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ORGANIZATIONAL DEVELOPMENT AND LEARNING TECHNOLOGY IN THE WORKPLACE: THE MIGRATION OF UNIVERSITY REPORTING TOOLS

by

Anne C. Pinder

A Dissertation

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Doctor of Education
at
Rowan University
March 23, 2016

Dissertation Chair: Dr. Burton Sisco Ed.D.

Dedications

To My Husband, Marty

Thank you for your love, support and most of all your understanding, during the time it took me to complete all of my coursework for this doctorate and to write this dissertation. I genuinely appreciated your patience and understanding during this difficult time.

To My Son, Robert

Thank you for your love and support while writing my dissertation. I value and appreciate you. You are a beautiful and intelligent young man. I hope that you achieve your goals and reach all of your goals in your life.

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I also want to thank Dr. Christopher Lacke and Dr. James Coaxum for serving on my dissertation committee. Thank you, Dr. Lacke, for your help with the data analysis for this study. Thank you, Dr. Coaxum, for your continued support and encouragement throughout the time it took me for this dissertation.

Abstract

Anne C. Pinder

ORGANIZATIONAL DEVELOPMENT AND LEARNING TECHNOLOGY IN THE WORKPLACE: THE MIGRATION OF UNIVERSITY REPORTING TOOLS

2015-2016

Dr. Burton Sisco Ed.D.

Doctor of Education

This dissertation study focused on organizational development (OD) as it related to implementing a new technology, the Cognos reporting tool, within working groups at a mid-sized University, in southern New Jersey. In this study, I intended to understand how these two work groups accomplished this change on an individual, team, and organizational level, while they achieved success through dealing with stressors associated with the software implementation. I was especially interested in how individuals in the two workgroups dealt with a major change within their organization. I was also interested in evaluating my personal leadership skills as a contributor to the organizational change.

This research consisted of two phases. The first phase involved the distribution of research packs containing the *Dimensions of the Learning Organization Questionnaire* instrument, *Margin in Life* instruments, and demographic questions. The second phase of the study encompassed one-on-one interviews. Results indicated that helping others, and communications were key factors in implementing a new software reporting tool. For Leadership, sharing a vision proved a strong bond with the work groups. This study provides empirical evidence that implementing a new reporting tool is a detailed and a complex process. Further research would be required for a broader perspective.

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Chapter I

Introduction

By the end of the 20th century, explosive growth had occurred within the realm of technology. The segment of information technology, has not only experienced rapid growth, but has re-shaped the way that people and organizations learn about, manage, and utilize the wealth of data that is now ready available to them. The changes have been truly revolutionary and have expanded the power that people have over the collection and personal use of data. Research capability has been forever changed due to the availability of the Internet and the tools used to search for information. Computer size, power and cost have improved so dramatically that any layman, even a child, is now able to perform research that before now, could only be done by teams of highly trained specialists.

The evolution of technology had a meaningful impact on society throughout the entire world. Technology growth and progression has been rapid. Downey (2014), and Hitt, Keats, and DiMarie (1998) share their vision of technology as a growing industry.

Downey (2014) depicts there are three distinct generations in the history of technology. Although there is the constant growth of technology, the landscape of technology is ever-changing. The author describes the first, second, and third generations of technology like the following.

First Generation Technologies

Downey (2014) describes the first generation technologies developed in 1978 to 1984, as "Persistence Small-scale systems, Text-based displays, and Fantasy-based games" (p. 57). The author provides an example of this era as the desire to replace table

top games, such as Dungeons and Dragons. Therefore, this era proved the theory that technology could exist in a collaborative nature, in a virtual environment. The introduction of the personal computer, with personal and business software packages, were introduced during this era.

Second Generation Technologies

Downey (2014) discusses the second generation technologies occurring from 1985 to 1996, as "Persistence Larger scale systems, Graphical displays, Games and social worlds, Avatars, in-world persona, and User control over objects" (p. 57). The author implies this era helped technology developers to refine their techniques, and develop unique user styles. The author also credits this era as the redefining and creation of new business models, to be utilized in the future marketplace of technology.

Third Generation Technologies

Downey (2014) details the third generation technologies occurring from 1997 to present, as "Persistence Massive scale worlds, Striking 3D presentation, Games, social, and education worlds, highly customized avatars, User-driven communities, and adult and children user bases" (p. 57). The author identifies this era as "an explosion of user growth and the entry of virtual worlds into mainstream society" (p. 59). Moreover, the era identifies the development of sophisticated technological systems for work or play.

The emergence of new technologies reminds managers to develop human capital skills so that all of the staff are able to meet the needs of new technologies. The absence of enhanced skills-sets within the human capital, prevents the power of technology, from being fully utilized.

Hitt, Keats, and DiMarie (1998) identify the "need to develop human capital skills is critical to develop core competencies within a new technology effort" (p. 29).

Moreover, Kotter (1996) discusses the necessity of increasing the sense of urgency when workers are complacent, and goals are not achieved. Kotter (1996) states a visible crisis can be extremely helpful, in pushing urgency levels to new highs.

The important advances in reporting technology enable an organization to better monitor its overall health and performance not only historically but, predicatively as well. Having more powerful performance gauges or tools, facilitates improved management of human resources and strategies, and the resultant overall performance of the organization. While everyone appreciates the improvement brought about by the new technologies, not everyone enjoys the transition from the old to the new. Whether the tools are used in a personal, business, or educational, organizational environment, there exists a learning curve that needs to be achieved in order to reach the desired goal.

Within a collegiate environment, changing a campus-wide reporting tool is difficult to implement. Changing reporting tools can frequently involve numerous individuals and countless levels of change. Motivating workers to learn technology in the workplace may be challenging. Fullan (2001) describes change as complex and unclear which at times leads to contradictory advice. Nevertheless, change can be undertaken and accomplished.

This doctoral study examines the organizational development of a team of individuals that are using technology in the workplace to implement a new organizational reporting tool, called Cognos. According to Castle and Sir (2001) "Organizational development (OD) is a planned process of developing an organization to be more

effective in accomplishing goals" (p. 1). Some existing circumstances that could affect the implementation of change in an organization are a lack of human resources, the need for training, and adapting to different and unique learning styles. Training and workplace learners' experiences may be difficult when it comes to learning and adapting to technology changes within the organization.

Background of the Study

The nature of the initiative occurs at a mid-size north eastern university in the United States of America, known as Henry University. In particular, the initiative surrounds two groups of staff at the university. These two groups are the University Software Group (USG) and the University Planning Group (UPG). The UPG consists of 11 employees. The USG consists of 26 employees. These two departments' roles and responsibilities are aligned with all campus and administrative departments. These employees provide service and support to the campus community for reporting and software application support. This alignment supports Fullan and Scott (2009), where organizational and individual competencies to manage change are directly related. Change-ready and capable organizations are made up of change-ready and capable human resources (Fullan & Scott, 2009). Fullan and Scott (2009) assert that everyone is a leader of change in their own proficiency.

These workgroups are responsible for delivering software solutions for the university, as well as ensuring alignment with the business solutions in the planning group. Building a solid learning base and encouraging team participation are always key components in building strong skill sets between the two teams. Collaboration, along with endless attempts to gain buy-in from each team member, are essential factors in skill

set enhancement. When a employees perform well at work, it enables them to feel valued regardless of their ethnicity, race, gender, sexual orientation, nationality, class, religion, or other differences. Strong performance fosters a feeling of success that results not only in overall job satisfaction but enhances future performance as well.

Being supportive of each team member, learning and leveraging skills regardless of gender, race or cultural background are factors that promote the likelihood of success and desired expectations from managers in each department. These expectations are set to achievement goals and objectives, and have traditionally been set by the senior management of the university. Although the context is educational, goals and objectives to meet the business needs of the university are set much like they are throughout corporate America. Today, many aspects of running a university are quite similar to running a business.

In this study, the skill sets of the University Planning Group (UPG) and the University Software Group (USG) were leveraged by a joint team skill set. Each team member participated in forming the departmental goals and objectives. Each team member performed the necessary tasks to complete a particular goal based on their strongest skill set. The goals and objectives were measured just as they are in corporate America. The requirements, time, and expected outcome were each defined within the goals and objectives set forth for each of the teams. The progress and success were monitored to ensure on-time delivery. Issues around differences were leveraged in structuring internal readiness and capacity building of both teams.

All team members did not possess the same level of skill. They had different listening and learning skills. According to Bucherati (2009), true innovation comes from

this beautiful collision and commingling of cultures, ideas, beliefs, and experiences. The ability to communicate across differences helps foster and build productive relationships for better effectiveness throughout the organization.

Pelled (1996) specifies a diversified workgroup, with respect to members' demographic conditions, may have a powerful effect on the group's accomplishments.

Pelled (1996) indicates while diversity can intensify turnover, its effects on cognitive task accomplishments are more mixed, sometimes enhancing adult learner performance and sometimes weakening outcomes. An understanding of how diversity works with adult learners, leads to these conclusions that may help managers enhance workgroup effectiveness (Pelled, 1996).

Problem Statement

Henry University was utilizing a reporting tool called Oracle Discoverer. Most functional offices at Henry University learned to utilize the Oracle Discoverer reporting tool to identify characteristics and traits of their clients or students, and to provide adequate reporting to their offices. The Oracle Discoverer reporting tool became widely used at the university in 2006, when the main system of the university was upgraded to a relational database called Banner.

In early 2013, the university learned the Oracle Discoverer was no longer going to be supported at the university. Through observation and evaluation of other products available for reporting, senior administrative officials decided to purchase a data warehouse from Ellucian (the parent company of Banner) and also to purchase the Cognos reporting tool solution. The data warehouse would collect a full copy of the Banner database nightly, and allow the Cognos reporting tool to report from a copy of the

Banner database. By reporting from a copy of the database, functional offices would be able to utilize the data but would be unable to change, alter, or update the original data, thus preserving data integrity.

The problem with changing the reporting tool from Oracle Discoverer to Cognos introduced a new program to the workgroups that then needed to learn it, and continue to support the new reporting tool for use by the entire university. These two workgroups, the UPG and the USG, needed to develop their skill-sets in order to become Cognos reporting tool experts. There are numerous reports that needed to be converted from Discoverer to Cognos, throughout the university. These two workgroups needed to adapt to this rapid change in reporting tools, and overcome the stressors of learning something new.

Another problem existed when it was determined that Henry University did not have a published and accurate data dictionary. The importance of the data dictionary is that all fields and terms are defined identically by each office for reporting purposes. One of the problems that occurred with the Oracle Discoverer reporting tool is that the data could be manipulated to reflect whatever the functional office believed the field or the term to be. There was no standardized definition of data elements or terms. For example, the term "matriculated student" had a different meaning from one office's point of view to another office's point of view. At this time, the university did not have a data dictionary that was utilized commonly by all offices. As a result, this caused a major difference in the Oracle Discoverer reporting counts for "matriculated students," as an example of the many other terms inherent within the university.

Purpose of the Study

The chief purpose of this study was to understand, and examine the experiences at the individual, team, and organization levels of the University Planning Group (UPG) and the University Software Group (USG), as they migrated from the Oracle Discoverer reporting tool to the Cognos reporting tool. I intended to understand how they achieved success through dealing with stressors associated with the software implementation, as I was especially interested in how individuals in the two workgroups dealt with a major change within their organization. In this study, I utilized the descriptive and exploratory questioning techniques to uncover emerging trends, patterns, and threads amongst these team members. Each participant provided a unique lens, voice, and perspective that helped to discover a common thread or strand in learning a new reporting tool at work.

Definition of Terms

- Banner®: Banner® is an ERP software solution that is offered by Ellucian. It supports the financial, human resources, payroll, financial aid, student, and bursar functionality of a University.
- 2. Banner® Production: Banner® Production is the actual database instance that reflects all current information about the University, per module (Finance, HR/Payroll, Financial Aid, Student, and Bursar).
- 3. Banner® SIS: Banner® SIS is an acronym for Banner® Student Information Systems.
- 4. Bugzilla®: Bugzilla® is an online project management tool used to reflect all project activity for all Cognos® reporting. Bugzilla® is a freeware that is utilized by Henry University for project management of software projects and initiatives.

- 5. Cognos®: Is a software reporting tool that is available from IBM that works with the Ellucian Operations Data Store® (ODS).
- CIO: The term CIO is an acronym for Chief Information Officer. This is the
 highest title in the software/network and hardware hierarchy within a university or
 corporation.
- 7. Data Dictionary: A data dictionary is a dictionary that describes each data element in a given data environment.
- 8. Excel® Workbook: The Excel® workbook is a spreadsheet program that is offered by Microsoft®. An Excel® workbook is a spreadsheet that contains data that are used to build the Oracle Discoverer® report.
- 9. Non-Traditional Adult Learner: Merriam, Caffarella, and Baumgartner (2007) indicate adult learners can also be non-traditional adult learners. Merriam et al. (2007) state the non-traditional adult learner is typically over age 25 with copious roles and responsibilities. Merriam et al. (2007) indicate adult learners are female or male, that they are usually over the age of 25, and have completed high school or some type of college, have an above average income, are white collar full time workers, married with kids, and probably live in the suburbs.
- 10. ODS®: The ODS is an acronym for the Operational Data Store® which is a component of the Ellucian Data Warehouse product purchased by Henry University.
- 11. Organization: The definition of an organization in this study is defined as the combined groups of the University Planning Group (UPG) and the University Software Group (USG).

