by

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ABSTRACT

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An Analysis of Onlin	ne Training for Season	al Employees	
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Technology has enabled small businesses to make the transition from traditional classroom training to online training. This same technology has enabled employees to have access to just-in-time training that fits within their time restraints and provides them with a learner controlled environment. The purpose of this study is to analyze one small northern Wisconsin business with seasonal employees geographically dispersed throughout eleven states that made the transition from traditional classroom training to online training. The study evaluates the effectiveness of the online training, employee's satisfaction with the online training and the cost savings as a result of online training. A survey instrument was developed to collect data from the seasonal employees as they completed the online training.

To make a successful transition from traditional classroom training to online training, a small business must look beyond the initial cost savings and find the value of retaining a skilled seasonal workforce that can meet the current and future business goals.

Acknowledgments

The achievement of receiving my graduate degree is shared with my husband, Stuart Gehler. His love, support, encouragement and prayers sustained me through the many obstacles encountered in my efforts to receive a graduate degree. He is my champion, hero and best friend.

As non-traditional students who both received undergrad degrees after turning forty, my husband and I are proud to be first generation college graduates and alumni of UW-STOUT.

My research advisor, Dr. Michael Galloy, deserves special recognition for his guidance and support. His optimism and gift for providing just the right feedback to ignite the desire to excel has been remarkable and greatly appreciated.

TABLE OF CONTENTS

	Page
Abstract	ii
List of Tables	vii
Chapter I: Introduction	1
Statement of the Problem	5
Purpose of the Study	5
Research Questions.	5
Significance of the Study	6
Limitations of the Study	6
Assumptions of the Study	6
Definition of Terms	7
Chapter II: Literature Review	8
Effectiveness of Online Training vs Traditional Classroom Training	8
Employee's Acceptance of Online Training vs Traditional Classroom Training	10
Cost Effectiveness of Online Training vs Traditional Classroom Training	12
Summary	14
Chapter III: Methodology	15
Population	15
Instrumentation	15
Validation of Survey Document	16
Data Collection	16
Data Analysis	17

Chapter IV: Results	18
Demographic Data	18
Demographic Summary	21
Research Question One Data	21
Research Question Two Data	23
Research Question Three Data	25
Chapter V: Summary, Conclusions and Recommendations	27
Research Questions	29
Research Design	29
Conclusions and Recommendations	30
Additional Recommendations	33
References	34
Appendix A: Survey Instrument	36

List of Tables

Table 1: Position Demographic Data	18
Table 2: Age Demographic Data	19
Table 3: Age Demographic Data	20
Table 4: Years of Service Demographic Data	20
Table 5: Years of Service Demographic Data	21
Table 6: Computer Access	22
Table 7: Online Training Length	22
Table 8: Comfort Level Prior to Completing Online Training	23
Table 9: Comfort Level After Completing Online Training	24
Table 10: Comments from Respondents	24
Table 11: Traditional Classroom Training Costs	25
Table 12: Online Training Costs	26

Chapter I: Introduction

Company XYZ, is a privately owned professional nursing consulting business that, over the past decade, has provided four primary occupational health services to businesses throughout the Midwest. The company has one facility located in northwestern Wisconsin and employs fifteen full-time employees year round. The four primary occupational health services Company XYZ provides are on-site occupational health services, health risk assessments, drug and alcohol screenings and mass influenza immunizations.

On-site occupational health services focus on enhancing an organization's productivity through an integrated offering of worksite medical care and health management programs. The on-site occupational health services are delivered by a Company XYZ Occupational Health Nurse who works at the client's facility. Health Risk Assessments is a comprehensive tool which provides to an organization aggregate data gathered from their employee's self-reported health status information, personal and family medical history, and biometric data. Health Risk Assessments are delivered by Company XYZ Registered Nurse's who come to the client's facility, collect the health data and meet individually with each participating employee to review results. Drug and alcohol screening services are available to employers for pre-employment, post-accident, and for employees regulated by the Department of Transportation. As all drug and alcohol screening are conducted at the Company XYZ facility, these services are limited to a geographical area encompassing three counties. All services are provided throughout the year with the exception of the mass influenza immunizations which is the focus of this field problem.

