Efficiency of E-Learning not Proven - 18%
4. Lack of High-Quality Content - 19%
5. ROI of E-Learning as Not Been Proven - 24%
6. Employees Lack Internet Access - 25%
7. Lack of Management Buy-In - 28%
8. Employees Not Motivated to Learn Online - 39%

With only 28% of respondents listing a lack of management buy-in as a reason for limited e-learning use, this indicates that executives are beginning to see e-learning as an opportunity to tie content and training into business processes. (p. 29).

There are three motivations considered to be the driving force behind people's learning. Two of the types of motivation could be met with e-learning and the third not as easily. Goal-motivated learners do not require a particular format to achieve their goal. They will reach the goal however they have to. Learner motivated learners will decide if they what to learn the topic or not and base their motivation on the desire. The third type is relationship motivation and e-learning will not be the right format for their learning style. About one third of the workforce is represented by relationship motivation (Connor, 2004).

#### *Critical Success Factors*

The document, Critical Success Factors: E-learning Solutions is an edited document written by Marion Wands (DC) and Andrew Le Blanc (ATO). The data is based largely on research done by Dr G. Cooper. The data used in this research comes from the full version of the document by Dr. G. Cooper (Wands-Le Blanc, 2001).

Dr. Cooper breaks down the critical success factors into three categories; organizational factors, general factors, and cognitive factors. All three areas are vital to the success of computer-based training (Wands-Le Blanc, 2001).

Knowing the implications of the technical areas of Integrated Technical Systems (ITS) and the application of e-learning is important for implementation. Without the ITS departments involvement the effectiveness of the application of e-learning may fall short.

Having an appropriate change leadership program will enhance this same effectiveness. There are many issues that can be avoided if addressed upfront prior to implementation. Having a clearly defined change leadership strategy will set the stage before, during and after implementation (Wands-Le Blanc, 2001).

Dr. Cooper (2001) states the following organizational factors to be of importance:

1. Identification of cultural issues that will affect individuals' willingness and ability to use the technology.
2. Skill development for key stakeholders, work practices, and learning environments.
3. Strategic Human Resource initiatives to support e-learning such as performance management, career planning, succession planning and communication briefings. (p. 1)

Managers need to have the same technical skills required of their employees. It is important that the managers know and understand their position in the e-learning initiative. Managers comments made in public are clearly heard increasing the need for the managers to support the initiative. The managers' attitude will greatly influence the success of the strategy. There are a number of characteristics needed by the adult learners to achieve the maximum learning benefit the e-learning initiative can provide (Wands-Le Blanc, 2001).

Marion Wands and Andrew Le Blanc (2001) list the characteristics as:

1. Student Centered – The learner has the opportunity for some input into the topics they learn, the depth and scope of the learning, timing and method or approach they will take in order to undertake the learning.



2. Motivation to Learn – Adults tend to learn better if they are motivated to learn in the first place. This motivation usually results from the learner recognizing a need to learn, either by themselves or by way of explanation.
3. Activity – Skills learned through guided practical experience are likely to be learned more thoroughly, better retained and are more likely to be used in the workplace.
4. Reward – Recognition and reinforcement of successful efforts or contributions increases the likelihood of the behavior being repeated on the job.
5. Environment – People learn best in a supportive but relaxed and informal environment. Physical comfort, trust, respect, helpfulness, freedom of expression, acceptance of differences and tolerance of errors should characterize the learning environment. (p. 2)

The characteristics listed are a part of the transfer of learning. Learners need to know how they will utilize the new skill back on the job. The immediate application lends to the transfer of learning. There has to be a connection between the lessons being learned and the application of the lessons learned (Wands-Le Blanc, 2001).

Learning objectives are important to inform the learner of three components; performance, the standard and the condition. The performance will document what the learner will be able to do as a result of learning the lesson. The standard is the measure of acceptable performance the learner must demonstrate to show successful transfer of learning. The condition states under which conditions the learning and assessment will take place (Wands-Le Blanc, 2001).

E-learning lessons should provide the opportunity for the learner to test their abilities prior to taking the e-learning lesson. The pre test will avoid repetition of materials for learners with knowledgeable skills in that area. Assessments will look at the competency against the identified standard to verify acceptance. There are two times the assessment are crucial with e-learning. The learning module should include an assessment after completion of the lessons. The second assessment should be taken on the job back in the work place to determine the level of skill retention (Wands-Le Blanc, 2001).

The cognitive factors require help to be readily available for learners. Learners need to know that there is support in more than one place. Learners may need a visual requiring a hard copy of the on-line version of the procedures. The hard copy should be a minimum of what is available for learners. The on-line help should include search options allowing the learning to type in a request and know there is direct help. Expert trainers or subject matter experts should provide a help line or extension where learners can call to receive technical support. A glossary is recommended to assist learners with technical terminology (Wands-Le Blanc, 2001).