- 12. Organizational Development: Castle and Sir (2001) identify organizational development (OD) "is the planned process of developing an organization to be more effective in accomplishing goals" (p. 1).
- 13. Traditional Learner: Merriam et al. (2007) also explain the traditional learner is usually under age 25 with limited roles and responsibilities.
 - 14. UPG: The UPG is the acronym for the University Planning Group.
 - 15. USG: The USG is the acronym for the University Software Group.

Research Questions

The following research questions guide this study:

- 1. What do members of the UPG and USG teams report about learning the Cognos reporting tool at the individual, team, and organizational levels?
- 2. To what extent do the categories of the *MIL* influence the UPG and the USG and their learning on an individual, team, and organizational level?
- 3. What do selected members of the UPG and USG, report about their experiences in learning the Cognos reporting tool at work?
- 4. What is the impact of my leadership in the migration of the Cognos reporting tool with the UPG and USG groups?

Significance of the Study

Learning technology within an organization at work includes numerous facets.

Being assessed based on personal skill set is something that may make adult learners uncomfortable. A positive support system can assist workers in their pursuit of achieving job-related success. Friends and family can also support the worker to build on their strengths, and assist them in balancing their life's responsibilities, along with their career

aspirations. The following chain of reasoning reflects how mixed methods research informs and shapes the study based upon on organizational development as it relates to learning a new reporting tool at work. In this research, the intent was to identify the obstacles, and engage in the study of adults, in their context and setting.

Bartunek and Moch (1987), describe first-order organizational change as "The tacit reinforcement of present understanding" (p. 486). The authors indicate first-order change is reversible and non-transformational. First-order change takes the present situation and alters it; either more, or less.

Bartunek and Moch (1987) describe second-order organizational change as "The conscious modification of a present schemata in a particular direction" (p. 468). The authors specify second-order change is non-reversible and transformation. Moving from one particular practice to another, making an entirely different practice altogether.

According to Bartunek and Moch (1987) the levels of change would best be described as a second-order by changing the reporting tool from Oracle Discoverer to the Ellucian Cognos reporting tool. Implementing the Ellucian Cognos reporting tool would eventually affect all offices at Henry University. At this point, all of the university work groups used the existing reporting tool to measure their progress, pitfalls, and record their current status. Moving to Ellucian's Cognos reporting tool would be a second-order change, where all participants would be requested to use the new system. This would be a forced change. There would not be a choice. At times, second-order change contains barriers that may not have been initially observed. However, the presence of such barriers could be the source of frustration when group members first use a new reporting tool.

Assumptions and Limitations of the Study

Assumptions and limitations in the study may exist. These assumptions and limitations could place constraints on and hinder the progress of the Cognos implementation.

Assumptions

The functional office personnel assumed that they have the same security privileges in Cognos as they had in Oracle Discoverer. In Oracle Discoverer, the report is run against the Banner Production environment, with real-time data. The output of that data is produced in an Excel workbook where the data could be manipulated or changed to match the subjective functional office definitions. This is an issue because it allowed the offices to interpret the data based on their meaning, not that of a standardized data dictionary.

In the Cognos reporting tool, the functional users did not have the same security privileges to run against Banner Production. For Cognos reporting, a copy of the Banner Production database was taken, nightly, and stored in the Operational Data Store (ODS) where Cognos reports could be created from the copy of Banner Production. When reporting off of a copy of Banner Production, the data are frozen when the copy is taken and all offices could report off of the same copy of the database. This may not be well received by the functional office personnel. The functional office personnel wanted the same security privileges as they currently had with Oracle Discoverer. This may be a difficult part of changing to the Cognos reporting tool.

Another assumption is that the subjects or the participants in this study were truthful in their responses to questions within the survey and in the interviews. Since a majority of the human subjects previously reported to me, they may not have been completely truthful about their attitudes, or feelings, during the implementation of the Cognos reporting tool.

There could be a concern from the participants of coercion since I am a project manager in the division, and the participants may feel that I have leverage over them. I addressed this concern by explaining that this study is based upon the participants choosing to complete the survey, and choosing to be interviewed. Additionally, the surveys would be anonymous to shield individual identity, encouraging accuracy.

Limitations

For limitations, prior knowledge contains bias. In an environment where individuals are constantly learning technology, experiences and opinions may contain inherent bias. Thus, prior experiences may have an influence on the outcomes of the study. Views may be slanted based on experiences as a workplace learner working in a technology department, therefore, coloring the actual research collected with interpretations.

The data collected in the study may not be representative of the entire population that would be learning the new reporting tool at work. There may be some parties that choose not to participate, therefore, influencing the outcome of the study. The non-response rate of the participants also needed to be considered. Based on the methods that I selected to conduct my study, there may be cultural issues that should also be considered. Because this study uses an exploratory sequential mixed method design, there

were quantitative data, and qualitative data collected. There could be differences in the outcomes of the different strands of the mixed methods study.

Additionally, there is a potential for my bias as a researcher. I do have an interest in the project. My views may be slanted based upon my bias.

Organizational Development: The Migration of the University Reporting Tool

Figure 1.1 is a detailed concept map that outlines the unique distinctiveness of this organizational development study. As this study occurred in phases, each concept described in Figure 1.1 was researched and unveiled. First, I explored the attitudes, values, and beliefs of the UPG and USG team members. Next, I reviewed learning the Cognos reporting tool. Then, I examined the research of Marsick and Watkins', *Dimension of the Learning Organization Questionnaire*, (*DLOQ*), Castle and Sir's model of defining change called the Five I's, McClusky's theory of Power Load Margin as operationalized, by Stevenson's *Margin in Life* scale, and my leadership as measured by the *Leadership Practices Inventory*, (*LPI*). In conclusion, Figure 1.1 describes the phases of the adult team members learning the Cognos reporting tool at work, as they passed through on their journey of learning. The processes depicted in Figure 1.1 begins with step one "Team member," and ends with step seven, "Findings and Conclusions."

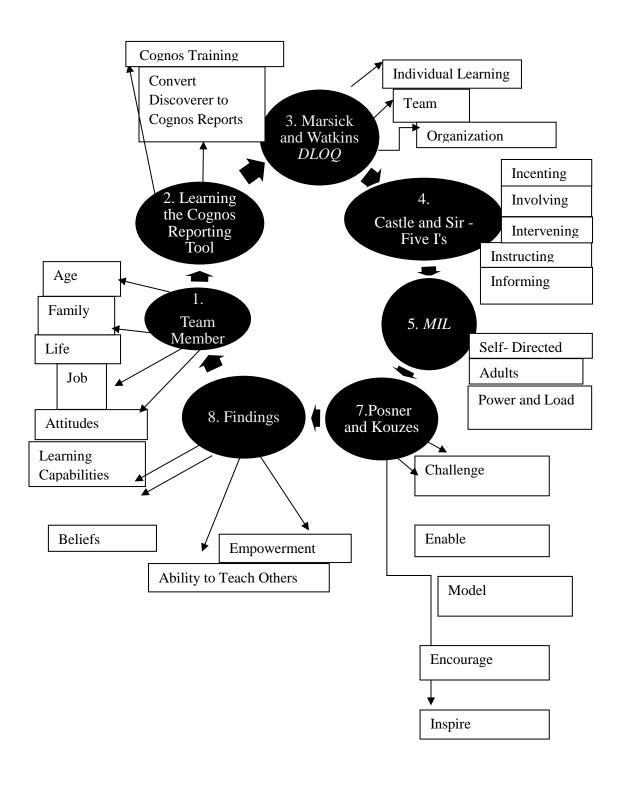


Figure 1.1 "Organizational Development: Learning the Cognos Reporting Tool."

Overview of the Study

In conclusion, through my study of the migration to a new reporting tool within the organization, I hoped to understand and comprehend the imbalances that adult workers experience in furthering their careers by learning new technology skills within university reporting. In Chapter II, Adopted Leadership, Philosophies, and Organizational Change, the reader gains knowledge of who I am as a leader. Chapter III encompasses the literature review. Chapter IV contains the details of the methodology used in this study. Chapter V presents the findings. Chapter VI provides a summary of the study, including discussion, conclusions, recommendations, and leadership self-awareness.

Chapter II

Adopted Leadership, Philosophies, and Organizational Change

In this chapter, I describe my formative years as a youth, and then my transformative years where I strived to become the leader that I now am. My leadership framework consists of various frames of leadership. Let me explain my lifelong journey.

The Formative Years

Born in North Philadelphia, I was the youngest of six in the Cunningham family. I attended 12 years of parochial school. Once I graduated from high school, I planned on attending college. Father's belief was that girls stayed home and did not attend college. Father told me to be different from my other sisters who both worked at Bell Telephone. Father told me to get a job at Colonial Penn Insurance Company and to be a secretary. He thought I would find a nice husband there, and I would not need to go to college. At the end of the summer in 1977, I landed a job at Colonial Penn Insurance Company, in center city Philadelphia. I loved working in the city. Everyday my Mother packed my lunch and gave me a dessert named Twinkie. I loved my Twinkies! One day, I checked my lunch, and there was no Twinkie. I sat in my cubical and could not believe my Mother forgot the Twinkie. I said out loud, "What no Twinkie?" Little did I know that Marty Pinder, my future husband was sitting on the opposite side of the cubical wall, and overheard me complain about the missing Twinkie. I was so upset; I went down to the snack shop and bought my Twinkie. By the time I got back to my desk, there was a Twinkie on my desk. I did not know who gave me the Twinkie, and then there he was, Marty Pinder. Marty introduced himself to me and said he bought me the Twinkie after overhearing me over the cubical wall. How sweet! From that point forward, Marty spoiled me with stuffed

animals, flower baskets, and fun little presents. Often, we went to lunch, then we started dating. Marty lived in Cherry Hill, NJ and commuted to his job at Colonial Penn in Philadelphia. As I began my journey as an adult worker, there was Marty at my side.

The Transformative Years

At age 21, I married Marty Pinder. Since Marty lived in New Jersey, we decided that was where we wanted to live. Shortly after being married, I began night school and attended college part-time for several years while working full time. Over the years, I was employed in the insurance industry working for several corporations. I worked hard and earned several promotions, but felt marginalized when it was held against me that I did not have a four-year college degree.

As time passed, I obtained my associates degree in Business Administration, from Burlington County College in 1993. I then transferred my credits towards obtaining a bachelors degree. I chose Rowan University since it was close by, it offered a Business Administration, Management Information Systems major, and credited all 69 credits, I had earned from Burlington County College. Since Marty and I were paying the full tuition (with no employee reimbursement), going to a state school was the answer. In December of 1995, I earned a bachelor's degree in Management Information Systems, from Rowan University. My degree was actually awarded in January of 1996. As I look back, it took me in excess of 10 years, part-time to get my degree. Soon after I obtained my degree, I then accepted a job offer at Computer Sciences Corporation (CSC), in Mount Laurel, NJ. At this point, I had finally and successfully changed my career from insurance industry to the field of computer science.

During the years at CSC, I worked and advanced my way into management positions while simultaneously pursuing my Masters degree at Stevens Institute of Technology. During the day, I managed several groups of computer programmers working together as a team on a project for the military. During the night, I worked toward furthering my coursework towards earning my Masters degree. I then became pregnant in November of 1999. By the summer of 2000, my son was born, while there were still three more classes to go in order to complete the course requirements for the Masters. Several weeks after my son was born, and before even returning to work, I started back to night school in order to continue the coursework for completion of my Masters degree.

In January of 2001, I completed all of the required course work for my Masters degree at Stevens Institute of Technology. I earned a Master of Science in Technology Management, with a specialization in Information Management. I was recognized for having maintained a 4.0 average throughout my entire course of study, while attending Stevens. In 2003, I left Computer Science Corporation (CSC) and accepted a position at Rowan University as a software manager, leading a team of 12 in support of the institution from a software perspective. At times being a manager is complicated and demanding. I resonate with feeling the frustrations and excitement from the team members. Although I am now a Project Manager in the Information Resources and Technology division at Rowan University, I am also pursuing my doctorate in educational leadership.

All throughout my life, my personal quest has been a focus on achievement, to soar to higher levels, particularly in education. While growing up, I strived to do

whatever my parents and teachers wanted me to do. When it came to growing up in the sixties and seventies, it was a different world than what it is today. Females generally, were expected to be seen not heard, and males dominated the business world and were the only recognized leader of the family. From my circle of friends from high school, I was the rare exception of one who pursued a college degree.

Leadership Defined

According to Fullan (2001) leadership must have a foundation of a moral purpose. While growing up, my own personal definition of leadership was being able to take responsibility for my actions, while listening and learning, and leading others towards a common goal, a postive goal. Throughout the years, I often reflected up leadership styles of teachers, prior bosses, and of course through leadership characteristics from my family. As I have grown in my leadership, I rely on lessons learned, and the importance of comminicating to others. My leadership framework is the core of my leadership style. Northouse (2010) describes "Leadership is a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3).

My Leadership Framework

My leadership style consists of a variety of different frames. These frames, like different lens, are the foundation of my leadership style. Many aspects of my leadership are intertwined and woven into my own tapestry. My leadership styles consist of feminine leadership, transactional leadership, transformational leadership, social justice leadership, and servant leadership. 2.1 depicts my leadership characteristics.