In the last quarter of each year Company XYZ employs approximately 225 to 275 new and returning seasonal employees to administer flu shots during flu shot clinics at drugstores, supermarkets, community centers, nursing homes and businesses in Wisconsin, Minnesota, Iowa, Illinois, South Dakota, North Dakota, Nebraska, Missouri, Michigan, Kansas and Arizona. Seasonal employees from these eleven states fall into two categories; Registered Nurses and Registration Clerks. Due to changes in nursing protocol and insurance paperwork, all new and returning seasonal employees must be trained each year prior to their first flu shot clinic. The training delivered included the following:

- Orientation to Company history of company, services provided and geographic areas served.
- 2. Bloodborne Pathogen Exposure designed to provide a basic understanding of bloodborne pathogens, common modes of their transmission, and method of preventions.
- Flu Paperwork detailed information provided for completing consent forms and documenting vaccine lot data.
- 4. Preparing for a Flu Clinic specific instructions on the physical set-up of the clinic and ensuring all needed forms are available.
- Medicare Part B and/or Insurance detailed information and instructions for each clinic concerning its specific insurance coverage and the information necessary for proper reimbursement.

6. RN Protocol – policy and procedures for RN's concerning the number of syringes to prepare prior to clinics, the amount of vaccine for each syringe, the use of protective clothing, and how to deal with any vaccine reactions.

The method of training new and returning seasonal employees involved staggering the start dates of each states flu shot clinics to allow the President of the company, a Registered Nurse, and experienced occupational health nurses to travel to each state and train the local RN's and clerk's within hours of an actual flu shot clinic. The training was delivered similar to traditional classroom training with two to six seasonal employees participating. The amount of time delivering the training, which consisted primarily of reviewing the training manual, to each seasonal employee group was dependent on the time available which could vary greatly from one training session to the next. The training lacked in consistency of delivery and material reviewed. Questions were answered if time permitted. Evaluations were not provided to the seasonal employees to evaluate the training. This last minute delivery of the training was a cause of great frustration to seasonal employees. Newly hired seasonal employees would become increasingly nervous and uncomfortable about the upcoming flu season as they did not know what was expected of them and would not learn of the expectations and standards until just prior to their first flu shot clinic. Returning seasonal employees became frustrated with having to go through a complete training session when they only wanted to know what changed from the previous year.

The problems resulting from the training were numerous:

- Excessive travel expenses. Trainers were traveling throughout the eleven states for three weeks. Travel expenses included lodging, meals, mileage and meeting rooms for four trainers.
- 2. Tight schedules to meet. Trainers often were scheduled to provide training throughout each day from 5am through 8pm, Monday through Saturday, across a state or several states. Delays in arrival time often occurred due to travel delays, previous training clinics running long or difficulty finding the location.
- 3. Increased wages resulting from overtime for the occupational health nurses. All RN's, with the exception of the President, were hourly employees averaging \$30 an hour. Overtime hours for each nurse during the training weeks averaged approximately 30 hours. This resulted in approximately \$16,200 just in overtime expenses.
- 4. Seasonal employee frustration resulting from last minute training. After the flu shot clinic season ended, all seasonal employees would be contacted to inquire if they were returning the following year. At this time feedback was received concerning the frustrations with the last minute training and its effectiveness.
- 5. Wages and travel expenses for the seasonal employees to attend the training
 The organization wanted to increase their flu shot customer base and the number
 of flu shots given by 10% each year while decreasing expenses 15%. In reviewing
 expenses for the flu shot season and feedback from seasonal employees, it became

obvious that the previous method of delivering training would not enable the organization to meet their growth or cost reduction expectations. Online training was considered the most cost effective method of delivery and a pilot training module was introduced to the full-time staff for their review and evaluation.

Statement of the Problem

The focus of the field problem is to analyze the implementation of online training for Company XYZ's new and returning seasonal employees. Will the implementing of online training for seasonal employees meet the company's cost goals and employee satisfaction expectations?

Purpose of the Study

Research Questions

The purpose of the study is to collect data from new and returning seasonal employees after they have completed the newly developed online training to determine if online training will meet their needs and expectations in addition to being cost effective.

The data collected for the three questions below will determine if implementing online training for seasonal employees will meet the company's cost goals and employee satisfaction expectations:

- 1. Will online training provide effective training for seasonal employees?
- 2. Will seasonal employees be satisfied with online training?
- 3. Will online training meet the company's cost goals?

Significance of the Study

The significance to Company XYZ is value:

- Financial value by eliminating all flu related training travel expenses and trainers wages. The approximate savings to the organization would be \$55,000 annually which is 10% of their total expenses.
- 2. Employee value by providing just-in-time training. Online training will meet the needs of our seasonal employees by providing training that meets their demands and allows them to be fully prepared to perform the responsibilities of the seasonal position and positively represent the organization. This will have a direct impact on future employee retention and customer satisfaction.

Limitations of the Study

The limitations of the study are:

- 1. The study is limited by the number of new and returning seasonal employees completing the online training.
- 2. The study does not provide data on the comparison of previous training and the newly developed online training methods.

Assumptions of the Study

The following are assumptions of this study:

- 1. Participants will honestly complete the survey.
- Seasonal employees will have a computer, email and internet access to complete the online training and online survey.
- 3. Seasonal employees will be able to follow written instructions distributed by email on how to access and use the online training.