Wands-Le Blanc believes a key to the transfer of learning is to use real life opportunities. Learners will be able to make the connection between training and back on the job. This would include demonstrations and hands on activities for the learners. By utilizing real life examples the learners will not become overloaded as readily and the scenarios will not seem as complex. Providing multiple opportunities for practice provides flexibility for the different learning styles of the learner. Some learners will take advantage of completing all practices while other learning styles will require the

completion of one exercise to feel they have retained the objective (Wands-Le Blanc, 2001).

Grebow (2004) notes, “The biggest myth about online learning may be that it can prepare someone to do a job. The experience, not learning, is the best teacher” (p. 34).

The learner needs to feel competent while taking the on-line lesson. Interactive learning should be kept to a minimum when a principle is being demonstrated. The learner should be given time to understand and learn what is being taught and not distracted by the interaction. The interaction should be held until the learner is trying to achieve the newly taught principle. A learner should receive immediate feedback when an interactive exercise is attempted. When multiple attempts are tried without success the learner needs to understand the correct function. The more unsuccessful attempts a learner tries, the higher the chance of frustration for the learner. A better solution would be to have hints built in to the interaction. After an unsuccessful attempt by the learner a hint would display to avoid frustration and support the learner in making a correct choice (Wands-Le Blanc, 2001).

Multimedia has a place in computer-based training if designed properly. Sound enhanced lessons can be beneficial for learners who are auditorial learners. Headsets may be necessary to avoid disturbing co-workers if the learner is completing a course at their workstation during work hours. Multimedia resources are most effective when the needs of the learner are taken into account. Having the capability to turn the audio sound off is important for the learners who are distracted by the voice and see it as an interruption in their learning style (Wands-Le Blanc, 2001).

## *Resistance*

Resistance is to be expected when implementing e-learning. Instinctively the trainers will want to address the resistance. The resistance brings two responses commonly to the training department. First, it is common to try and sell e-learning harder. The second response commonly brings conversation of stopping the new approach to education. Silencing the resistance is not going to address or educate the learners (Werner, 2000).

Peter Block is famously known for stating, “Resistance means something important is going on. We need to note the resistance, talk about it out loud, and listen to what the resisters are saying” (Block, 2000, p. 9).

The resistance may be a result of offending the learners’ sense of competency. The learners may feel like they are not in control of their own learning style. The communication process needs to incorporate the objections, feelings and opinions of the learners to consistently reinforce the learning curve. The uncomfortable resistance can be overcome when the learner understands they are not alone when stepping out into an unfamiliar environment (Werner, 2000).

Jennifer Vollmer (2003) states her opinion on motivation:

Managers just didn’t motivate learners to take the e-course. Managers who took simple steps – merely tracking attendance, for example – saw higher completion rates. The lesson? Business is still business. Focus on business needs. If you rely on technology alone, it might let you down. (p. 25)

### *Summary*

Computer-based training is becoming the competitive edge. The business world is in a steady aggressive technology change. Michele C. Minton has compiled seven key questions that need to be asked to determine if the organization is ready to make the leap towards e-learning training. The seven key questions to remember are:

1. Do you understand the changes e-learning will bring to your organization?
2. Is e-learning part of your organization's integrated training strategy?
3. Is there appropriate leadership throughout the organization to support e-learning?
4. Are the organization support systems in place to sustain the adoption of e-learning?
5. Is your technology capable of delivering e-learning predictably and effectively?
6. Are individual learners prepared for distance learning?
7. Do you have an overall Change Management plan in place to transition your organization to e-learning? (Minton, 2001, p. 1)

Corporations who implement e-learning easily see cost savings with training being delivered on-line from one single location reducing corporate training travel budgets. E-learning condenses the trainers' time assigned to stand up training providing opportunities for trainers to address other training needs. The costs of printing and maintaining materials is brought to a minimum and scheduled downtimes become valuable training opportunities. A comprehensive approach for employee development is needed along with an e-learning format.

Leadership support is important for acceptance of moving towards an e-learning environment. This is achievable through change behavior, development, performance incentives, sustained behavior, buy-in and acceptance.

Implementing e-learning requires strong communication channels that can deliver credibility and urgency throughout the initiative. Feedback from learners documenting their opinions or concerns can be used as a tool during the implementation.

Technology for e-learning has hardware, telecommunication and browser requirements that need to be addressed to insure credibility of the new technology. Transitioning into computer-based training requires learners to use different skill sets than instructor led training. Learners' technical skills vary creating the need for basic computer skills training prior to participating in an e-learning format. An important factor in the transfer of learning is the ability for learners to make a connection between their job duties and the training.

It is important to build the business case for e-learning. Communication channels are important to inform and educate the learner throughout the initiative. Resistance needs to be talked about openly and listen to what the resisters are saying. The learners may feel like they are not in control of their own learning style or the learners' sense of competency is being threatened. The communication process needs to consistently reinforce the learning curve.