Social Justice Leadership

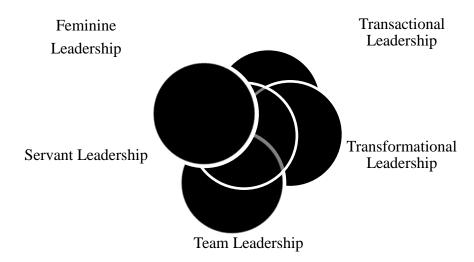


Figure 2.1 Characteristics of my Leadership.

Feminine Leadership

Partly, I attribute my feminine leadership to the sign of the times. What I mean is, growing up in the early sixties, there was a strong sense of changing roles for women, and women were no longer satisfied with staying home to be a housewife. Women were modernizing themselves. In fact, Betty Friedan, a feminist leader in the sixties, riled many complacent male driven households with reverberations of equal rights for woman, the same rights as their male counterparts. During the seventies, women were now leaving their role as housewife to pursue their own interests and careers. Chansky (2008) discusses Betty Friedman and her book the "The Feminine Mystique," as a shocking, but refreshing outlook on how females could follow their own hearts, follow their own

dreams, and not necessarily remain their standardized role of being a housewife. The author emphasizes how Friedman often thought of herself as an actress while acting out her feelings of equal rights as a woman. I resonate with Betty Friedman. Growing up in an household dominated by men, my voice was often unheard or even ignored. I somehow think I was not the only woman feeling these feelings. In high school in the seventies, I recall women continuously standing up for their rights. I was part of that movement. I distinctly remember singing a song by Helen Reddy in 1975, called "I am Woman." In listening to the lyrics of this song, Reddy sings, "I am strong, I am invincible, I am woman!" This song, even today, reminds me of how women still struggle for equal pay, and equal rights, as feminine leaders.

Additionally, I espouse a belief is that my feminine leadership reverberates from my Mother. Mother always did things for other people and never asked for anything in return. Mother believed in me. Mother did things to make me happy. I see myself like this when I participate in church functions for feeding the poor. I learned from my Mom that giving was better than receiving. My Mother was very nurturing and very caring to all of us. I very much appreciated my Mother. Throughout my life, I always believed my feminine leadership came from my Mother. My Mother was a leader in her role, caring and nurturing all of her six children. This is my example of my feminine leadership style of nurturing and caring.

Additionally, I recognize Heifetz and Linsky (2002) as they articulate on gender differences in leadership. For example, Heifetz and Linsky (2002) address how women leaders need to recognize their overall behavior when working together with men.

Women also need to manage their feelings and emotions at work, as well as, at home

(Heifetz & Linsky, 2002). Personal feelings, emotions, and managing conflict help leaders to adapt their overall leadership to drive change to promote positive outcomes.

Transactional Leadership

Brymer and Gray (2006) define transactional leadership as a bargaining between the leader and the follower. The authors indicate transactional leadership is rigid.

Therefore, this leadership style does not encourage the followers to do anything other than what they were instructed. Brymer and Gray (2006) specify that:

Transactional leaders may also only approach followers when problems or mistakes occur, that is by avoiding any intervention until something has gone wrong. In this instance, transactional leadership is termed management-by-exception. Management-by exception can be either passive or active. In the active form, leadership involves the continual monitoring of followers' performance with the specific purpose of anticipating mistakes before they become a more serious problem. In this type of transactional leadership the leader sets out and clarifies standards, expectations and criteria for assessment and monitoring at the start of a task or work thus corrective action can be more immediate as the leader is continually measuring performance against expectations in an attempt to determine deviations. (p. 19)

Through my life, my Catholic education and strong Catholic family beliefs, with routine practice in the religion of Catholicism, are the basis of my transactional leadership style. Transactional leadership in action is found in areas such as the military and industries that are fixed in nature, utilizing transactional leadership as part of their management style. For example, the police are often described as being transactional

leaders. Their strict policies and procedures are to be adhered to or consequences will be paid. Although the police are often thought of as rigid souls, their transactional leadership guides the community and shapes a safe environment for our families and friends.

Transformational Learning

Transformational learning was a term first coined by Jack Mezirow in the 1970s. Mezirow (1975) was strongly persuaded by the efforts of Roger Gould and his psychoanalytic hypothesis connected to transitions. Mezirow (1975) specifies transformational learning theory transpires in one of four methods. The author describes these methods as transforming behaviors of the mind, transforming personal perspectives, gaining knowledge in new frames of suggestion, and enlarging existing points of reference.

Mezirow (1975) details that transformational learning is about dramatic change; changing what is known. The author indicates transformational learning occurs when people reevaluate their outlook on life and re-examine their current methods of doing things. This personal experience helps shape new perspectives, as critical reflection occurs. Self- reflection helps to look at new and different ways of doing things, and helps adults change their actions when making critical decisions (Mezirow, 1975).

Mezirow (1981) identifies critical thinking, life experiences, and personal perspectives as key components to transformational learning. The author suggests transformation is characterized as a dramatic change in the way adults see themselves and their lived world. Concepts of experience, critical reflection, and adult development are proponents to transformational learning. The author discusses experience as learners must critically self-examine the assumptions and beliefs they have structured, and how the

experience has been interpreted. Critical reflection has significance to transformational learning (Mezirow, 1981). Transformational learning is about change. Individual development is both inherent in and an outcome of the transformational process. The ability to think critically, explains how individual and cognitive developments are intertwined. From my lens, equality and confidence in my abilities help to foster my transformational leadership framework.

Social Justice Leadership

Theoharis (2007) defines social justice leadership as treating individuals equally, with mutual respect, without bias. My social justice leadership originates from my personal values of being included in family gatherings, and traditions. From my lens, I resonate with social injustices as they reverberate with issues of marginalization, ethics of care and critique, power, and manipulation, advancing from political, social, or cultural contexts. Even now, I think back on how I was transforming myself to achieve a higher degree, while at the same time, feeling marginalized. In my experiences, many traditional aged students assumed that I would be home with my baby rather than in the class with them. In my heart, I felt the echo of supremacy of traditional adult learners as I was rejected by teams that could not meet until after class, due to my responsibilities as a mother and wife.

Theoharis (2007) details the significance of transformative moral leadership, as it relates to social justice. Building strong social justice leadership requires collaborating, educating, and communicating social justice values. As advocates for democracy and equality, social justice leaders are at the front line in educating and transforming workers through a constructive, positive, and reflective practice. Workers, through their leaders,

learn to celebrate their humanization as they are recognized as equal, autonomous employees.

Servant Leadership

Spears (1996) discusses Robert Greenleaf's values and beliefs concerning servant leadership and explains that "Servant-leadership is a leadership term and philosophy which was originated by Robert K. Greenleaf, and which puts serving the greater needs of others as the primary goal of leadership" (p. 33). The author specifies:

In a ground-breaking 1970 essay, entitled The Servant as Leader, Robert Greenleaf suggested how caring for our many institutions, and each other, can occur through the practice of servant-leadership. In the 1980s and 1990s servant-leadership has become a major focus and goal in leadership and management writings, and in organizational practice. (p. 33)

Through my lens, I also possess servant leadership. I enjoy the satisfaction of being a servant to others, and feel that servant leadership is part of my very soul; and it is part of who I am.

Spears (1996) identifies:

Greenleaf concluded that the central meaning of it was that the great leader is first experienced as a servant to others, and that this simple fact is central to his or her greatness. True leadership emerges from those whose primary motivation is a deep desire to help others. (p. 33)

Although my servant leadership is not in the form of a nurse or a teacher, I feel as a project manager, I serve senior administrators, and also care about the team members that report to me, day-to-day. On a personal level, my servant leadership is revealed

through the care I give to my family and friends, as my caring and nurturing characteristic helps me to transform myself into a better leader.

Transformational Leadership

Northouse (2010) specifies transformational leadership is "inspirational motivation" (p. 177). Conversely, Heifetz and Linsky (2002) detail various aspects of leadership and change. The authors describe the dangers of leadership and the difficulty to convince others of change. The authors depict most people resonate with the change as a technical problem, rather than a challenge to assimilate (Heifetz & Linsky, 2002). It seems that Northhouse feels leadership is inspirational, and Heifetz and Linsky feel that leadership is difficult when implementing a change.

The Flight to Transformational Leadership

The symbol of my transformative leadership is a butterfly. I believe I can transform the "as is" of a project to the "to be" of a project. I believe I transformed myself from a caterpillar to a butterfly, through my lifelong learning. This butterfly is the mere foundation of my leadership styles. Being a team leader within the organization often is challenging, but for the most part rewarding.

Team and Organizational Leadership

Northouse (2010) specifies "It is up to the leader to assess what action, if any, is needed and then intervene with the specific leadership function to meet the demands of the situation" (p. 249). At times, leaders need to adapt their leadership style to the current situation or scenario in order to be effective in leading the change within the organization. When leading the team, the leader needs to adapt themselves to understand and communicate to each team member within the organization. Let me explain.

Team Leadership

Heifetz and Linsky (2002) detail there are various components to leadership.

Leadership involves motivating teams joining in common goals and objectives of the organization. Joining together the strengths and weaknesses of team members can foster diversity, inclusion, and improve the overall knowledgebase of the team's skills. Thus, the team and team members' accountability and productivity can be measured by overall team performance and also individual performance within the team. Thus, gaining individual trust is critical to engaging participants to partake and believe in a shared mission and a shared vision of the organization.

Austin (2009) discusses the dimensions of team capacities as it relates to the individual and team strengths and weaknesses. Austin (2009) highlights the various characteristics of team dynamics and how to blend in the team's ethnicity and backgrounds, to shape the organization to produce positive outcomes.

Because workgroups are charged with reaching a common goal, teams can be strengthened if more attention is paid to personal processes, procedures, and tasks, thus promoting collaboration. The experiences may also be more memorable for the team by the leader encouraging the team members to accept differences, and adapt to diverse learning styles, as they are adapting to the change.

Impact of Change in Organizational Learning

Friedman, Lipshitz, and Overmeer (2001), define organizational learning as a group of individuals who share values and concepts who then develop a shared knowledgebase of information based on their previous encounters, skill sets, and understandings. Although leadership is a key component to organizational learning, I

believe a solid learning base and encouraging team participation are always key components in building strong teams. Collaboration, along with continuing attempts to gain acceptance from each team member, are essential factors in developing skill sets of individuals, and organizations. Jehn, Northcraft, and Neale (1999), specify groups have in large part, been the essential building elements of organizational structure and strategy, as it seems to be based on the hypothesis that groups can gather together the diversity of information, experiences, and ethics, necessary to achieve the goals and objectives of the organization.

Austin (2009) discusses the "process of personal enrichment" (p. 85), as it aligns the goals of the organization with the goals of the human resources that support it. The team concept, tied with personal development of existing staff, encourages team participation, productivity, and positive outcomes. Measuring team achievements against the organization's overall goals and objectives, helps to foster and leverage skill sets within the team, while simultaneously advancing inclusion and overall team confidence (Austin, 2009).

All organizational team members do not possess the same level of skill. They have different listening and learning skills. According to Bucherati (2009), true innovation comes from this beautiful collision and commingling of cultures, ideas, beliefs, and experiences. The ability to communicate across differences helps foster and build productive relationships, for better effectiveness throughout the organization.

Heifetz and Linsky (2002) discuss the importance of teams working collaboratively together. The authors discuss conflicts within the team and how to resolve them. Heifetz and Linsky (2002) specify four characteristics of an intervention of

leadership, including: (a) assembling interpretations, (b) soliciting inquiries, (c) contributing personal experiences, and (d) appropriating accomplishments.

Heifetz and Linsky (2002) explain the importance of constant communication and connecting with the employees for leaders to be successful. They indicate, "Leadership requires disturbing people, but at a rate they can absorb" (p. 20). The authors explain various situational examples of real life experiences involving leadership and the process of adapting to change (Heifetz & Linsky, 2002).

Heifetz and Linsky (2002) discuss different aspects of leadership. One aspect in particular, is taking the heat when trying to lead a project. The authors illustrate the difficulty in dealing with the fervor of employee resistance and frustration when trying to lead a project (Heifetz & Linsky, 2002). They indicate "Taking the heat from your friends and allies is very tough" (p. 145). At the conclusion of any project, it is important to ascertain whether the project objectives have been accomplished (Mochal, 2003).

Leadership can make a difference in affecting a change within an organization. Being a successful leader in a software change, requires leaders who have experience in software evaluation and implementation, as well as, one who possesses the flexibility to leverage several leadership styles to accomplish the task. In this journey, my leadership can help support the UPG and the USG groups to adapt to the change of a new reporting tool.

Summary of the Chapter

As a lifelong learner, I resonate with organizational development, learning technology at work, and adult learning. I possess a personal interest in these topics since it is representative of my life. I resonate with the fact that adults must balance the

different aspects and people in their lives, as well as, set goals to achieve career aspirations. This is why I have chosen organizational development and learning technologies at work, as the foundation of my dissertation for my Doctorate in Educational Leadership.

The core of my leadership framework is based on my transactional and transformative leadership styles. Although my leadership is transactional, numerous added bonuses accompany my transactional leadership that are transforming. In my context, personal leadership encourages team members in learning, inspiring, and planning upcoming events. I am also a strong feminist leader who possesses caring and nurturing leadership styles within me. I also am drawn to team and organizational leadership perspectives since I have been in a supervisory capacity for many years throughout my career.

Although I did not realize this, the empirical research I examined when writing this chapter had an impact on my life as I was making my journey, as an adult leader and learner. Betty Friedan was an inspiration from my feminist perspective. Eric Greenleaf's discovery of servant leadership validated my constant urge to care of others. Jack Mezirow certified my longing to shape new ideas through transformational learning.