Definition of Terms

Bloodborne Pathogen. Any pathogenic microorganisms that are present in human blood and can cause disease in humans.

Just-in-time training. On demand training.

Online training. Web or internet based training. Also referred to as e-Learning, online Learning.

Seasonal employees. Registered Nurses and Registration Assistants who work for Company XYZ each fall during the months of October and November.

Traditional classroom training. Instructor teaches a course to a room of learners.

Also referred to as instructor-led training and on-site training.

Chapter II: Review of Literature

Introduction

Lack of trained seasonal employees in a small business, such as Company XYZ, is a critical barrier to sustaining growth and is a challenge that requires rapid results and return on expectations.

Minton states that, "Most often, training is delivered in order to transfer some specific competencies to the individual employee. Presumably, these competencies are aligned with the overall goals of the organization" (2001, p.3).

The purpose of this study is to collect data from new and returning seasonal employees after they have completed the newly developed online training to determine if online training has met their needs and expectations in addition to being cost effective for Company XYZ.

Chapter Two will overview other studies done on the comparison between online training's effectiveness; acceptance by employee's and cost effectiveness versus traditional classroom training.

Effectiveness of Online Training versus Traditional Classroom Training

The August, 2000 study "Facts, Figures and Forces Behind e-Learning" compiled and prepared by LearnFrame, is an abridgement of documents from various investment companies that investigated e-Learning and anticipated it to be revolutionized by the internet. The investment companies involved were Merrill Lynch, Banc of American Securities, USbancorp – Piper Jaffray, SunTrust Equitable, WR Hambrecht + Co, Thomas Weisel Partners, and Dain Rauscher Inc. The study identifies the following benefits of e-learning compared to instructor-led training:

Learner controlled – technology has given the individual greater authority over the learning environment.

Self-Paced – an individual may proceed through a course or program as the information is full comprehended. Students can convert information to knowledge on their timetable.

Uniformity of Content – the information delivered can be consistent to all users, therefore reducing the possibility for misinterpretations.

Content Updated Quickly – Product and procedural changes can be updated and delivered in real-time. This increases the rate at which knowledge is acquired.

Higher Retention of content – Students have more control over their learning process leading to a 60% faster learning curve, compared to instructor-led training. Additionally, the average retention rate for an instructor-led class is only 58%, the more intensive e-learning experience enhances retention rate by 25-60%. (p. 11-12)

In addition to the study above, research indicated online training versus instructor-led training involves providing immediate and effective feedback. Wands and Le Blanc state in their article "Critical Success Factors: eLearning Solutions" based on research done by Dr. G. Cooper, that attempts at any interactive exercise, such as knowledge checks, should be given immediate and effective feedback (2001). In support of this statement, the LearnFrame study states that online training is less intimidating than instructor-led classes because employees completing online training can make mistakes without exposing themselves (2000).

Further research discusses the type of content more appropriate for online training. Minton states that e-learning is not the "silver bullet" for all training needs. She believes it is "inappropriate for complex manufacturing tasks and instruction in which collaboration is integral to the learning experience" (2000, p.3). Seligman adds to this theory with "e-learning is less appropriate to deliver behavioural-skills training" (2000, p.73). Aubuchron believes that "subjects that are 'concrete' in content are ideal for e-learning formats" (2005, p.33).

The research above indicates that online training can be more effective than traditional instructor-led training. However, in the development of online training critical factors such as the learner, course content, and assessment tools must be evaluated to ensure online training meets the needs of both the organization and employee.

Employee's acceptance of online training versus traditional classroom training.

Research by Wands and Le Blanc states, "Adults tend to learn better if they are motivated to learn in the first place. Motivation usually results from the learner recognising a need to learn, either by themselves or by way of explanation" (2001, p.2). This statement is supported by results from the Mayo Clinic who in 2003 had to meet a deadline for training all 50,000 employees on the federal Health Insurance Portability and Accountability Act (Fisher, 2005). Mayo offered employees the option of completing training through a classroom version or through an online course. Only one percent of all Mayo employees completing the training choose the classroom version.

Lim and Kim (2002-2003) take motivation a step further with their research, titled "Motivation and Learner Characteristics Affecting Online Learning and Learning Application". Their study assessed the effect of learner characteristics and motivation on

learner's application of learning during online instruction. Lim and Kim's study is very relevant to this researcher's study because the entire group of seasonal employees completing the online training are female. Their study involved 77 undergraduate students, 23 male and 54 female, who took an online course between 2000 and 2001 at a southwestern university. Their finding indicated that female students show significantly higher degree of learning than male students and explains the gender difference in online training:

Female students perceived the instructional quality of the course relatively better than male students.