## Chapter III: Methodology

### *Introduction*

The purpose of this study is to determine the perceptions WPS employees have toward computer-based training and their readiness for on-line learning. The study results identify the areas of focus for future efforts in delivering computer-based training. The following research questions are addressed by the data collected through this study:

1. Did communication efforts make the employees aware of the initiative to implement computer-based training?
2. Did employees have the computer skills needed to navigate the curriculum?
3. Did employees have difficulties navigating through the e-learning layout and process? Example: Access, sign-up, completing the course and skill builders.
4. Did employees feel there was adequate support in place to sustain the adoption of computer-based learning?
5. Did employees have prior experience with computer-based training?
6. Did employees feel e-learning would be an effective alternative to instructor led training?

### *Population*

The participants of this study are employees of Wisconsin Public Service who are geographically located in nineteen district offices in the state of Wisconsin. The participants are field workers and office personnel. The population surveyed completed a pre-requisite that required a passing score from a computer skills assessment. This prerequisite was required prior to participation of the e-learning initiative. The e-learning training initiative consisted of nine courses. The courses contained contextual

information, lessons, summary and skill builders. The participants of the survey are from a variety of work groups with different skills sets. The number of participants per district varies depending on the population of the district. An alphabetical random selection was used selecting every third employee. The employment status of the participants varies from part-time to full-time hours. The participants' educational levels vary.

#### Instrumentation

A survey was constructed to measure WPS employees' perception toward e-learning and the company initiative to introduce computer-based training. The survey attempted to measure the perceptions WPS employees have toward computer-based training and their readiness for on-line learning. A five-point Likert scale was used to measure the responses. The responses included: (1) very poor, (2) poor, (3) fair, (4) good, and (5) very good. The survey also gathered demographic information including age, gender, company position, years of service, and educational level. The final survey question was intended to capture employees' opinion toward future e-learning initiatives.

#### Validation of Survey Document

The Change Management Manager, Project Manager, Human Resource Business Consultant, Customer Value & Support Services Manager, Research Activities Manager and Customer Care Staff Leader all reviewed the purpose of this study to determine the security and confidentiality restrictions of WPS prior to the survey instrument being administered. Other trainers and pilot participants of the e-learning initiative validated the survey. The survey results would be considered skewed if delivered on-line when asking employee perceptions of e-learning from an on-line instrument. The final pilot for this



survey instrument consisted of a final review of the document from other trainers who will benefit from the compiled data results.

#### *Data Collection*

The participants from all nineteen districts were asked to complete the survey. The initial task of delivering the surveys to the participants was achieved by compiling a list from the company listing of employees required to participate in the e-learning initiative. The participants received the surveys through company mail and were asked to return the completed survey to the researcher. The internal WPS company mail department assisted in the return of the completed surveys to the researcher for data compiling. The researcher provided a returned envelope for the instrument to be placed in upon completion of the survey. The data was compiled from the returned surveys by the researcher.

#### *Data Analysis*

The research design consists of a Likert scale where the participants circle a value given to each survey question. The descriptive values placed on each question will be compiled to determine the common perception toward the computer-based learning initiative at WPS. A ranking order using the mean will determine the results of this study.

## Chapter IV: Results

### *Results*

The purpose of this study is to determine the perceptions WPS employees have toward computer-based training. The study results identify the areas of focus for future efforts in delivering computer-based training. Participants of the survey are a select group of employees required to complete computer-based courses as a prerequisite to instructor led training. Two hundred and twenty (220) surveys were sent, and 128 surveys were returned. The demographic information on the survey instrument was not completed by all 128 surveys returned.

### *Demographic Information*

Data was collected to find the following demographics: age, gender, position, years of service, and education. The demographic data is compiled from an incomplete survey sample. Some of the survey participants chose not to complete the demographic portion of the survey.

The study gathered data from subjects ranging in age from under 25 years to over 56 years. The data results indicate that 64% of the responding participants are in the 36 to 55 year age group.

Table 1

*Age Demographic Data*

Age	No. of Respondents
Under 25	6
26-35	24
36-45	39
46-55	39
56+	13

The study indicates that 118 participants of the 128 surveys returned documented their gender. The percentage of male versus female participants is close with female participants ranking the lead with 54%.

Table 2

*Gender Demographic Data*

Gender	No. of Respondents
Male	54
Female	64

The study indicates 79% of the survey participants work in an office environment.

Table 3

*Position Demographic Data*

Position	No. of Respondents
Field	27
Office	101

The study indicates 116 participants of the total 128 surveys documented their years of service. The largest representations of 44% have one to ten years of service with the company.

Table 4

*Years of Service Demographic Data*

Years of Service	No. of Respondents
1-10 years	51
11-20 years	28
21-over years	37

The study indicates the majority of the participants who responded to the demographics of years of education have an education higher than a high school level. Eighty-six percent (86%) of the responding survey participants have additional studies past the high school level.