Through my lens, I possess the ability to drive change through my various leadership styles. As a change agent, I believe my transactional, team, and transformational leadership support to the success of change. My transactional leadership supports the scaffold of an implementation plan so that all necessary and required tasks are accounted for. My team leadership is the foundation representing the human aspects of leading a change project. My belief is that employees are to be valued, and recognized

for their strengths and contribution to the change project. My transformational leadership style is my pillar of strength to support the organizational change by allowing me to transmute and renovate existing structures, to build new frameworks of a changed organization. Figure 2.2 depicts a symbol of my leadership before this study.

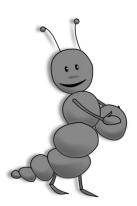


Figure 2.2 A Symbol of my Leadership Before this Study.

Chapter III

Literature Review

This study examines the organizational development of adults learning technology at work, focusing on the adult learners' characteristics, internal, and external motivation, and core competencies. The goal of this study was to access the attitudes and experiences and meta-cognitive learning to determine if these factors helped shape adult capabilities when it comes to embracing a new software program. This software had an aggressive roll out and all members of the UPG and USG teams rapidly needed to become reporting writing experts. All team members were expected to become confident in creating new reports accurately, while simultaneously overcoming their fears of learning a new software. Self- efficacy was vital in supporting the team members to feel comfortable in using the new software, while producing accurate reliable results for the university community. The foundation of this literature review examines forces of change, organizational framework, understanding and driving change, and organizational learning.

Forces of Change in the Workplace

Within the organizational framework, change management involves the process of assessing the current state of business while developing new goals and objectives towards process improvement. Implementing change is important. However, sustaining change is equally important. Fullan (2001) argues, "Change is a double edged sword" (p. 1). He stipulates change can be positive or negative. When change is present, feelings of uncertainty or fear often arise.

In assessing change in an organization, there are many elements that can affect the change implementation. Human factors such as espoused beliefs, ethnicity, cultures, stressors, financial costs, and lack of resources are a few to consider. The environment is also a factor based on where the change is occurring, as well as, the development of a timeline to meet the business goals of the institution. According to Fullan (2001) "If you ask people to brainstorm words to describe change, they come up with a mixture of negative and positive terms" (p. 1).

Forces of Change in Higher Education

Fullan and Scott (2009) indicate there are numerous change factors influencing the higher educational arena. They identify these change factors such as:

1) Demographic factors, in relation to the student and administrative population of the university, 2) Social factors regarding changing patterns of participation, including changing expectations of students, and growing diversity, 3) Political factors such as the change in funding and pressure to generate new sources of revenue, as well as, the export market and growing competitions, 4)

Technological factors in relation to developing and maintaining standards, and providing efficient informational technologies to all colleges campuses, and 5)

Globalization. (p. 3)

For the University Planning Group (UPG) and the University Software Group (USG), these five characteristics played a role in the change management process of implementing a new reporting tool. Each of the components of demographics, politics, social, technological, and globalization can affect the outcome and success of the reporting tool implementation. Inclusion and collaboration are also essential elements

that contribute to a successful implementation.

Demographic Factors

The demographics of higher education are rapidly changing. In prior years, the population of higher educational institutions was mostly traditional students between the ages of 18 to 24. Anderson (2003) specifies:

By 1999, 33 percent of postsecondary students were twenty-five and older, an increase of 11 percentage points since 1970. Although this includes students enrolled in graduate degree programs, 71 percent of students age twenty-five and older were undergraduates in 1999. (p. 4)

Anderson (2003) describes the characteristics of adult students as different from those in 1970. Anderson (2003) states the adult students attend school part-time instead of full-time. Anderson (2003) indicates "From 1970 to 1999 the number of part-time students in higher education rose by 117 percent, compared with 51 percent for full-time students" (p. 4). The author also indicates the students are diverse in color, ethnicity, and culture.

Anderson (2003) details the increase in students of color are primarily due to the population explosion of Asians and Hispanics in the United States. Anderson (2003) emphasizes, "Hispanics and Asian Americans were responsible for the largest numerical increases (933,000 and 712,000, respectively)" (p. 4). The author also specifies more African Americans are entering colleges, as well as, American Indian students.

Anderson (2003) emphasizes:

The number of African Americans increased by 59 percent, with the numerical increase in these students at more than 600,000. The increase among American

Indians was also significant (360 percent); however, because the number of American Indian students enrolled in 1976 was so small the numerical growth from 1976 to 1999 was only 69,000. (p. 4)

Anderson (2003) also discusses the explosion of the non-white races and reflects on the white race becoming a minority. The author stresses policymakers need to address the needs of the non-white diverse population, to better serve these individuals in the post-secondary market. Anderson (2003) concludes "Higher education throughout the nation must be cognizant of these changes. States that have traditionally had few minorities must be prepared to address the educational needs of these students" (p. 11).

Social Factors

Another challenge for many postsecondary institutions is competing with new approaches on how students want to learn. Distance learning versus traditional modes of learning could be switching directions for many young, enthusiastic learners that originally learned technologies in their early childhood. Fullan and Scott (2009) discuss college and university retention as an important factor to improving the higher educational levels of the general population. Retaining students towards graduation is a challenge amongst universities, along with the various modes of distance and online learning.

Gorard, Selwyn, and Williams (2000) reported the United Kingdom Government committed to a policy of education, and focused on developing a learning society. Some of the goals towards the widening participation of adults are easy access to learning, and developing new methods of learning in place of traditional style learning. Promises of 24/7, anytime, or anywhere learning has always been an attractive aspect of using

technology, and is certainly the case with adults. Technology is alluring, so how can technology solve the needs of the unemployed, workers with learning disabilities, and those that are poverty stricken?

Gorard et al. (2000) discuss the issues of widening access to learning opportunities for all. The authors specify this is not a new problem, and it is unlikely to be one with a simple technical fix. The authors conclude the emerging use of digital technology is alluring, although unlikely able to fix the entire problem. They indicate despite the efforts of using technology to overcome such barriers of distance, time, and location. The recommendation must be that all instructors and technology experts should try harder to increase participation of adult learners.

Political Factors

Fullan and Scott (2009) describe the component of unlocking access, as the world-wide economic disaster in 2008 occurred in the stock market. They indicate the endowments of many United States colleges and universities were negatively impacted by the stock market crash in 2008. They also indicate the United States no longer reigns as the dominate player in the shares of the global domestic product.

Other countries have entered the arena and are growing rapidly in gaining leverage against the U.S. Fullan and Scott (2009) specify India and China are now recognized as additional global players. These countries are seeking their full potential as they recognize the strengths to offer labor and services at a less expensive level, as well as, offer a higher educational degree at a cheaper rate. Fullan and Scott (2009) identify within the next 10 years, many colleges and universities will suffer from a lack of strong

leadership as the baby boomers, approach retirement. Filling the gap with new leadership will remain a challenge for higher educational institutions.

Technological Factors

According to Fullan and Scott (2009), university and college senior administrators must deal with external pressures for funding from state and federal sources. All higher education institutions sense the need to raise tuition and reduce expenses. One method to reduce expenses is to utilize corporate software to standardize solutions while simultaneously meeting the needs of a university. Thus, this begins the discussion of the transformation of information technology as a key factor in higher education.

Prensky (2001) talks about "today's students, K through College representing the first generation to grow up with using new technologies" (p. 1). Prensky (2001) identifies today's average college graduate has spent the least amount of hours of their lives reading, but in excess of over 10,000 hours using technologies and electronic devices. Additionally, Prensky emphasizes digital and computer games, email, the Internet, cell phones, and instant messaging, areas also integral parts of student's K-through college lives. Prensky expresses students of today can be identified as "Digital Natives" (p. 1). Prensky identifies students as "native speakers of the digital language of computers, video games, and the Internet" (2001, p. 1).

Adults may not have been born into the digital world but need to adapt to using technologies. Adults need to utilize technology in their everyday lives, as well as, to adapt to using technologies in the workplace. Prensky calls adults that are learning technology "Digital Immigrants" (2001, p. 2). Prensky posits, "Adults adapt to their environment. However, they always retain, to some degree, their reflections and

memories as part of their past" (2001, p. 2).

Tight (1998) describes lifelong learning with interpretations of personal experiences throughout the article and explains the relationship between lifelong learning, and the need for lifelong education. Tight suggests lifelong learning and education are about the economic and social aspects of life. Tight discusses the importance of lifelong learning and standards set by national councils to achieve a stronger workforce. Tight specifies "The threat of economic and social exclusion hovers over those who do not take on this responsibility" (1998, p. 256). Moreover, Tyre and Von Hippel (1997) discuss adaptive learning within groups and describes the quandaries in using new technologies as a new foundation for learning and process enhancements in organizations.

Globalization

The crossover between corporate business and higher education continues to grow. Levine (2001) discusses the emergence of the "Brick and click colleges" (p. 253) where the physical disappear and the international virtual develop due to innovative technology. Levine (2001) also discusses the emergence of corporate vendors within the university realm, as they exist due to the impending needs of managing a university. Efficiency and standardized software solutions are introduced and implemented to bridge the gap between managing a university as a business, while providing exceptional customer service to their students, no matter where the students live.

Levine (2001) indicates:

There will be worldwide campuses. For the most part colleges and universities are associated with a particular nation. For click and click and brick universities, national boundaries have no meaning. The result is that there will be

The Remaking of the American University the rise of global universities. Which institutions make the transition will depend on speed of action and the quality of the products they produce. Schools like the British Open University which already operate around the world have an advantage if they can develop the cutting edge pedagogy for the new Internet technologies which are already shaping the future.

(p. 265)

Organizational Framework of Higher Education

Conceptually, the organizational framework of higher educational institutions consists of three pillars of administration. These three legs of the stool consist of: a)

Academic Affairs, b) Student Affairs, and c) Operations and facilities. These three key operations are core to universities nationwide. The office of Academic Affairs tends to the coursework and curriculum offered to the students that are attending a university. The student affairs division provides all of the various required services to the students. These services include housing, enrollment management, food services, and student activities and clubs. These services are provided with the objective of enhancing the student experience when attending college. The students are the accepted applicants that are planning on attending the university. The third prong of the university is the operations and facilities leg of the stool. This division supports the operation of the departmental

services provided to the student. The facilities are the actual setting of the classrooms and labs (virtual or physical locations) where the students would be taught.

Academic affairs. The university division of academic affairs is responsible for addressing the educational needs of the institution. Academic affairs' offices often consist of enrollment management services for the students, including admissions, financial aid, bursar, and registrar. The academic affairs division is also responsible for the hiring of qualified faculty and establishing core curriculum that is offered to students.

The Office of Academic Affairs is responsible for supporting the work of the faculty, whose teaching, advising, and scholarship brings the academic program to life. As chief academic officer, the Provost and Vice President for Academic Affairs oversees the University curriculum and new curricular initiatives; faculty hiring and promotion; support for faculty research and teaching; and the administration of all academic departments and programs, the library, and offices within the division of Academic Affairs. (Wesleyan University, 2014, p. 1)

At Henry University, the division of academic affairs reports to the Provost. The Provost is responsible for all of the deans and faculty, as well as the establishment of the core curriculum. According to Mortimer and Sathre (2007), "The art of being a good provost involves working through the processes of academic governance with the deans and faculty" (p. 83).

Student affairs. The division of student affairs concerns itself with all aspects of the students attending the university. The student affairs offices often consist of student housing, career and academic planning, food services, clubs, bookstore, and student life. Student life supports the needs of the student. Services provided by student life deal with

supporting and addressing the conduct, attitudes, behaviors, and academic difficulties of the student.

At Henry University, student enrollment consists of approximately 13,349 students representing undergraduate, graduate, and professional degrees (Henry University, 2013). Henry University students are mostly undergraduate students. The student population consists of full-time students, part-time students, and online students. Henry University students can live on campus, commute to any of the campuses, or complete their coursework online. There is an increased number of graduate students at Henry University. With the incorporation of two medical schools, the university also offers numerous terminal degrees. All students are offered the services and the amenities of the entire university campuses.

Operations and facilities. The operations and facilities divisions of Henry University are responsible for the physical or virtual classrooms, as well as, academic buildings, and facilities. These facilities may include technology services, software, and hardware maintenance, required to support student applications. Other operations and facilities may include library services, recreation centers, sports, and radio for the university.

The employees and staff of Henry University are a learning organization that supports the operations and facilities of the institution. The support provided by the employees and staff are similar to that of any university but also include support to satellite campus' and virtual classrooms. The technology services include software and hardware support, as well as, report writing, needed to support all functional offices.

Often, technology needs and requirements drive the changes in software and reporting for

the university. The following figure depicts the organizational framework of Henry University.

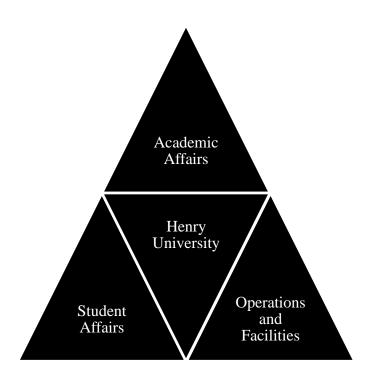


Figure 3.1 The Organizational Framework of Henry University.