Among several instructional factors, female students perceived some factors such as instructional effectiveness, previous learning experience, and the opportunity to practice learning as positively promoting factors for their learning. (p.429-430)

Seasonal employees may have other obligations such as full-time or part-time employment, community involvement and family commitments which limits their availability for attending the traditional classroom training. The LearnFrame study states that the barriers to training for working adults is lack of time, training not available at convenient times and the travel distance to the training location (2000). These barriers commonly associated with instructor-led training are eliminated with the offering of online training to employees.

Evans argues that online training can be perceived by employees as a "second-best" method of communication and can be counterproductive versus the face-to-face and personal contact provided by traditional instructor-led training (2001, p.342). The previous method of training seasonal employees did involve face-to-face communications

and limited personal contact, however, the quality of the communications did not meet the expectations of the seasonal employee, thus the purpose of this study.

Based on the research provided, employee's acceptance of online training versus traditional classroom training will involve their motivation for completing the training and applying the skills learned, their perception of the convenience of the online training, and any comparison between the online training and traditional classroom training.

Cost effectiveness of online training versus traditional classroom training.

A critical area of concern in evaluating online training is the cost of implementation and delivery versus traditional classroom training. Aubuchon's example of cost savings involves a face-to-face course on negotiation that costs \$1,200 per person to deliver. He states e-learning advocates believe the same course could be delivered online for \$99 per person. "Compared with face-to-face training – namely live classroom events – e-learning cut costs by 80 to 90 percent" (2005, p.33). Bartholomew weighs in with his research and states "To create an e-learning module is three times less expensive than it is to create an instructor-led class" (2005 p.35).

Khirallah confirms that e-learning can "shave time and money from the cost of educating employees and help them quickly learn new skills." She states that "companies using online training can see an average of 50% in time savings and 40% to 60% in cost savings compared with conventional classroom learning" (2000, p22).

Online training allows for up-to-date content changes to be made to training materials and for immediate access by employees versus the delays and extensive preparation costs associated with delivering content changes via classroom training. Minton's research involves travel costs and she states that "Implementing e-learning

promises substantial benefits for organizations: it will potentially eliminate corporate training travel budgets" (2000, p.2). Seligman confirms this theory with her statement of "Online training is much cheaper to use than classroom teaching after the cost of travel and accommodation has been built into the equation" (2000, p.72).

Webster's research discusses the attraction of online training for small businesses with his statements "What makes e-learning most attractive to corporations and small businesses is the potential economic advantage it provides over classroom learning.

According to Training Magazine, companies can save up to 70% when instituting e-learning courses" (2001, p.2).

Employee retention must also be considered in the cost effectiveness of online training. According to research, the cost to replace an employee can be 150% of their base salary (Murtagh, 2003). Online training can also increase employee retention through providing the right knowledge and tools for the seasonal employees to perform effectively (Minton, 2000).

As stated in Chapter One a primary purpose of this study is to determine if providing the seasonal employees with online training – the right knowledge and tools – will meet their needs and assist in their overall job satisfaction. The cost savings of retaining seasonal employees is critical to the success of delivering mass influenza immunization services.

Summary

As stated in Chapter One, the values listed below are significant to this study:

- Financial value by eliminating all flu related training travel expenses and trainers wages. The approximate savings to the organization would be \$55,000 annually which is 10% of their total expenses.
- 2. Employee value by providing just-in-time training. Online training will meet the needs of our seasonal employees by providing training that meets their demands and allows them to be fully prepared to perform the responsibilities of the seasonal position and positively represent the organization. This will have a direct impact on future employee retention and customer satisfaction.

Bernthal stated that the success of an organizations online training is based on evaluation of how well the online training met the agreed-upon expectations (2005).

Based on the studies presented in this chapter, the agreed-upon expectations of delivering training online to seasonal employees are realistic and obtainable.

Chapter III: Methodology

Introduction

The purpose of the study is to collect data from new and returning seasonal employees after they have completed the newly developed online training to determine if online training will meet their needs and expectations in addition to being cost effective. The following three research questions will determine if implementing online training for seasonal employees will meet the company's cost goals and employee satisfaction expectations:

- 1. Will online training provide effective training for seasonal employees?
- 2. Will seasonal employees be satisfied with online training?
- 3. Will online training meet the company's cost goals?

Population

The participants of this study are seasonal employees of Company XYZ who are geographically located in Wisconsin, Minnesota, Iowa, Illinois, South Dakota, North Dakota, Nebraska, Missouri, Michigan, Kansas and Arizona. The participants are Registered Nurses and Registration Clerks. Each seasonal employee who completed the online training had the opportunity to voluntarily complete the survey.