Table 5

*Education Demographic Data*

Years of Education	No. of Respondents
High School	17
High School Plus 1-2 Years	49
High School Plus 3-6 Years	52

*Demographic Summary*

Based on the demographic data collected 64% of the responding participants are in the 36 to 55 year age group. Fifty-four percent (54%) of the responding participants are female and 79% work in an office environment. The largest representations of the demographic study indicated 44% have one to ten years of service with the company. Eighty-six percent (86%) of the responding survey participants have additional studies past the high school level.

*Survey Questions*

The survey instrument collected data relative to the six research questions for this study. The research question and data collected are as follows:

*Research Question One.* Did communication efforts make the employees aware of the initiative to implement computer-based training? Survey question one asked the participants to select the rating that best describes their awareness during the past two years of the initiative to implement computer-based training.

The study collected the following responses:

Table 6

*Communication*

Rating	No. of Respondents
Very Poor	3
Poor	22
Fair	28
Good	54
Very Good	21

Based on this data, 59% of the participants ranked the e-learning communication efforts over the past two years above average. Nineteen percent (19%) of the participants had a poor to very poor understanding of the e-learning initiative. The data indicates communication efforts did not reach all employees involved prior to the e-learning initiative. Twenty-eight (28) participants ranked the communication as fair indicating that not all communications were received. This ranking of awareness of the initiative is less than an acceptable level.

*Research Question Two.* Did employees have the computer skills needed to navigate the curriculum? Survey question six asked the participants to select the rating that best describes their PC skills associated to learning in an e-learning environment.

The study collected the following responses:

Table 7

*Computer Skills*

Rating	No. of Respondents
Very Poor	17
Poor	18
Fair	51
Good	35
Very Good	7

Based on this data, 68% of the participants ranked their PC skills above average. The high percentage level of PC skills indicates participants are experienced with a computer environment. Participant's PC skills are an indication of an acceptable skill level for e-learning environments to exist.

*Research Question Three.* Did employees have difficulties navigating through the e-learning layout and process? Example: Access, sign-up, completing the course and skill builders. Survey questions three and four asked the participants to select the rating that best describes the:

- E-learning process.
- Layout of the e-learning courses.

The study collected the following responses:

Table 8

*E-learning Process*

Rating	No. of Respondents
Very Poor	0
Poor	5
Fair	42
Good	64
Very Good	18

Based on this data, 63% of the participants ranked the e-learning process above average. Data collected in question two indicated participants have high PC skills. Based on prior data, 85% of the participants ranked their PC skills above average. The high PC skills ranking compared to a lower process ranking of 64% is an indicator that participants found the process to be below standard.

Table 9

*E-learning Layout*

Rating	No. of Respondents
Very Poor	0
Poor	5
Fair	37
Good	72
Very Good	14



Based on this data, 67% of the participants ranked the e-learning layout above average. Based on prior data, 85% of the participants ranked their PC skills above average. The high PC skills ranking compared to a lower layout ranking of 67% is an indicator that additional efforts are needed in the area of layout of the courses, modules within the course, summary and skill builders. Additional efforts are recommended in determining if the low ranking is a result of the communication process for navigation or the actual course layout design.

*Research Question Four.* Did employees feel there was adequate support in place to sustain the adoption of computer-based learning? Survey question five asked the participants to select the rating that best describes their opinion toward adequate support available for learning to occur in an e-learning environment.

The study collected the following responses:

Table 10

*E-learning Support*

Rating	No. of Respondents
Very Poor	2
Poor	8
Fair	42
Good	54
Very Good	22

Based on this data, 59% fifty-nine percent of the participants ranked the e-learning support above average. The low ranking indicates employees did not feel the e-learning

initiative was adequately staffed with the needed support during the implementation. Introducing a learning environment that requires new or additional skills needs to be supported during the learning curve. The low ranking indicates the participants did not know whom to contact for support.

*Research Question Five.* Did employees have prior experience with computer-based training? Survey question two asked the participants to select the rating that best describes their prior experience with an e-learning environment.

The study collected the following responses:

Table 11

*E-learning Knowledge*

Rating	No. of Respondents
Very Poor	17
Poor	12
Fair	51
Good	35
Very Good	7

Based on this data, 32% of the participants ranked their level of experience with e-learning above average. The data gathered supports the fact e-learning is a new environment for many employees. Based on prior data collected on high PC skills and the low ranking on experience with e-learning, indicates participants have the skills needed for e-learning with minimal e-learning opportunities.

*Research Question Six.* Did employees feel e-learning would be an effective alternative to instructor lead training? Survey question seven asked the participants to select the rating that best describes their opinion of e-learning as an effective alternative to instructor led training based on the modules taken in the e-learning format.

The study collected the following responses:

Table 12

*E-learning: An Alternative*

Rating	No. of Respondents
Very Poor	3
Poor	12
Fair	34
Good	54
Very Good	25

Based on this data, 62% of the participants ranked e-learning above average as an effective alternate to instructor led classes. Data collected supporting prior questions indicates a high skill level for PC environments with low exposure to e-learning. Survey participants ranked e-learning above average as a learning alternative indicating an acceptance to an e-learning environment. For many employees the e-learning is a new learning alternative requiring education on all phases of implementation.