Change- Understanding and Driving Change

According to Fullan (2001), change is described as a course of action that involves the process of going from one process to another. Change can provide improvements, enhancements, betterment, or conversely, change can have a negative

impact. The development of change strategies within a learning organization consists of three key change agents. These change agents specify and indicate the importance of leadership within the change model to achieve success and process improvement within an organization.

Human factors also influence change in an organization. The attitudes, beliefs, and past experiences of team members can affect the outcomes of the change throughout the organization. Negativity can add to resistance and slow down the change progress of the overall team accomplishments. Theorists such as Kotter, Fullan, Deming, and Castle and Sir, provide a framework of change through their lenses. These change frameworks are pertinent to understanding and implementing the organizational change discussed in this study.

Kotter – The Eight Step Process for Leading Change

John P. Kotter, a professor in business leadership development at the Harvard University School of Business is an expert in change management and transforming organizational change. Kotter (1996) identifies the significance of the transformational change that must occur to achieve organizational success. Kotter (1996) identifies eight steps of generating change within an organization. Kotter's (1996) eight-step change model is characterized as the following:

Establishing a sense of urgency, Creating the guiding coalition, Developing a vision and strategy, Communicating the change vision, Empowering broad based actions, Generating short term wins, Consolidating gains and producing more change, and Anchoring new approaches in the culture of the organization. (p. 21)

Sense of urgency. Kotter (1996) specifies in step one of his change model the importance of developing a sense of urgency within the organization. The author discusses the activities of re-examining current processes and determining realities. The author encourages open discussions and collaboration to identify key issues and problems within the organization.

Guiding coalition. Kotter (1996) specifies in step two of his change model the magnitude of creating a coalition within the organization. He identifies the value of working within a team, sharing ideas and framing key questions for specific consideration around identified conflict. Team members discuss issues (both positive and developmental) in order to plan further collaborative initiatives.

Developing a vision and a strategy. Kotter (1996) specifies in step three of his change model the value of developing a vision and a strategy for the organization. He stresses the importance of a team strategy focusing on improvement, advancement, and growth. Cross team approaches are also discussed as they align with cross-functional strategic planning. Measuring individual team contributions, accomplishments, and productivity, as well as, overall team effectiveness can influence the bottom line of any institution or corporation.

Strategic planning is also part of Kotter's (1996) third step of change. Strategic planning provides a path for strategies for achieving the vision. The vision guides the change process in the organization.

Communicating the changed vision. Kotter (1996) specifies the fourth step of his change model as communicating the changed vision. Moreover, Austin (2009) also identifies the need for communication as a prerequisite for a shared governance approach

in strategic planning, goal setting and communication plans. All participants in an organization are expected to participate and contribute towards a shared responsibility, encouraging a collaborative dialog.

Empowering broad-based action. Kotter (1996) specifies in step five of his change model the magnitude of empowering the organizational team members to take action. Empowering employees to take action, helps to remove obstacles, and encourages team members to take risks. Risk taking can result in the team members building and creating innovative ideas. Thus, this is the beginning of the change structure.

Generating short term wins. Kotter (1996) specifies in the six-step of his change model the importance of generating short term wins. He identifies the significance of the team creating wins. The author also discusses visibly rewarding and recognizing team members that are involved in the short term win.

Gains and change. Kotter (1996) specifies in step seven of his change model the meaning of consolidating more gains and producing the change. He discusses using increased credibility hiring, promoting, and developing talent, to improve change, and reinvigorating processes within the organization to promote new projects ideas, and agents.

Anchoring new approaches in the culture. Kotter (1996) indicates "New approaches usually sink into a culture only after it's very clear that they work and are superior to old methods" (p. 157). Kotter (1996) specifies in step eight of his change model the substance of anchoring. He details developing new approaches to handling the problems and areas of opportunity, experienced within the learning organization. The author also discusses creating the improved performance of team members. Allowing

team members to articulate their connections builds individual leadership, and fosters an environment of process improvement.

Kotter's (1996) eight step change process was utilized in various businesses and industries around the world. Leaders in businesses such as the Seaman Corporation, and Selective Benefits Group, were enlightened by the transformational eight step change process that Kotter has theorized. Identifying the eight step change process and identifying the mistakes that are made along the way helped to reshape these corporations towards global success and overall organizational transformation.

Richard Seaman, (as cited in Kotter, 1996), President and CEO of the Seaman Corporation, indicates he shared the ideas of Kotter's eight step process with his managers to help them identify with the difference between being a manager and being an effective leader. Andrew S. Bluestone (as cited in Kotter, 1996), President of Selective Benefits group, specified Kotter's eight step process helped him and others with their managerial organization and administration style.

Fullan- The Six Fundamentals of the Change Process

Fullan (2001) stipulates business and education have commonalities; however, leadership and management intermingle and are not exclusively distinguished. Fullan (2001) emphasizes the significance of moral purpose and its connection to strategic planning. Fullan (2001) indicates "Moral purpose cannot just be stated, it must be accompanied by strategies for realizing it, and those strategies are the leadership actions that energize people to pursue a desired goal" (p. 19). He specifies the moral purpose and continuous performance are mutually dependent. Building and sustaining relationships are also key factors in implementing change.

Fullan (2001) defines:

The six fundamentals of the change process are: a) The goal is not to innovate the most, b) It is not enough to have the best ideas, c) Appreciating the implementation dip, d) Redefining resistance, e) Reculturing is the name of the game and, f) Never a checklist, always complexity "(p. 34).

These six steps in understanding the change process accentuate building and creating knowledgebase within individuals and teams. The author emphasizes coaching and reengineering tactics as dynamics within the change process. The authors also discuss the importance of teamwork in implementing organizational change.

The goal is not to innovate the most. In this first step of understanding change, Fullan (2001) discusses leaders are taking on so much change that the organization becomes tired and weary. He notes that the depth and magnitude of these changes have no real significance but are a result of the culture of the organization. Fullan (2001) indicates "Pacesetters must learn the difference between competing in a change marathon and developing the capacity and commitment to solve complex problems" (p. 37).

It is not enough to have the best ideas. In this second step of understanding change, Fullan (2001) discusses aspects of the authoritative leader who has good ideas but cannot get anyone to listen to them. Fullan (2001) states "The answer is that authoritative leaders need to recognize the weaknesses as well as the strengths in their approach" (p. 39).

Appreciate the implementation dip. In the third step of understanding change, Fullan (2001) defines the implementation dip as: "The implementation dip is literally a dip in performance and confidence as one encounters an innovation that requires new

skills and new understandings" (p. 40). Fullan (2001) implies the team members in an implementation dip feel restless, uneasy, nervous, and concerned that they will not be able to build their skills for the new change. Goldman (as cited in Fullan, 2001) states:

Leaders who understand the implementation dip know that people are experiencing two kinds of problems when they are in the dip the social psychological fear of change, and the lack of technical know-how or skills to make the change work. It should be obvious that leaders need affiliative and coaching styles in these situations. (p. 41)

Redefine resistance. In the fourth step of understanding change, Fullan (2001) specifies that people naturally learn more from others who disagree, rather than those who always agree. The author indicates there will always be resisters. Fullan (2001) emphasizes "Respecting resistance is essential, because if you ignore it, it is only a matter of time before it takes its toll" (p. 42).

Reculturing is the name of the game. In the fifth step of understanding change, Fullan (2001) details the difficulty in reculturing individuals and team members to integrate newly implemented systems and processes. Fullan (2001) specifies "Leading in a culture of change means creating a culture (not just a structure) of change" (p. 44). Additionally, the author identifies the need for leaders to possess direction, motivation, and optimism when leading the change within an organization.

Never a checklist, always complexity. In the sixth step of understanding change, Fullan (2001) emphasizes there is no step-by-step design to implementing change within the organization. Utilizing a checklist may seem to be helpful at first, but change is a

moving target. The project plan constantly changes with the implementation, and there will be complexities.

Fullan (2001) identifies "Complexities can be unlocked and even understood, but rarely controlled" (p. 46). Organizational change may be a magnanimous task.

Moreoever, Wentland's (2010) dissertation main purpose was to test Michael Fullan's eight step process of sustainability in the Mississippi school system as predictors of school performance classification levels (level 4 and level 5).

Wentland (2010) found:

The results of this study indicated that the elements of sustainability were present in the schools utilized in this study and also demonstrated that the sustainability element of cyclical energizing was the most common factor in the school performance classification level 4 and level 5. Cyclical energizing refers to the fact that the eight elements of sustainability will require changes and challenges which can easily burn-out an individual trying to bring about educational reforms. Burn-out, turnover, and morale are serious threats to achieving sustainability and the development of school cultures that enhance teacher and student performance. Sustainability is cyclical not linear. Periods that leaders push for greater accomplishments followed by a period of replenishment to avoid burnout. (p. 78) Change agents such as Deming have also developed an organizational framework

to support the various facets of change. The following depicts Deming's work.

Deming

Deming (1986) emphasizes:

The origin of the 14 points. The 14 points are the basis of transformation of American industry. It will not suffice merely to solve problems, big or little. Adoption and action on the 14 points are a signal that the management intend to stay in business and aim to protect investors and jobs. Such a system formed the basis for lessons for top management in Japan in 1950 and in subsequent years. (p. 23)

Deming's (1986) specifies the:

Fourteen key principals include the following: 1) Constancy of purpose for improvement of product and service. 2) Adapt the new philosophy, 3) Cease dependence on mass inspection. 4) End the practice of awarding business based on price alone, 5) Improve constantly and forever the system of production and service, 6) Institute training, 7) Adopt and institute leadership, 8) Drive out fear, 9) Break down barriers between staff areas, 10) Eliminate slogans, exhortations, and targets for the work force, 11a) Eliminate numerical quotas for the workforce, 11b) Eliminate numerical goals for people in management, 12) Remove barriers that rob people of pride of workmanship, 13) Encourage education and self-improvement for everyone, 14) Take action to accomplish the transformation. (pp. 24-86).

Create constancy of purpose for improvement of product and service.

Deming (1986) specifies "Innovation is the foundation of failure, cannot thrive unless the top management have declared unshakeable commitment to quality and productivity" (p.

25). Moreover, Deming's belief is that management turnover is a continued disruption to the people within the organization. Knowledge is lost and history is not maintained.

Consistency and quality are lost.

Adapt the new philosophy. Deming (1986) states "Transformation is required" (p. 28). Deming (1986) identifies "We can no longer tolerate commonly accepted levels of mistakes, defects, material not suited for the job, people on the job that do not know what the job is and are afraid to ask......" (p. 26). The author specifies that everyone within the organization must agree mutually on who their customers are, to what the priorities are of the organization.

Cease dependence on mass inspection. Deming (1986) specifies "Inspection does not improve quality, nor guarantee quality. Inspection is too late" (p. 29). Deming (1986) specifies the importance of producing a quality product the first time around to save resources, cost, and time. The author discusses the criticality of taking the time up front, to ensure better results in the end.

End the practice of awarding business based on price alone. The W. Edwards Deming's Institute (2016), states Deming believed in gaining leverage through buying products through a single source provider. Deming, as discussed by the W. Edwards Deming Institute (2016), believed that utilizing a single source fostered a positive environment where you could build a long term relationship; cost should not be the sole reason in evaluating and awarding business.

Improve constantly and forever every process. Deming (1986) belief is "Quality must be built in at the design stage" (p. 49). The author identifies process

improvement as a key factor towards achieving a quality product and a quality system.

The author believes consistent quality standards help to drive costs down.

Institute training on the job. According to the W. Edwards Deming Institute (2016), Deming believed in on the job training, as it would enhance the skillsets of the works to improve their job skills. Training and constant retraining enhances the overall accuracy of worker input. Training provides an increased knowledgebase and also fosters an environment of care and inclusion.

Adopt and institute leadership. Deming (1986) specifies "The job of management is not supervision, but leadership" (p. 54). The author details leadership fosters inclusion. Being flexible and adopting to various leadership styles, can enhance communications, and encourage team work.

Drive out fear. Deming (1986) identifies with a worker and indicates "I am afraid that I may not always have an answer when my boss asks me something" (p. 60). The author specify this principal inhibits workers from speaking up, and thus can cause fear amongst entire workgroups. Fear causes disruption and ineffectiveness in work environments.

"Teamwork is sorely needed throughout the company" (p. 64). The authors believed in building teams with various strengths, weaknesses, opinions, and espoused beliefs. The

Breakdown barriers between staff areas. Deming's (1986) specifies:

authors exemplify the importance of dialog, communication, and inclusiveness, in order to promote effective teamwork. Listening and learning can help to build trust amongst the

workgroups.

Eliminate slogans, exhortations, and targets for the workforce. According to the W. Edwards Deming Institute (2016), Deming strongly believed that empowering workers could lead to their ability to transform an organization. Building relationships with the staff could improve overall quality and foster an environment where ideas can be shared and explored. Inclusion is a component of social justice in the workplace where managers can exchange ideas and discuss opportunities for improving processes.

Eliminate numerical quotas for the workforce. Eliminate numeric goals for people in management. Deming's (1986) emphasizes a longing to remove numerical quotas and eliminate managerial goals. The authors discuss inclusion and trustworthiness as important factors in overall work environments. Management's focus in building relationships with staff members can promote positivism, however, managerial goals may still exist from a corporate strategic perspective.

Remove barriers that rob people of pride of workmanship. Deming (1986) explains this principal applies to management and also production workers. The author emphasizes "Barriers against realization of pride of workmanship may in fact be one of the most important obstacles to reduction of cost and improvement of quality in the United States" (p. 83). Taking pride in workmanship can build trust and build confidence within the workgroup. Teams can share their ideas and focus on the quality, not the quantity.