Instrumentation

A survey was created to capture information that could be analyzed to determine the effectiveness of the online training completed by seasonal employees. The eight question survey included seven close-ended, nominal scale and one open-ended question using qualitative, interval, and ordinal scale responses.

The survey gathered data about the seasonal employee's demographics such as length of service with the organization, age, position within organization, computer access and perceptions prior to completing the training and after completing the training. The open-ended question, which is also the last question, was intended to gather data on the seasonal employee's opinion on using online training.

Validation of Survey Document

The survey instrument was reviewed by the President and Information

Technology Coordinator of Company XYZ prior to being administered to the pilot

participants. The President, also the founder of Company XYZ, has delivered training to
seasonal employees since 1995 and is an expert on the seasonal training needs. The

Information Technology Coordinator provided validation through ensuring the survey
instrument would meet the security and confidentiality restrictions of Company XYZ.

The pilot participants, comprising year-round employees of Company XYZ who had
previously participated in seasonal training, validated the survey by completing the online
training and survey questions. This allowed the researcher to review data collected and
ensure accurate conclusions could be determined.

Data Collection

Seasonal employees had their own login and password to Company XYZ's secure website. Participants could select the online training module, complete the training and submit their test results. Upon submission of their test results, participants were identified so the completion of their training could be recorded. Participants who chose to voluntarily complete the online survey had those results submitted to the Company XYZ's Information Technology Coordinator. The IT Coordinator would then forward all

survey results to the researcher with no reference to the participant's name, email address or other identifiers.

Data Analysis

The raw data from the survey question responses will be compiled by the researcher to determine the common perception and preferences of the seasonal employee to the online training. The responses will be entered into an Access database and the percentage of responses for questions 1 through 7 will be calculated. Responses for question 8, which is an open-ended question seeking feedback, will be compiled in a single list for review and placement in categories relating to research objectives.

Chapter IV: Results

Results

The purpose of this study is to determine if implementing online training for seasonal employees will meet the company's cost goals and employee satisfaction expectations. Participants of the survey completed the online training prior to voluntarily completing the online survey. Two hundred and forty-three (243) seasonal employees completed the online training and 203 completed the online survey.

Demographic Information

Data was collected from survey questions one, two and three to determine the following demographics: age, position and years of service. The study gathered data from subjects ranging in age from 18 years of age to over 66 years. Gender was not used in the data collection as all seasonal employees are female.

The study indicates that 52% of the survey participants are Registered Nurses.

Table 1

Position Demographic Data

Position	No. of Respondents	
Registered Nurses	107	
Registration Assistants	96	

The data results indicate that 53% of the responding Registered Nurses and 62% of the responding Registration Assistants are in the 51 to 66+ year age group.

Table 2

Age Demographic Data

Age	Registered Nurses	
3 – 25	6	
5 – 35	9	
-40	5	
- 45	18	
- 50	12	
- 55	27	
- 60	12	
- 65	12	
+	6	

Table 3

Age Demographic Data

Age	Registration Assistants	
8-25	5	
6-35	8	
36 – 40	7	
41 – 45	10	
46 – 50	6	
1 – 55	20	
56 – 60	15	
51 – 65	15	
66+	10	

The study indicates the 75% of the Registered Nurse respondents are new seasonal employees.

Table 4

Years of Service Demographic Data

Years of Service	Registered Nurses		
First year	81		
Second year	8		
Third Year	10		
Fourth Year	3		
Five years or more	5		

The data results indicate that 83% of the Registration Assistant respondents are new seasonal employees.

Table 5

Years of Service Demographic Data

Years of Service	Registration Assistants		
First year	80		
Second year	8		
Third Year	4		
Fourth Year	3		
Five years or more	1		

The study indicates that 79% of total respondents are new seasonal employees.

*Demographic Summary**

Based on the demographic data collected 53% of the responding Registered Nurses and 62% of the responding Registration Assistants are in the 51 to 66+ year age group. Fifty-two percent (52%) of the Registered Nurses respondents and 83% of the Registration Clerk respondents are new seasonal employees. This makes new seasonal employees the largest representation in the years of service demographic with 79%. Research Questions

The survey collected data relating to the three research questions for this study.

The research question and data collected are as follows:

Research Question One. Will online training provide effective training for seasonal employees? Survey question four asked the participants to indicate the computer

they were using to complete the online training and survey question five asked how much time was required for the online training.

The study collected the following responses:

Table 6

Computer Access

Registered Nurses	Registration Assistants
83	76
12	13
5	7
6	0
1	0
	83 12 5

Table 7

Online Training Length

	Registered Nurses	Registration Assistants	
Less than 1 hour	28	34	
1.5 hours	26	25	
2 hours	25	15	
2.5 hours	9	10	
3 hours	12	4	
3.5 hours	4	4	
4+ hours	3	4	

Based on this data, 90% of the participants accessed the online training through their home or work computer. Seventy-five percent of the participants completed the online training in two hours or less.