### *Personal Comments on E-Learning*

The study asked a final open-ended question to gather comments on the e-learning initiative: Do you have any comments you would like to make about the WPS e-learning initiative?

The comments from the study were categorized as follows:

*Comments In Support Of E-Learning.* Thirteen (13) participants commented in support of e-learning as an alternative to instructor led training. Comments were made on the costs savings, flexibility, and change of pace from traditional training environments. Participants enjoyed working at their own pace while others stated e-learning should be the up and coming approach to refresher training. Participants favored the opportunity to become familiarized with the new system prior to the instructor led classes.

*Comments on Functionality.* Multiple functionality comments stated the speed of the modules are slow and tedious. Participants commented on the three step approach of demonstration, walk through and practice as being too in-depth, boring and repetitive. Data indicates multiple participants worked faster than the speed of the modules causing the functionality to error out. This issue became frustrating to participants and multiple statements on the need to correct the error issue prior to future e-learning initiatives. The limited functionality of the system not being able to display a correct answer after an incorrect error was not acceptable by many participants. Multiple comments from participants on correct answers not displaying a hurdle in their learning experience. Multiple comments were documented on support or lack of it during the initiative. Participants want to have a contact person at all times during the initiative. The e-learning

format constrains how lessons are taught with limited functionality with all mouse clicks. Participants would like to utilize window functionality; enter keys, control keys, right mouse clicks.

*Comments on the E-Learning Environment.* Data indicates the environment for e-learning is a hurdle to learn in for many employees. Participants indicated the work environment is busy, noisy, and congested causing it hard to concentrate on the voice during the lesson. Multiple comments are made on priority of the e-learning initiative against the priority of customer service. Participants are confused with direction from leadership in relation to priority. Multiple comments stating a quiet place away from the work area is needed to obtain a full learning opportunity. The learning experience becomes frustrating when employees are interrupted with work tasks. Time commitments are documented as a large hurdle. Many employees were not given assigned quiet times to complete the lessons required. Field employees find the length of the lessons too long because they are not used to sitting at a desk for hours at a time.

*Comments on E-Learning Materials.* Data collected on the materials indicate efforts are needed for future e-learning initiatives. Comments stated materials should be reviewed more before the e-learning initiative was implemented. Multiple comments were documented on the speed of the materials stating the modules slow and boring. One participant indicated; some courses were so slow it was geared toward a younger child in school, second - third grade. Multiple comments were made on the wording of the test questions. Participants stated the questions were not covered in the materials. Comments were made on true or false questions being correct either way the question was answered. Participants commented on the questions being stated as a trick question and no reason to

have pass / fail tests. Multiple comments were documented on the format being boring and hard to stay on track. Participants commented on the voice in the audio as being monotone and hard to keep the participants attention. Participants felt they would have learned more if their attention span were greater. Data indicated the tutorial should have been a classroom training. Multiple participants commented on limited support during the initiative and no opportunity to ask questions. Comments were documented on the need for reference materials during the initiative.

*Comments on E-Learning Support.* Multiple comments are documented on the need for support during the e-learning initiative. Multiple comments were documented on no opportunity to ask questions.

*Comments on E-Learning Communications.* Data indicates communication efforts will need to be addressed. Participants documented they were not notified on the e-learning initiative and felt leadership should have provided the information. Participants stated they were not fully informed on what to expect before the initiative was implemented. Navigation is documented as needing to be communicated in a different format than e-mail.

*Comments in General about E-Learning.* Data collected in general terms for e-learning is listed as follows:

- Open-cIS is the only e-learning experience.
- Courses assigned taught tasks. That I am not authorized to do in my position.
- I would like to get training on how to set up/design or gain access to e-learning tools and courses.
- It is easier to make time available in my schedule for regular classroom

training. But e-learning seems to be a more efficient way. (Don't have to travel).

- It does add a level of complexity on the administrative end of learning/training but this should be offset with ease to participants.
- Instructor led courses are much better to use for learning. Especially for the Emerging Leaders classes and Excel to allow for interaction with instructor and others in the company.

I find it to be a good way to learn new skills, without having to travel to Green Bay.

## Chapter V: Summary, Conclusions, and Recommendations

The final chapter of this study begins with a summary section reviewing the study. The second purpose of this chapter will report the conclusions and recommendations that are gathered from analyzing and interpreting the findings of the research data.

### *Restatement of the Problem*

The purpose of this study is to determine the perceptions WPS employees have toward computer-based training and their readiness to accept the technology change. The study results identify the areas of focus for future efforts in delivering computer-based training.