Encourage education and self-improvement for everyone. Self-improvement and further education can improve employee self-confidence and the ability to perform job duties. The W. Edwards Deming Institute (2016), exemplifies Deming's

commitment to furthering education to enhance their job skills. Stronger job skills could support improved overall quality of deliverables.

Take action to accomplish the transformation. According to the W. Edwards

Deming Institute (2016), Deming believed the ownership of transformation of the

organization belonged to each and every person within the organization.

Transformational change is essential in today's workplace in order to stay competitive.

Leveraging different skill sets of workers can improve overall work processes.

Although Deming was a physicist and a statistician, he was an important contributor and collaborator in improving various corporate, educational, and service organizations with his 14 principals of transformation. Authors such as Castle and Sir (2001) were also transformational change agents and leaders much like Deming. Castle and Sir (2001) as well, drove change through improving business processes and process improvements.

Castle and Sir – Organizational Development and Change Management

Castle and Sir (2001) depict the background of their research began in 1997 when an international petrochemical company had a failing electronic communications product. The authors indicate the product had serious deficiencies, and was affecting the bottom line of meeting overall corporate goals and objectives. The electronic communications product was difficult to use and required users to repetitively enter data. The product could not be utilized by mobile users in any capacity.

Castle and Sir (2001) then discuss the management team's decision to upgrade the communication products. The authors depict the management team "Decided to implement a new set of electronic communications products under the umbrella named

ECOM. (ECOM stood for electronic communications)" (p. 61). Castle and Sir (2001) in working with the international petroleum company on their new communications products, discovered a theory of organizational development framework in "Project ECOM – a technology assimilation project in a 43,000 member international petrochemical company" (p. 1). They identify that organizational development (OD) "is the planned process of developing an organization to be more effective in accomplishing its goals" (p. 1).

Castle and Sir (2001) also provided:

A framework for change management within the context of an IT assimilation. The authors create an architecture for change management to enable individuals associated with the change process to reduce resistance problems significantly and increase support for the major change. The change management methodology helps to ensure that the organizational dimensions of the IT solution enable business processes to achieve their stated objectives. These organizational dimensions include culture, organizational and workforce structure, competencies, information, and human resource and management practices. (p. 2)

The OD consultants followed a change management architecture depicted in Figure 3.1, Castle (as cited in Castle & Sir, 2001) as the following:

This architecture served as a blueprint for IT transition execution and served as a roadmap for deployment. Using the change management architecture, the ECOM Project Team was able to keep focus on critical priorities and control risks, schedules, and costs. The results of the prescribed tactics and operations

throughout the four phases eliminated the obstacles that impeded successful implementation. (p. 3)

Table 3.1

Castle (as cited in Castle and Sir, 2001, p. 3) ECOM Management Plan

	Phase 1: Diagnosis	Phase 2: Design	Phase 3 : Implementation	Phase 4: Evaluation
Goals	The Organization's capacity to succeed in an IT change initiative.	The design of the organization's change campaign.	The execution of the ECOM deployment process and change management plan; monitoring progress and redefining.	The evaluation of the results.
Tactics and Operations	 Coaching Strategy Transition Committee Cascading Change Management CSF of Change Behavioral Indicators Stakeholders Analysis Cultural Audit Readiness Assessment 	 ECOM Deployment Process Training Education Plan Communications Plan Executive Alignment and Support Concerns-Based Adoption Model (CBAM) Group Development Analysis Lewin's Theory 5 I's Strategy Cascading Sponsorship 	 ECOM Project Tracking Formative Evaluations of Sub-Plans and Processes in Change Management Plan Training Programs Communication Releases Coaching Leadership Development 	 ECOM Project Final Evaluation Report Interim Reports (Formulative Evaluation) Change Management Campaign Final Report

Table 5.3 (Continued)

	Phase 1: Diagnosis	Phase 2: Design	Phase 3 : Implementation	Phase 4: Evaluation
Deliverable	• Stakeholder Impact Map Measure Cultural Gap & Readiness	 Change Management Plan Project ECOM Deployment Process 	Progress Reports & Refinements in the change management campaign mechanisms & ECOM deployment	Summative Evaluation

Castle (as cited in Castle & Sir, 2001) defined the change management plan as consisting of four phases of change. The authors emphasized the four phases of the plan involved diagnosis, design, implementation, and evaluation. Castle (as cited in Castle & Sir, 2001) define the four phases of the change architecture plan to each encompass goals, tactics and operations, and deliverables.

Phase 1, diagnosis. Castle (as cited in Castle & Sir, 2001) detail the goal of this phase involves achieving success for the information technology proposal. The authors identify the tactics and operations to include coaching and achievement of critical success factors, as key measurements of the project's success. Castle (as cited in Castle & Sir, 2001) specify the deliverables of this phase to include an impact map for the stakeholders, and cultural and readiness evaluations.

Phase 2, design. Castle (as cited in Castle & Sir, 2001) identify the goal of phase two of the change architectural plan involves designing the change. The authors identify the tactics and operations to include training, communication, corporate alignment, CBAM (Concerns Based Adoption Model), Lewin's theory, and the 5 I's strategy. Castle

(as cited in Castle & Sir, 2001) specify the deliverables of this phase to include an impact map for the stakeholders, and cultural and readiness evaluations.

CBAM. Horsley and Loucks-Horsley (1998) define CBAM as the "Concerns-Based Adoption Model" (p. 1). The authors describe this model as a "Framework and set of tools for developing and continually evaluating reform efforts" (p. 1).

Horsley and Loucks-Horsley (1998) detail:

CBAM examines the change process through the dimensions of Stages of Concern, Levels of Use, and Innovation Components. The Stages of Concern describe the affective dimension of change. The Levels of Use describe the behavioral dimensions of change. The Innovation Components dimension recognizes the importance of identifying specific parts of a change process and provides staff developers with hands-on tools for making those identifications. (p. 1)

Lewin's theory. Kritsonis (2004) discusses "Kurt Lewin theorized a three-stage model of change that is known as the *unfreezing-change-refreeze model* that requires prior learning to be rejected and replaced" (p. 1). Kritsonis (2004) describes the *unfreezing* stage as people opening up to new ideas and allowing themselves to be wide-open to new ways of doing things. Kritsonis (2004) details the second phase of Lewin's change model is *change* itself. The author describes people changing their thoughts, attitudes and ideas. Kritsonis (2004) details the third step in Lewin's change model is *refreezing*. The author indicates this process of the change model is key to adapting to the new process, as the new everyday process. The author also indicates without the third

stage of Lewin's change process, people could go back to the original ways of doing things and not change at all.

Phase 3, implementation. Castle (as cited in Castle & Sir, 2001) describe the goal for this phase of the change architectural plan is implementing the change, monitoring process improvements, and critiquing procedures. The tactics and operations of this phase are the development of training plans, communications, and assessment. The authors indicate the deliverable of this phase is reporting and evaluation.

Phase 4, evaluation. Castle (as cited in Castle & Sir, 2001) emphasize the fourth phase of the change architect plan is the evaluation phase. The authors identify the goal of this phase is to evaluate the change and the overall results of the implementation of the change. Castle and Sir (1996) imply the tactics and operations of this phase involve various types of reporting to determine the outcomes of the change. The deliverable for this fourth phase of the change architect plan is an assessment as a measurement of achievement, and evaluation.

Five I's. Castle and Sir (2001) describe OD as a methodology of Five I's. The authors describe the Five I's as (a) Incenting, (b) Involving, (c) Intervening or coaching, (d) Instructing, and (e) Informing techniques (Castle & Sir, 2001). Castle and Sir (2001) imply OD is a crucial component in driving successful technology implementations. The authors also emphasize the intent of the Five I's is to overlap and coincide to produce a successful outcome. Castle and Sir (2001) felt "Interventions at the individual, group, and organizational levels that involved the use of the Five I's drove the success of all project plans, including the Change Management Plan" (p. 3). The following describes the Five I's in detail.

The significance of incenting. Castle and Sir (2001) describe incenting responsibilities as the designing, implementation, and evaluation of the deployment process for Project ECOM. The authors stipulate that each member of the ECOM team donated their monetary rewards to this measure. Therefore, there was an incentive to design, implement and evaluate successfully, since the team members could be affected by the change monetarily.

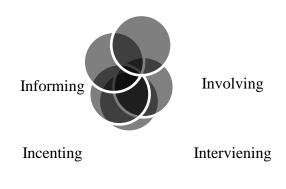
The significance of involving. Castle and Sir (2001) describe the responsibilities of involving were tasked to the transition committee at Project ECOM. The authors indicate each business unit was assigned a designated person as a single point of contact for the project. Relationship building was a key factor in involving all levels of employees for the change initiative.

The significance of intervening. Castle and Sir (2001) indicate the responsibilities of intervening were assigned to the cultural change team assigned to Project ECOM. The authors specify this team incorporated a transition workshop, a rewards program, and coaching workshops. Adapting to the new culture was not easy for all team members. These functions help to provide support to the end-users.

The significance of instructing. Castle and Sir (2001) describe the responsibilities of instructing as: "Design, development of materials, delivery and evaluation of the training for those responsible for deployment and the end-users" (p. 1). The authors specify the training group at Project ECOM various methods of training to the end-users such as: online, videotape, interactive training and used surveys for evaluation of the trainers.

The significance of informing. Castle and Sir (2001) describe the responsibilities of informing were to audit the current methodologies of communicating. Then the team was tasked to build a new framework for communication. Castle and Sir (2001) specify "Two way communication events, such as online bulletin boards, and discussion groups, coffee klatches, town hall meetings, and lunch and learn sessions" (p. 4).

The intent is not for the Five I's to live as silos within the organization (see Figure 3.2). The intent is for the Five I's to build collaboration, knowledge base, confidence, and commitment within the organization. The overall organization consists of numerous types of workers with various age groups; however, there is a concentration of adult learners in the workplace. Recognizing the strengths and the weaknesses of the adult team members helps to build collaboration, understanding, and communication skills. Aligning teams to work together fosters a positive environment for learning, participation, and standardization.



Instructing

Figure 3.2 Describes Castle & Sir (2001) Theory of Organizational Development. This Process Starts With Incenting and Concludes With Informing.

Being an Adult Learner

Knowles (1973) developed the theory of andragogy. The author specifies "Andragogical theory is based on four assumptions which differ from those of pedagogy: (1) Changes in self-concept, (2) The role of experience, (3) Readiness to learn, and (4) Orientation to learning" (p. 1). The author indicates andragogy is based on the study of adults. He details each of these four entities as the following.

Changes in self-concept. Knowles (1973) indicates "Andragogy assumes at the point at which an individual achieves a self-concept of essential self-direction is the point at which he psychology becomes an adult" (p. 45). Moreover, Cross (1977) indicates adult learners learn from self-directed learning projects in informal settings. Adult learning should be based on experience, pain, suffering, understanding, insight, wisdom, and maturity. Learning styles have great bearing to how one learns, as does a person's self-concept.

The role of experience. Knowles (1973) specify: "Accordingly, in the technology of andragogy there is decreasing emphasis on the transmittal techniques which tap the experiences of the learners and involve them in analyzing their experiences" (p. 46). Adults have many experiences that detail the shape of how they learn. Context and process make a distinct difference from learning in childhood. Self-identity tied with personal experiences molds personal learning styles and behaviors as adult learners.

Readiness to learn. Knowles (1973) discusses "The critical implication of this assumption is the importance of timing learning experiences to coincide with the learners developmental tasks" (p. 47). There is a distinct link between participatory motivation in a learning activity and an adult's life experiences and developmental issues. Reflection is also a key component of learning in adulthood.

Orientation to learning. Knowles (1973) indicates the adult "Comes into an educational activity largely because he is experiencing some inadequacy in coping with current life problems" (p. 48). Adults are responsible for themselves, and set goals that are often work related. Adult education must be with purpose.

Learning as an Adult

Cross (1977) identifies:

For the nation as a whole, a reasonable estimate is that somewhere around onethird of the adults are probably participating in some form of organized learning activity, and that somewhere between one-third and two-thirds say that they are seriously interested in further learning of some kind. (p. 3). Adults, in general, vary in values and preferences, as well as, the social context that shapes the fabric of who they are. There is no one strategy that encompasses everyone, nor does one method provide clarity to the learner. Learners often seek peerreview with comparable experiences. The process of adult learning is seen as shared and contributing. Context is heavily considered in particular forms of learning. Context is a broad concept referring to where the learner is situated concretely (as in the workplace).

Transforming learning environments to an environment supported by communication, liberation, and growth in humanization requires individuals who are willing to change and grow. Transformational learning is about dramatic change; changing what is known. Transformational learning occurs when people re-evaluate and re-examine their current methods of doing things. The personal experience and the experiences of others help adults shape new ideas (Cranton, 2006). Transformational learning occurs when personal beliefs or attitudes change as in the transforming of the entire prospective (Cranton, 2006).

From a personal lens, self-directed and transformational learning is taking place in the workplace at Henry University with the UPG and the USG teams. For example, in observing these work teams, each team member is assigned roles, responsibilities, and accountability. This professional learning organization emphasizes key concepts of transformational learning by emphasizing personal experience, critical reflection, development of skill sets, and taking action. The producers of the Cognos reporting tool are now the learning organization from this point forward. Team members changed roles and responsibilities throughout the implementation, therefore, transforming themselves as they develop, expand and strengthen their skills and abilities.