Research Question Two. Will seasonal employees be satisfied with online training? Survey questions six and seven asks the participants to rate their comfort level prior to and after completing the online training. Survey question eight asks for participants to provide comments on using online training.

The study collected the following responses:

Table 8

Comfort Level Prior to Completing Online Training

	Registered Nurses	Registration Assistants	
Completely Comfortable	39	33	
Small Amount of Anxiety	61	41	
Worried But Optimistic	7	20	
Very Concerned	1	2	

Table 9

Comfort Level After Completing Online Training

	Registered Nurses	Registration Assistants
Completely Comfortable	47	33
Easier Than I Thought	36	40
Small Amount of Frustration	24	21
Very Frustrated	0	2
Will Never Do Again	0	2

Table 10

Comments from Respondents

Comment Category	Number of Respondents			
Satisfied with Online Training	108			
Dissatisfied with Online Training	20			
Access Problems	3			

Based on the data, 35% of the total respondents were completely comfortable prior to completing online training and 50% had a small amount of anxiety. After completing the training, 39% were completely comfortable with the online training and 37% believed it was easier than they original thought. Seventy-two of 203 survey participants did not provide comments. Based on the comment data, 82% of respondents were satisfied with the online training.

Research Question Three. Will online training meet the company's cost goals?

Training costs for the previous year were compiled and compared to the costs of delivering the online training to seasonal employees.

The study collected the following responses:

Table 11

Traditional Classroom Training Costs

	Costs		
Wages with Overtime for Four Trainers	\$30,600		
Trainer Mileage	\$ 1,950		
Trainer Meals and Lodging	\$ 4,000		
Seasonal Employees Mileage	\$ 9,500		
Seasonal Employees Meals and Lodging	\$12,150		
Training wages to Registered Nurses	\$12,300		
Training wages to Registration Assistants	\$ 6,000		
Meeting Rooms	\$ 1,500		
Total Expenses	\$78,000		

Table 12
Online Training Costs

	Costs
Training wages to Registered Nurses	\$ 6,150
Training wages to Registration Assistants	\$ 3,000
IT Coordinator Wages (development & implementation)	\$ 9,500
Total Expenses	\$18,650

The data indicates the development and implementation of online training for seasonal employees was a 76% cost savings over the traditional method of classroom training.

Chapter V: Summary, Conclusions and Recommendations

This chapter will provide a summary of the study and will report the conclusions and recommendations resulting from the analysis and interpretation of the research data.

Restatement of the Problem

Will the implementing of online training for seasonal employees meet the company's cost goals and employee satisfaction expectations?

Purpose of the Study

The purpose of the study was to collect data from new and returning seasonal employees after they have completed the newly developed online training to determine if online training would meet their expectations and needs in addition to being cost effective compared to the traditional method of classroom training.

Research Questions

Chapter Two provided an overview of other studies done on the comparison of online training's effectiveness; acceptance by employee's and cost effectiveness versus traditional classroom training.

Will online training provide effective training for seasonal employees?

In the study "Facts, Figures and Forces Behind e-Learning" by LearnFrame, two benefits of online training versus classroom training are technology that gives the individual greater authority over the learning environment and the ability for an individual to proceed through a course as the information is fully comprehended. This study also states that online training can be less intimidating than classroom training because employees completing online training can make mistakes without exposing themselves (2000).

Availability and easy access to a computer is critical to providing seasonal employees with greater control over their learning environment. The ability to study, review and complete knowledge checks at a pace that allows for maximum learning will ensure that seasonal employees are trained effectively to meet their needs, the company's needs and the customers needs.

Will seasonal employees be satisfied with online training?

Lim and Kim's study, important to this researchers study because all current seasonal employees are female, found that female students perceived the opportunity to practice learning as a positive factor of their learning (2002-2003). Wands and Le Blanc stated that, "Adults tend to learn better if they are motivated to learn in the first place" (2001, p.2). The ability to complete the online training and review as needed allows the seasonal employee to practice what they have learned before applying their knowledge. One motivation for the seasonal employee to learn is the requirement that they must complete the training prior to their first influenza clinic.

LearnFrame's study states that the barriers to training for working adults is lack of time, training not available at convenient times and the travel distance to the training location (2000). As seasonal employees have other obligations such as full-time or part-time employment, community involvement and family commitment, their motivation to learn may be equal to the value they place on the convenience of the just-in-time training.