### *Research Design*

Participants of a computer-based training initiative were given a survey instrument to determine the perceptions WPS employees have toward computer-based training and their readiness to accept the technology change. The participants were chosen from a random selection and mailed a survey instrument tool. The participants were given a four-day window to return the completed survey to the researcher through company mail. The survey had seven questions developed around the research questions of this study. A final eighth survey question asked the participants if they had any comments they would like to make about the WPS e-learning initiative.

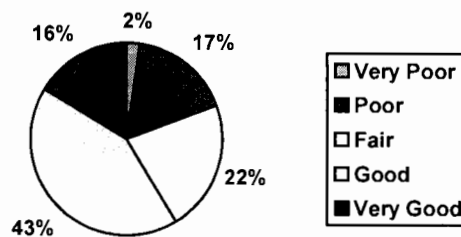
The research design consists of a Likert scale where the participants circled a value given to each survey question. The descriptive values placed on each question were compiled to determine the common perception toward the initiate of introducing



computer-based learning. A ranking order using the mean will determine the results of this study.

### *Conclusions and Recommendations*

*Research Question One.* Did communication efforts make the employees aware of the initiative to implement computer-based training? Based on the survey data, fifty-nine percent of the participants ranked the e-learning communication efforts over the past two years above average.



*Figure 1. Communication*

Based on the data it can be concluded that 19% of the participants had a poor to very poor understanding of the e-learning initiative. Future initiatives will need to have a communication plan in effect to deliver standard communications throughout the company at all levels of employment. Employees need to be exposed to the product and witness commitment from leadership.

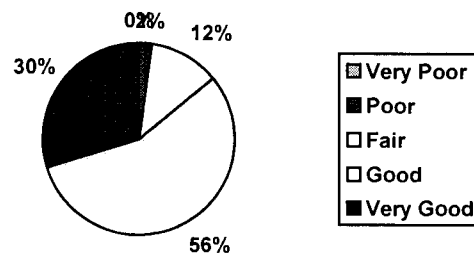
Based on the conclusions, it is recommended the following communication efforts be implemented for future e-learning initiatives:

1. Weekly demonstrations at department meetings
  - E-learning Sign in Process

- E-learning Course Layout
  - Question and answer sessions at department meetings
2. Monthly Company Communications Updates
    - Administered through company mail to each employee.
  3. Company Power-Net Sight (Home-page)
    - Open Forum for question and answers
      - Replies updated daily

*Research Question Two.* Did employees have the computer skills needed to navigate the curriculum?

Based on the survey data, 30% of the participants had very good PC skills associated to learning in an e-learning environment. Fifty-six percent (56%) felt they have good PC skills and 12% of the participants indicated they had fair PC skills associated with learning in an e-learning environment. Two percent (2%) ranked their PC skills as being below fair.



*Figure 2.* Computer Skills

Based on the data it can be concluded that 68% of the participants ranked their PC skills above average. It is noted that efforts to determine employees PC skills and

requiring a computer skills test prior to implementation of the e-learning initiative addressed the issue. It is recommended that employee computer skills testing be continued with future e-learning initiatives providing the opportunity for employees to seek additional computer skills training if needed.

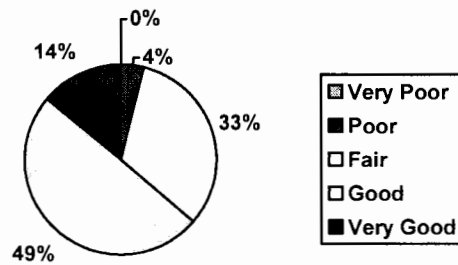
Based on the conclusions, it is recommended the following skill test efforts be implemented for future e-learning initiatives:

1. Prerequisite computer skills tests for all employees prior to the start of e-learning.
2. Employee test results communicated to employees' leader.
3. Additional computer training provided to all employees with non passing computer skills testing scores.

*Research Question Three.* Did employees have difficulties navigating through the e-learning layout and process? Example: Access, sign-up, completing the course and skill builders.

The survey instrument captured this data by asking the participant two separate questions. The first question asked the participants to rank the e-learning process of access, sign-up, completing the course and skill builders.

Based on the survey data, 14% of the participants ranked the e-learning process very good. Forty-nine percent (49%) ranked the e-learning process good and 33% of the participants ranked the process fair. Four percent (4%) ranked the process below fair.



*Figure 3. E-learning Process*

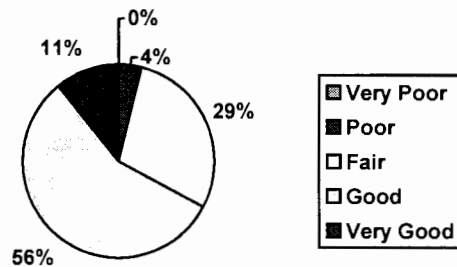
Based on the data it can be concluded that 63% of the participants ranked the e-learning process above average. It is recommended that additional efforts be made on the communication process of navigation in an e-learning environment. Based on prior question data, 85% of the participants ranked their PC skills above average. The high PC skills ranking compared to a lower process ranking of 64% is an indicator that additional communication efforts are needed in the area of access, sign-up, completing the course and skill builders.