Gonzales (2011) discusses a work-force improvement process involving adult workers. He specifies this work force improvement process could drive billions of dollars back into the national economy. Gonzales (2011) indicates a strengthened work-force, the adult learner community, through educational opportunities, could increase the nation's accessible group of workers by inspiring adults to pursue employment opportunities by obtaining a college degree. Gonzales (2011) hypothesizes that a reinforced adult learning work-force could facilitate reductions in the overall unemployment levels. The researcher indicates that through adults strengthening their skill sets in the workplace, this can facilitate the reduction of unemployment spending from a federal perspective.

According to Voorhees and Lingenfelter (2003), a necessary factor for adults to be gainfully employed consists of obtaining a college degree. They specify workers need to continuously learn. Voorhees and Lingenfelter (2003) also state "The most obvious gap between the millions of adults who need to further their education, is in the participation of adults who need to enhance their basic literacy skills" (p. 1). Adults need to achieve basic literacy skills to start the process of being prepared for the workforce. This study supports traditional and non-traditional learners entering the job market and measuring their abilities to obtain jobs that require a technology skill set. Many adults are drawn to technology and learning at work, but barriers to workplace learning can exist emerging from institutional, situational, dispositional, and environmental factors.

Multiple Responsibilities

Life becomes a struggle to balance each separate entity. This balancing act leaves no time for personal learning or advancement. Cross (1977) indicates barriers dissuade adults from learning. The author also discuss there are many reasons for non-

participation. Cross (1977) specifies "lack of time and lack of money are socially acceptable reasons for not participating in learning activities" (p. 23). In the lives of many adult learners, there are barriers to their learning abilities. For example, adults may feel that they are too old to learn or a lack of interest.

Barriers to Participation in Learning

Cross (1977) specifies adults deal with many barriers such as child raising, work, home, and family. Their perspective aligns with Hiemstra's (2002) discussion of McClusky's theory on the power load margin, identifying the balance adult learners' face in their everyday lives. Hiemstra (2002) identifies McClusky's theory of power load margin as adults having a "load they must carry throughout their lives, in correspondence to the power or energy that is available to him or her to carry the load" (p. 1). These factors are described as barriers to learning. Cross (1977) describe the barriers to learning as: a) Institutional, b) Situational, c) Dispositional. Merriam et al. (2007) note these barriers as institutional, situational, dispositional, and environmental barriers.

Situational barriers to learning at work. Cross (1977) indicate that situational or external barriers exist with adult learners. Cross (1977) specifies "Situational barriers are those arising from one's situation in life at a given time" (p. 22). The author discusses aspects of situational barriers such as lack of time, overwhelming job responsibilities, or family commitments. She also specifies transportation for aging adults may be an situational barrier to learning. The authors emphasize the aging adult can experience isolation. Additionally, older adults may be handicapped. Conditions such as arthritis, or joint pain due to aging, may inhibit their abilities to learn, as well as, their younger counterparts. A momentous life event can also be a situational barrier to learning.

Examples of situational barriers can be divorce, having a child, or a dying parent.

Cross (1977) also identifies the lack ofmoney as a situational barrier to adult learners. In this particular case, the cost of training would be incurred by Henry University; therefore, the cost of the training would not be a factor in this study. The team members of the USG and UPG would not incur a cost for learning at work.

Dispositional barriers to learning at work. Cross (1977) suggests that negative attitudes, negative feelings or internal feelings of the adult learner may be a barrier to learning. Adults may deal with personal problems, financial burdens, or worries and not feel confident that they can focus on learning. Adult learners may refuse to learn anything other than what they know. Feelings of being too old to learn new skills may impede the adult from learning and from acquiring new skills for report writing. Previous negative experiences in learning can also result in a dispositional barrier of the learner. Cross (1977) identifies dispositional barriers to be found amongst adults who claim to be not interested in pursuing educational goals. As a leader in this endeavor, I needed to cultivate positive attitudes and provide encouraging positive feedback. I needed to provide support to these groups, to foster process improvements. Figure 3.3 depicts the dispositional barriers.

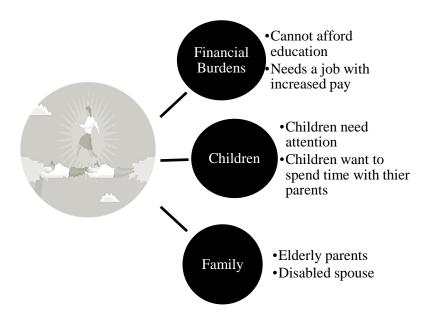


Figure3.3 Depicts an Adult Bridging or Balancing Dispositional Barriers of Financial Burdens, Children, Family, and Education.

Institutional barriers to learning at work. Cross (1977) indicates "Potential learners complain most about inconvenient locations and schedules and about the lack of interesting or relevant courses" (p. 27). Similarly, Smee (2013) defines institutional barriers of the adult learner to include institutional admissions requirements and stringent program prerequisites. For the USG and the UPG, these requirements do not exist for the implementation of the Cognos reporting tool. As an example, all USG and UPG team members possess a bachelor's degree as a minimum educational requirement for their positions at Henry University.

Environmental barriers to learning at work. Cross (1977) discusses adult learners who previously attended college will aspire to return, rather than those who have

never attended. Similarly, Merriam et al. (2007) discuss exclusion as an environmental barrier of adult learners in the learning community. From my perspective, a positive learning environment fosters positivism and unity, with a sharing of ideas, with all team members. For the USG and the UPG teams, there is a bridging effort taking place where both teams are now included in all training and meetings, and there is a sharing of knowledge that is positive, and promotes inclusion of all team members. Although the teams are different, there is a willingness to share, and to learn, to meet the division goals. Smee (2013) emphasizes access to learning is also an environmental barrier to learning. Access to learning for the USG and UPG groups was provided if the individuals attend the training. Higher institutional priorities may prove more important than learning a new reporting software.

From my lens, adult workers cope with many barriers such as child raising, work, home, and family. Life becomes a struggle to balance each separate entity. This balancing act leaves little time for personal learning or advancement. I experience this imbalance myself as I pursue my career and education, as well as, balance my responsibilities at home with my chores, my son, and my husband.

Power Load Margin

Howard Yale McClusky, a founding father of adult education, was born in 1900. He was well educated with an earned doctorate in psychology, and also was a well-renowned professor (Hiemstra, 1980). McClusky's work was at first focused on adolescences and young people. As McClusky aged, his focal point became adults and adult learning. McClusky found interest in adults managing their everyday lives and studied how adults prepared themselves for emergencies or urgent situations while

balancing the external and internal factors in their lives.

Hiemstra (2002) discusses McClusky's Theory of *Power, Load, Margin (PLM)* and the influence of external and internal factors as they affect the adult learner. Hiemstra (2002) identifies with McClusky's theory that the greater the adult learners Load of responsibilities, the greater the Margin that will be to carry the load. As life goes on, the Margin will change with the ever-changing responsibilities of the adult learner (Hiemstra, 2002).

Hiemstra (2002) describes Load as the responsibilities that an adult learner has such as job responsibilities, family, community, children, and perhaps aging parents. The Load carries weight and causes stress and strain on the adult learner. Load is a burden that can cause the adult learner difficulty in balancing life's responsibilities. Adult learners need to balance their everyday load of responsibilities with their inspirations, to succeed.

Hiemstra (2002) explains McClusky's reference to Power is the resources an adult learner would have that would assist him or her in carrying more Load. Power is also described as the supporting factors in the lives' of an adult learner. For example, the adult learner may have a daycare to help balance the child care in their lives. Perhaps, the adult learner may have a supportive boss that understands that children get sick, or elderly parents need to be watched over. Power resources facilitate the adult learner to cope and manage the weight of the Load.

Hiemstra (2002) specifies that McClusky states the perfect balance between Load and Power would need to be at an ideal level of .50 to .80. This ratio would represent the adult learner coping with his or her existing Load based upon the Power he or she has. As

Hiemstra (2002) indicates "The more Margin one has, the greater the chance of dealing with sources of Load" (p. 1). The following figure depicts McClusky's theory of the *Power, Load, Margin (PLM)*.

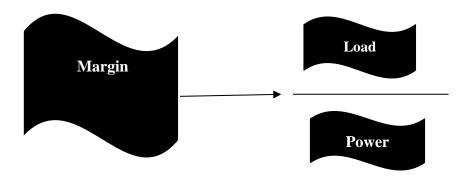


Figure 3.4 McClusky's Theory of Power, Load, Margin Theory.

The significance of the power, load, margin. For the USG and the UPG teams, each team member has a noteworthy amount of Load that they are carrying external to learning the Cognos reporting tool, at Henry University. For example, one team member has small children who require daycare and his spouse is constantly traveling. In addition to the children, this team member suffers from medical problems that at times, requires hospitalization. Although this team member is very intelligent, his Power is limited due to his health issues. Adding the stress of learning a new reporting tool could influence his Load balance and increase it.

Additional theoretical framework from Hanpachern, Morgan, and Griego (1998) support McClusky's theory of power and load as it relates to adults learning technologies

in the workplace. The authors reviewed McClusky's theory of power and load and found it related to employees readiness to accept and make the change within an organization. On organizational development (OD) Hanpachern, Morgan, and Griego (1998) indicate "The OD (organizational development) approach focuses on the workplace as an entity. The purpose of OD is to strengthen an organization's effectiveness by preparing employees for and ensuring that they are ready for change" (p. 348).

Stevenson

Stevenson (1980) studied McClusky's *Power, Load, Margin (PLM)* theory. Stevenson (1982) specifies that McClusky never performed a study on the *PLM* theory. Stevenson (1980) first developed a 211 item instrument for her research. After collecting data from 103 subjects for the MIL, Stevenson (1982) reduced the 211 item instrument to a 94 item instrument. The 103 subjects she first studied consisted of adult learners. At this point in the development of the questionnaire, comments were encouraged, and approximately 10 percent of the subjects were interviewed. The subjects indicated the wording of some of the questions seemed unclear, however the subjects were mostly positive. Two particular outcomes came from the 103 subjects interviewed which involved indicating a power and a load score for each item. Based on these findings, Stevenson (1982) then redesigned the instrument and reduced it to a 94 item instrument, then she developed required further testing for validity and reliability. From that point, through further cycles of research, Stevenson (1982) then reduced the questionnaire to approximately 60 items. Stevenson (1982) emphasizes "A research instrument needed to be developed so that *PLM* could be measured in adult subjects" (p. 222).

Piper (2012) applied the Stevenson *MIL* amongst nursing students in her study to measure the six subscales of Stevenson's instrument. Stevenson (1980) identifies the subscales as: "Religiosity/spirituality, self-concept, body (physical functioning), family, extra-familial human relationships, and non-person environment" (p. 223). Piper (2012) found "The smallest average PLM rate was in Parenting Satisfaction for all participants and the largest was in Religiosity" (p. 82).

For the UPG and the USG teams, there are many factors that influence the individual team members as adult workers. From a management lens, this workgroup represents an opportunity for management to rethink how organizations develop and function and how can we best utilize all human resources through diversity and equality at personal, and interpersonal levels. Leveraging the skill sets of the organization can strengthen the UPG and the USG team to become a learning organization.

The Learning Organization

The theory of the learning organization dates back to Argyris (1964). The author recognizes the development of a learning organization, which includes learning on an individual level, and learning as a team. Organizational learning is a process where learning can be achieved on an individual or group level (Bontis, Crossan, & Hulland, 2002; Marsick & Watkins, 2003). Moreover, Crossan, Lane, and White (1999) supported the theory of individual learning, group learning, and organizational learning.

As time went on theorists such as Crossan et al.(1999) further refined the theory of organizational learning as a process involving increasing knowledge, action, understanding, process improvement, and behavioral changes. Crossan et al. (1999) specify organizational learning is a dynamic process:

Not only does learning occur over time and across levels, but it also creates a tension between assimilating new learning (feed-forward) and exploiting or using what has been learned (feed-back). The concurrent nature of the feed forward and feed-back processes creates a tension, which can be understood by arraying the levels against one another. (p. 532)

Jehn, Northcraft, and Neale (1999) indicate organizations recently have adopted new structural scaffolds designed to decrease costs while concurrently amplifying flexibility and receptiveness to the increasing demands of the customer. Jehn et al. (1999) suggest more decentralized organizational frameworks tend to be assembled around groups and depend on deep synchronous exchanges of ideas provided by teams and task forces to a much greater degree than more customary hierarchical and centralized organizations. The authors specify that groups have in large part, been the essential building elements of organizational structure and strategy that is based on the hypothesis that groups can gather together the diversity of information, experiences, and ethics necessary to achieve the goals and objectives of the organization.

Senge and the Learning Organization

Senge (1990a) also studied the learning organization noting there was significance to the disciplines of an organization. He discusses the five disciplines of an organization and why these disciplines must be concurrently followed.

Moreover, Senge (1990b) specifies a learning organization as:

Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set to free, where people are continually learning to see the whole together. (p. 3)

The author describes discipline as "A body of theory and technique that must be studied and mastered to be put into practice" (p. 10). People can be experts or beginners, but practice is an essential component for anyone in mastering a technique. The author focuses on the configuration of a learning organization. He describes his hierarchy in five disciplines and stresses the importance of practicing these disciplines simultaneously. The author depicts these five disciplines as "1) Systems thinking, 2) Personal mastery, 3) Mental models, 4) Building shared vision, and 5) Team learning" (p. 7).