Evans argues that online training can be perceived by employees as a "second-best" method of communication and can be counterproductive versus the face-to-face and personal contact provided by traditional instructor-led training (2001, p.342). Accessing

the seasonal employee's comfort level prior to and after the online training will assist in determining if they perceive it as "second-best".

Will online training meet the company's cost goals?

The company's goal is to eliminate all travel related expenses for the mass influenza immunization training. Research found that this goal is reasonable and obtainable.

The attraction of online training for small businesses is addressed by Webster's research. He states this attraction for small businesses is the potential economic advantage that online training provides over classroom learning (2001).

Aubuchon states that online training can cut costs by 80 to 90 percent (2005).

Bartholemew believes that "to create an e-learning module is three times less expensive than it is to create an instructor-led class" (2005, p.35).

Minton states that "Implementing e-learning promises substantial benefits for organizations: it will potentially eliminate corporate training travel budgets" (2000, p.2). Seligman supports this theory, "Online training is much cheaper to use than classroom teaching after the cost of travel and accommodation has been built into the equation" (2000, p.72).

Research Design

Seasonal employees geographically located in Wisconsin, Minnesota, Iowa,
Illinois, South Dakota, North Dakota, Nebraska, Missouri, Michigan, Kansas and
Arizona, voluntarily completed a survey to determine the effectiveness of online training.
The seasonal employees were Registered Nurses and Registration Clerks. The survey
gathered data about the seasonal employee's demographics such as length of service with

the organization, age, position within organization, computer access and perceptions prior to completing the training and after completing the training. An open-ended question, gathered data on the seasonal employee's opinion on using online training.

The research design consisted of an eight question survey which included seven close-ended, nominal scale and one open-ended question using qualitative, interval, and ordinal scale responses. The raw data was compiled to determine the common perception and preferences of the seasonal employee to the online training.

Conclusions and Recommendations

Research Question One. Will online training provide effective training for seasonal employees? This research question compares the online training to the traditional classroom training and determines the most effective method of training for seasonal employees. Effective is defined as easy access to the training and allowing employees to complete the training at their own pace. Based on survey data, 90% of the participants accessed the online training through their home or work computer and 75% of the participants completed the online training in two hours or less.

Based on the data it can be concluded that 10% of the participants did not have access to a computer to complete the online training in a manner which would have allowed them convenience and just-in-time training. Also it can be concluded that 25% of the participants required more than two hours to complete the online training.

Based on the conclusions, it is recommended that the following efforts be implemented for future online training of seasonal employees:

 Recruitment of seasonal employees must include screening for home or work computer access. If online training is a requirement for employment, every

- applicant must be made aware of the requirement and must have easy accessibility to a computer which will allow them to have convenient just-in-time training.
- Distribution of hard-copy manuals to all seasonal employees prior to their online training. Hard-copy manuals can be used as a resource tool for review and reference.

Research Question Two. Will seasonal employees be satisfied with online training? This research question provides information on the seasonal employees comfort level with online training prior to completing the training and again after completing the training. Satisfied is defined as the categories "Completely Comfortable" and "Easier Than I Thought" which the employees can select after completing the online training.

Based on the survey data, 35% of the total respondents perceived themselves as being comfortable with the online training prior to completing it and 50% had a small amount of anxiety. After completing the training, 39% were completely comfortable with the online training and 37% believed it was easier than they originally thought.

Seventy-two of the 203 survey participants did not provide comments for survey question eight. Based on the survey comment data provided by 131 respondents, 82% of respondents were satisfied with the online training.

Based on the data it can be concluded that 65% of the total respondents were not completely comfortable prior to starting the online training and 76% were satisfied after completing the online training. It can also be concluded that after completing the online training 22% of the participants were frustrated, 1% were very frustrated and an additional 1% would never complete the online training again.

Based on the conclusions, it is recommended that the following efforts be implemented for future online training of seasonal employees:

- Develop an online tutorial for seasonal employees to take prior to beginning the online training. The tutorial would provide them with information on how to maneuver within the online training module and sample test questions.
- 2. Increase availability of Information Technology support. As the online training can be completed at the convenience of the employee, IT availability must be increased to accommodate employees who are completing the training during the evening and weekend. IT support can be accessible to the employee by email or phone.
- Implement suggestions made by seasonal employees to improve online training.
 Example: increase text size.

Research Question Three. Will online training meet the company's cost goals? The company's costs goals were to eliminate all mass influenza immunization training travel expenses. The data indicates the development and implementation of online training for seasonal employees was a 74% cost savings in comparison with the traditional method of classroom training.

Based on the data it can be concluded that online training met the company's cost goals. The \$29,100 in flu related travel expenses were eliminated with the implementation of online training for seasonal employees. Additionally, the \$34,350 of costs related to traditional classroom training of wages, meals, lodging and mileage was eliminated.