Based on the conclusions, it is recommended the following efforts be implemented for future e-learning initiatives:

1. Instructor led: Navigation course be a prerequisite for e-learning
  - Access
  - Sign-up
  - Course completion
  - Skill Builders

The second question in this category asked the participants to rank the layout of the e-learning course, modules within the course, summary and skill builders.

Based on the survey data, 11% of the participants ranked the e-learning layout very good. Fifty-six percent (56%) ranked the e-learning layout good and 29% of the participants ranked the process fair. Four percent (4%) ranked the layout below fair.



*Figure 4. E-learning Layout*

Based on the data it can be concluded that 67% of the participants ranked the e-learning layout above average. It is recommended that additional efforts be made on the communication process of the layout. Based on prior data, 85% of the participants ranked their PC skills above average. The high PC skills ranking compared to a lower layout ranking of 67% is an indicator that additional efforts are needed in the area of layout of the courses, modules within the course, summary and skill builders. Additional efforts are recommended in determining if the low ranking is a result of the communication process for navigation or the actual course layout design.

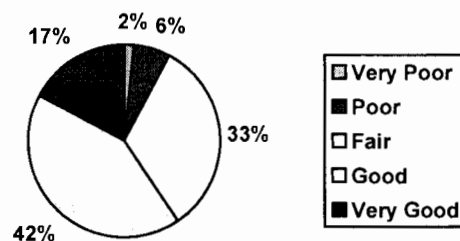
Based on the conclusions, it is recommended the following efforts be implemented for future e-learning initiatives:

1. Instructor led: Material Navigation Course, part two, of the Navigation Prerequisite Course for e-learning.

- Course Layout
- Summary
- Skill Builders

*Research Question Four.* Did employees feel there was adequate support in place to sustain the adoption of computer-based learning?

Based on the survey data, 17% of the participants rated support as very good during the initiative. Forty-two percent (42%) ranked support to be good and 33% of the participants ranked a fair amount of support during the initiative. Eight percent (8%) rated the support below fair.



*Figure 5.* E-learning Support

Based on the data it can be concluded 59% of the participants ranked the e-learning support above average. It is recommended that additional efforts be made on the support process for future initiatives with e-learning. A recommendation of additional support be provided by trained employees in the departments. Co-workers could utilize their expertise throughout the initiative. Questions could be answered by a help-desk employee providing support on navigating through the courses, modules, summaries and skill builders. Learning labs would be beneficial where employees can practice the skills

learned throughout the learning initiative with a training database that is refreshed or reset nightly.

Based on the conclusions, it is recommended the following efforts be implemented for future e-learning initiatives:

1. Additional Power-Users (Trained Employees) in each department
2. Trained fulltime dedicated help desk employee
3. Learning Labs
  - Assigned Power user per lab
  - Determined lab hours providing Power-user support
  - Lab hours with Power-user support posted on the lab door

*Research Question Five.* Did employees have prior experience with computer-based training?

Based on the survey data 5% of the participants had very good prior experience with an e-learning environment. Twenty-seven percent (27%) had a good experience level with prior e-learning and 41% of the participants ranked a fair level of experience with an e-learning environment. Twenty seven percent (27%) ranked below fair.

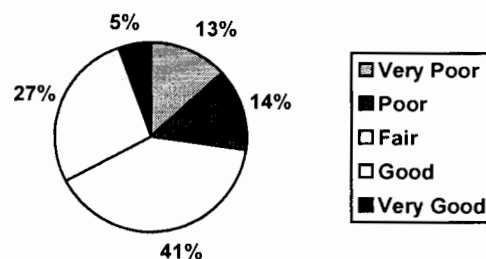


Figure 6. E-learning Knowledge

Based on the data it can be concluded 32% of the participants ranked their level of experience with e-learning above average. The data gathered supports the fact e-learning is a new environment for many employees. It is recommended that a communication effort continue to address the initiative as a new opportunity to provide training in a non-traditional environment. It is recommended that communication channels continue to strive to educate the employees on the initiative and the benefits of blended learning. It is important that employees see and recognize support from management that e-learning is a valuable tool and part of the company initiative in continued efforts to deliver quality training. It is recommended that employees continue to be exposed to pc skills testing prior to exposure of all e-learning environments.

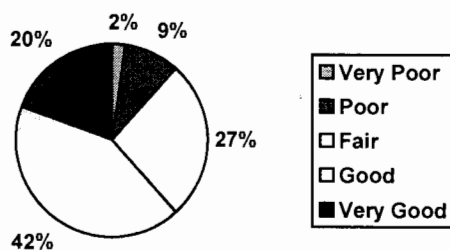
Based on the conclusions, it is recommended the following efforts be implemented for future e-learning initiatives:

1. Company communication on past e-learning initiatives encouraging exposure to e-learning creating employee buy in and acceptance
  - Benefits of e-learning stated
    - Just in time training
    - Taken on employees time schedule
    - Productive down time
  - Costs savings stated
    - Minimal travel
    - Reusable materials
    - Travel overtime reduced



*Research Question Six.* Did employees feel e-learning would be an effective alternative to instructor led training?

Based on the survey data 20% of the participants ranked e-learning very good as an effective alternative to instructor lead classes. Forty-two percent (42%) ranked e-learning good as an effective alternative to instructor led classes and 27% of the participants ranked a e-learning fair as an alternative to instructor led classes. Eleven percent (11%) ranked e-learning below fair as an alternative to instructor led training.



*Figure 7.* E-learning: An Alternative

Based on the data it can be concluded 62% of the participants ranked e-learning above average as an effective alternate to instructor led classes. It is recommended that communication efforts continue to educate employees on the many benefits of e-learning; cost savings, employee accessibility to multiple courses, availability of multiple courses, productive employee downtime, just in time training and refresher training. Additional efforts are recommended in creating a life-long learning environment where e-learning can be utilized as the tool to educate and train employees in different career opportunities. Partnering with an employee's leader can create a path to achieve

educational goals of other areas within the company. Employees can utilize online classes on their time, when it is convenient for the employee.

Based on the conclusions, it is recommended the following efforts be implemented for future e-learning initiatives:

1. Quarterly Company Communication on E-learning initiatives
2. Quarterly Company Communication on E-learning courses available
3. Company communication on all new courses available
4. Refresher training created and offered to all employees when deemed suitable for e-learning
5. Leadership communicate the costs savings and benefits at department meetings
6. Leadership support and encourage use of e-learning labs
7. Leadership partnership with employee utilizing e-learning classes available as a tool for career growth

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Appendix A

Cover Letter

April 11, 2005

Bonnie Maes  
429-6563  
CIS Baeten

### E-Learning Survey

You have been randomly selected to participate in a survey regarding the WPS on-line e-learning initiative. The following questions and answers will help clarify any concerns you might have.

*What does random selection mean?*

The names of employees who participated in the e-learning initiative are put in alphabetical order. Randomly, every third name on the list is being sent this survey.

*Will my name be associated with the results?*

No names will be listed. The data will be compiled to provide a percentage or measure of the question.

*What is the reason for the survey?*

We are trying to determine what went well and what could be done differently with future computer based courses.

*Is it required to participate?*

Although it is not a requirement, it is asked that you take a few minutes to fill out the survey. The results will provide the team with a better understanding of the opinions employees have toward the e-learning initiative.

*A follow-up call or email will be sent as a gentle reminder for the surveys that are not returned. Thank-you for supporting the data collection, your input is greatly appreciated.*

*Bonnie Maes*

Appendix B  
Survey Instrument

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

### E-Learning Survey

A range of opinions exists regarding e-learning. The data collected from this survey will provide a better understanding of the employees' perception toward the initiative of delivering training in an e-learning format.

Please respond to each question and return the completed survey by:

**April 14, 2005**

Please circle the appropriate category for the following:

AGE:

Under 25    26 – 35    36 – 45    46 – 55    56+

**Gender:**                      **Position:**                      **Years of Service:**

Male / Female              Field / Office              1-10    11-20    21-Over

Education:

High School              High School plus 1-2 yrs    High School plus 3-6 yrs

Refer to the following rating scale and circle the rating that best describes your opinion for each question:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Very Poor	Poor	Fair	Good	Very Good

1. Select the rating that best describes your awareness during the past two years of the initiative to implement computer-based training.

1   2   3   4   5

2. Select the rating that best describes your prior experience with an e-learning environment.

1   2   3   4   5



3. Select the rating that best describes the e-learning process.

Example: Access, sign-up, completing the course and Skill Builders.

1 2 3 4 5

4. Select the rating that best describes the layout of the e-learning courses.

Example: Course, modules within the course, summary, Skill builders.

1 2 3 4 5

*Please Continue on the back of the survey.*

5. Select the rating that best describes your opinion toward adequate support available for learning to occur in an e-learning environment.

1 2 3 4 5

6. Select the rating that best describes your PC skills associated to learning in an e-learning environment.

1 2 3 4 5

7. Select the rating that best describes your opinion of e-learning as an effective alternative to instructor led training based on the modules taken in the e-learning format.

1 2 3 4 5

8. Do you have any comments you would like to make about the WPS E-learning initiative?

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I understand that by completing this survey the information is being used in a manner that does not require an identifier and confidentiality is guaranteed. No names will be used in the compiled survey results. The survey results are intended for the sole purpose of better understanding the employees' perception toward e-learning and the company initiative to implement a portion of the training in a computer based format. Thank you for your support in this initiative of measure.

Note: The researcher, Bonnie Maes, should be the first point of contact for any questions or concerns about participating in this research (920-429-6563).