Based on the conclusions, it is recommended that the following efforts be implemented for future online training of seasonal employees:

 Increase IT annual budget \$10,000 to accommodate increased support hours during the last quarter of each year.

Additional Recommendations

The amount of research directly related to online training for seasonal employees was very limited. Research similar to this study would be very beneficial to businesses who wish to hire, train and retain seasonal employees to meet their needs. Technology allows for businesses to expand their employee base geographically to meet their growth and profit expectations with less cost than a brick and mortar regional office.

Technology has also enabled qualified individuals to consider employment with a business that is located out of the individual's geographic area.

This study could be enlarged by including the following survey questions regarding:

- 1. Level of education
- 2. Employment status (other than with Company XYZ)
- 3. Previous experience with online training
- 4. Type of internet service
- 5. Software application
- 6. Time and day online training completed

References

- Aubuchon, N. (2005). When it comes to e-learning: let the buyer beware. New Hampshire Business Review, 27(25), 33.
 - Retrieved March 8, 2006, from Ebsco Host database
- Bartholomew, D. (2005). Taking the e-train. *Industry Week/IW*, 254(6), 34-37.

 Retrieved April 2, 2006, from Ebsco Host database
- Bernthal, P. (2005). Measurement gets strategic. *Training and Development*, 59(5), 53-56. Retrieved March 8, 2006, from Ebsco Host database
- LearnFrame (2000). Facts, figures and forces behind e-learning [Electronic Version].

 Retrieved April 15, 2006, from www.learnframe.com/aboutelearning
- Evans, D. (2001). Online business development services for entrepreneurs; an exploratory study. *Entrepreneurship & Regional Development*, 13(4), 333-351. Retrieved February 28, 2005, from Ebsco Host database
- Fisher, A. (2005). Find online training that pays off. *Fortune*, 151(3), 34. Retrieved April 10, 2006, from Ebsco Host database
- Khirallah, D. (2000). A new way to learn? *InformationWeek [Electronic Version]*, (787), 22-23. Retrieved April 12, 2006, from www.informationweek.com/787/learn.htm
- Lim, D. & Kim, H. (2002-2003). Motivation and learner characteristics affecting online learning and learning application. *Journal of Educational Technology Systems*, 31(4), 423-439. Retrieved March 21, 2006, from Ebsco Host database
- Minton, M.C. (2000). Is your organization ready for e-learning? *The Communication Project, Inc., 3.1.* Retrieved March 3, 2006, from www.comproj.com

- Murtagh, J. (2003). The high cost of employee turnover. *Hudson Valley Business Journal*, 14(19), 7. Retrieved March 26, 2006, from Ebsco Host database
- Seligman, M. (2000). Online training. *New Zealand Management*, 47(10), 72-74.

 Retrieved February 28, 2005, from Ebsco Host database
- Wands, M., & Blanc, A. (2001). Critical success factors: eLearning solutions,

 Cappuccino, 2(3). Retrieved February 8, 2006, from

 www.internettime.com/itimegroup/crit_capp.htm
- Webster, R. (2001). E-learning takes worker training out of the classroom. *New Orleans CityBusiness*, 21(40), 34. Retrieved March 15, 2006, from Ebsco Host database

Appendix A

Survey Instrument

Survey	y Questions:							
1. Plea	ase indicate the nur	mber of yea	rs you	have del	ivered f	lu shots	for WI	NS:
	□1 st year □5 years or more		□2 nd year □3 rd year		ear/	□4 th year		
2. Plea	ase indicate your p	osition:						
	□RN	□Cle	rk/Regi	stration	Assistar	nt		
3. Plea	ase indicate your a	ge group:						
	□18-25 □ □45-50 □						□40-4 □66 o	5 r older
4. Plea	ase indicate the co	mputer you	are usi	ng to co	mplete t	he onlin	e traini	ng:
	☐Home computer ☐Work computer ☐Relative/Friends computer						mputer	
	□Library/Comm	unity Cente	er 🗆	Other				
5. Plea	ase indicate the len	gth of time	it took	to comp	olete the	online t	raining	; .
	□One hour or lea	ss 🗆 1.5 ho	ours	□2 ho	ours	2.5 1	hours	□3 hours
	□3.5 hours	□4 h	our or n	nore				
6. Ple	ase rate your comfo	ort level PR	IOR to	starting	the onli	ne train	ing:	
	□Completely Co □Small amount of □Worried but Of □Very concerne	of Anxiety ptimistic						

□Completely Comfortable	
□Easier than I thought	
□Small amount of frustration	
□Very frustrated	
□Will never do again	
8. Please provide your thought on using online training:	