The importance of systems thinking. Senge (1990a) suggests, "Systems thinking is a conceptual framework, a body of knowledge and tools that has been developed over the past fifty years, to make the full patterns clearer, and to help us see how to change them effectively" (p. 7). Senge (1990a) suggests that businesses are also a system much like a woven tapestry, intersecting thread upon thread, to create a pattern towards success. The author suggests businesses help individuals develop their skill sets, while simultaneously achieving organizational goals and objectives.

The importance of personal mastery. Senge (1990a) identifies personal mastery as an extraordinary level of proficiency in a particular field. A subject matter expert comes to mind. The author identifies young adults entering the job market for the first time, who possess the spirit and motivation to succeed. Over time, these young adults become mature, and their work priorities change. Their priorities now may focus on what is going on this weekend, or perhaps they just go to work to get by. Their spirit and motivation diminish over time. Senge (1990a) identifies the discipline of personal

mastery as an "untapped market" (p. 7) of adult workers who lose the spirit and motivation; the spirit and motivation they once had when they first started their careers. The author discusses the important connection between individual learning and organizational learning, identifying the importance of spirit and motivation.

The importance of mental models. Senge (1990a) note that our mental images are based on personal espoused beliefs. People form opinions and assumptions based upon their biases or stereotyping. Senge (1990a) states, "The discipline of working with mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny" (p. 8).

The importance of building a shared vision. Senge (1990a) suggests "Leadership has inspired organizations for thousands of years, it's the capacity to hold a shared picture of the future we seek to create" (p. 8). He discusses drastically different organizations that are unique to their particular market. The author emphasizes these organizations seem to possess the ability to connect their workers to a common vision, with shared goals and objectives.

Senge (1990a) emphasizes the importance of a shared vision, rather than a belief or a vision statement. The author describes a shared vision as a vision where workers in the organization, share in the vision, therefore, produce results for the good of the organization.

The importance of team learning. Senge (1990a) specifies the learning organization as: "When a team becomes more aligned, a commonality of direction emerges, and Individuals' energies harmonize. There is less wasted energy...There is

commonality of purpose, a shared vision, and understanding of how to complement one another's efforts" (p. 234). The author specifies when a team is accomplishing and becoming skilled at work, the skill sets of the individuals are enhanced. Individuals can collaborate and share ideas to build the team core competencies.

Senge (1990b) discusses in 1982, Johnson and Johnson experienced a horrifying incident when Tylenol bottles were tinkered with resulting in harmfulness to humans. The author indicates Johnson and Johnson destroyed over 30,000 bottles of Tylenol although the test for harmfulness of this product tested negative. The company's credo as indicated to the public was service to their customers was the most important aspect of providing Tylenol. Senge (1990a) suggests workers believe they are an intricate part of an organization's shared vision. Therefore, these workers were willing to learn and be a team, and they shared a commitment towards the common goals and objectives of the organization concerning Tylenol.

Organizational Cultural

Marsick and Watkins (1999) focus on learning that is formal and informal in organizational settings. The authors ground their work in the beliefs of theorists such as Kotter. The authors specify there are four pyramids of organizational culture. These pyramids are: (a) Individual, (b) Team, (c) Organization, and (d) Societial. Marsick and Watkins (1999) suggest that internal and external forces can affect any organization in the workplace.

Moreover, Marsick and Watkins (1999) discuss the fundamental model of the learning community. The learning community consists of individual learning, team learning, and organizational learning. The authors indicate these three components work

together to transform the organization in accomplishing goals and objectives. Individual learning is self-transformational. Team learning is group transformational. Organizational learning is transforming the organization through achieving the overall goals and objectives of the organization.

Individual learning. Marsick and Watkins (1999) specify "At the individual level we define learning as the way people make meaning of situations they encounter" (p. 81). The authors indicate the first step in individual learning is to create learning events in which opportunities exist for individuals to learn. Learning on an individual level, contributes to team learning, and organizational learning.

Team learning. Marsick and Watkins (1999) indicate "Team learning is the mutual construction of new knowledge and the capacity for concerted, collaborative action" (p. 82). The authors emphasize the importance of individuals feeling that they are part of a team environment. Working together builds individual skill sets, as well as, team skill sets. The objective is to meet the goals and objectives of the organization with a team effort.

Organizational learning. Marsick and Watkins (1999) also believe that change management is a key component in the implementation of a large project, and can affect the learning organization. Marsick and Watkins (1999) focused on learning formally and informally in organizational settings. Their research resulted in the development of a survey that identifies and measures the organization's learning capabilities. The researchers were both employed as College Professors teaching organizational development, however, they often consulted on organizational development and organizational change for such companies as Exxon, and the Ford Company. A few of the

In 1999, Marsick and Watkins created the *Dimensions of Learning Organization*Questionnaire (DLOQ). They assert that learning is a continuous process as shown in Figure 3.5.

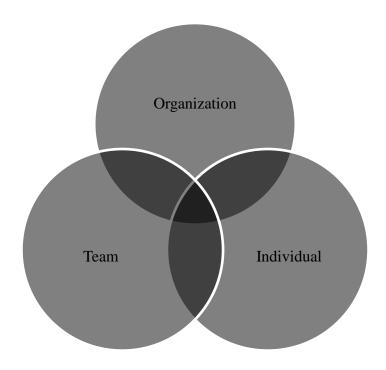


Figure 3.5 Marsick and Watkins (1999) Depiction of Organizational Learning.

The Dimensions of the Learning Organization Questionnaire

According to Watkins and O'Neil (2013), Marsick and Watkins first developed the theory of the *Dimensions of the Learning Organization Questionnaire (DLOQ)* in the

early 1990s, by conducting a literature review of all research on organizational learning. The authors inspired by theorists such as Senge and Lewin, state the literature review reflected overarching themes of the importance of organizational change. Moreover, the American Society for Training and Development (ASTD) also requested that Marsick and Watkins research case studies of learning for over 8, 000 persons to attempt to fully understand the learning organization. Thus, Watkins and O'Neil identify the "seeds of the *DLOQ* are embodied in action imperatives" (p. 135), involving change in the individual, group, and organizational levels of an organization.

Marsick and O'Neil (2013) indicate Marsick and Watkins developed the questionnaire as they gave numerous workshops to leaders, trainers, and individuals and always found they could not answer the question of how to operationalize their learning organizational model, inclusive of individual, group, and organizational learning. Thus, the development of the *DLOQ* survey instrument was born.

The Marsick and Watkins (2003) survey, *Dimensions of the Learning*Organization Questionnaire (DLOQ) "Involves widespread participation of employees and often clients...." (p. 79). The survey helps leaders to define the mission and vision of an organization, and helps to shape the organization in the process of implementing a new organizational change (Marsick & Watkins, 2003). The survey embraces personal characteristics of participants by engaging "The hearts, minds, and wills of the people who must make this significant change in the way they work" (p. 79). The researchers developed a 43-item survey in an attempt to measure the success of learning is at the individual, team, and organizational level. There are seven entities that shape the Dimensions of Learning Organization Questionnaire (DLOQ).

The seven dimensions of a learning organization. Yang, Watkins, and Marsick (2004) describe the seven dimensions of a learning organization. The authors specify these seven are critical to the success of the learning organization. Yang et al. (2004) indicate the "Seven dimensions are: (a) Continuous learning, (b) Inquiry and dialog, (c) Team learning, (d) Empowerment, (e) Embedded system, (f) System connection and (g) Strategic leadership" (p. 41). Each of these dimensions identifies the necessary steps in achieving triumph when implementing change in an organization. These seven dimensions are defined as follows:

Continuous learning. Yang et al. (2004) detail the first step in the dimensions of a learning organization is continuous learning. The authors recognize the importance of on-the-job training. Learning is a partnership of the individuals and team members working collaboratively and successfully.

Inquiry and dialog. Yang et al. (2004) identify the second step in the dimensions of a learning organization is inquiry and dialog. The authors identify the importance of a shared vision to encourage ideas and alliances. Within a learning community, all members should be communicating and sharing their ideas, and concerns about the project.

Team learning. Yang et al. (2004) explain the third step in the dimensions of a learning organization in team organization is empowerment. Yang et al. (2004) suggest that empowerment supports the team by helping members to see the current project as it compares to the new goals of the project. The authors specify empowerment identifies the gap in the knowledgebase of the change project.

Embedded system. Yang et al. (2004) describe the fifth step in the dimensions of a learning organization is embedded system. Yang et al. (2004) suggest "Embedded system indicates efforts to establish involve systems to capture and share learning" (p. 34). The authors specify shared learning is key to project success.

System connection. Yang et al. (2004) identify the sixth step in the dimensions of a learning organization is system connection. Creating systems amongst the workgroups to encourage shared learning and group collaboration is key to achieving the goals of the division. Yang et al. (2004) imply "System connection reflects global thinking and actions to connect the organizations to its internal and external environment" (p. 34).

Strategic leadership. Yang et al. (2004) identify the seventh step in the dimensions of a learning organization is strategic leadership. Yang et al. (2004) assert "The learning organization is viewed as one that has the capacity to integrate people and structures in order to move towards continuous learning and change" (p. 34). The authors indicate leadership is important within the change management process. Figure 3.6 depicts the seven dimensions of a learning organization.

Continuous Learning

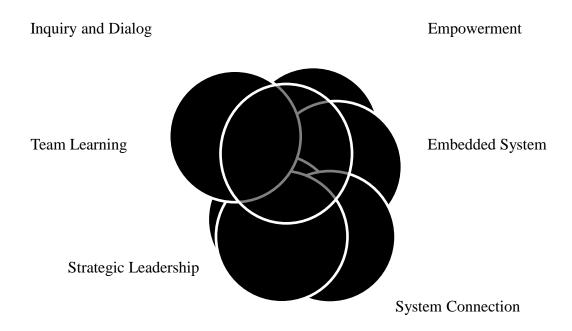


Figure 3.6 The Seven Dimensions of a Learning Organization.

The findings of Yang et al. (2004)'s model of the seven dimensions of a learning organization indicated "The organization needs to work with people at the individual and group level first" (p. 40).

The literature indicates that Marsick and Watkins (2003) conducted an:

International study of the *Dimensions of the Learning Organization Questionnaire*(DLOQ) with 389 participants to analyze the survey instrument. The two highest scores

in the Watkins and O'Neil study were found in the Strategic Leadership area at 4.13, and Connect the Organization at 4.0.

Yang et al. (2004) specify in the findings of their study:

Although people initiate change on their own as a result of their learning, organizations must create facilitative structures to support and capture learning in order to move towards their missions. Specifically, we hypothesized that three variables- *system connection, embedded system, and provide leadership for learning* – are the mediators between individual level learning activities and organizational outcomes. (p. 41).

Yang et al. (2004) learned they needed to engage employees in embracing the organizational change. The authors also found leadership was a key factor in achieving success within an organization. Yang et al. (2004) noted their view of leadership is comparable to Kouzes and Posner belief that behavior was important in developing one's leadership within an organization. In 1988, Kouzes and Posner created the *Learning Practices Inventory (LPI)* instrument to measure leadership characteristics amongst various levels of employees within an organization. The author's intent in creating the *Leadership Practices Inventory (LPI)* was to identify five distinct practices of leadership, through a survey instrument.

Leadership and Change – Kouzes and Posner

James Kouzes and Barry Posner, professors in Leadership at Santa Clara University, provided leadership training workshops to all aspects of business, non-profit and scholars, around the world. In 1988, Kouzes and Posner (1988) created the survey instrument called the *Leadership Practices Inventory (LPI)*. The authors specify this

instrument was produced to measure the behaviors and development of leadership, within private and public sectors, and among managerial and subordinate employees, of organizations. Kouzes and Posner (1988) also measured national and international differences, along with differences of gender.

When Kouzes and Posner (1988) developed the *LPI* survey, it consisted of 37 open ended questions and conducted in- person interviews. Kouzes and Posner (1988) surveyed approximately 1100 managerial and subordinate employees, and they conducted 38 in person interviews. Kouzes and Posner (1988) indicate "The various case studies (from the surveys and interviews) were content analyzed first by the authors, and then validated by two separate outside raters" (p. 484). Kouzes and Posner (1988) indicate "Leadership behavior emerges when people are accomplishing extraordinary things in organizations" (p. 484). The *LPI* survey instrument has been utilized at corporations such as Campbell Soup and Clorox.

Kouzes and Posner (1988) specify the *LPI* has five practices of leadership. For each survey question Kouzes and Posner (2012) indicate the *LPI* survey instrument:

Measures the frequency of 30 specific leadership behaviors on a 10-point scale, with six behavioral statements for each of the Five Practices. You and the observers you select rated how frequently you engage in each of these important behaviors associated with the Five Practices. The response scale is: 1-Almost Never, 2-Rarely 3-Seldom, 4-Once in a While, 5-Occasionally, 6-Sometimes, 7-Fairly Often, 8-Usually, 9-Very frequently, and 10-Almost always. (p.1)

According to Kouzes and Posner (2012) the results of the *LPI*, are calculated by identifying the leader and the observer. Then the authors determine an average mean for

the leader (as Self), and an average mean for the observers (co-workers). Next, the authors calculate the standard deviation for each item in the survey, categorized by the five LPI practices of leadership. The authors indicate these "LPI practices are: (a) Challenge the process, (b) Inspire a shared vision, (c) Enable others to act, (d) Model the way, and (f) Encourage the heart" (p. 485). These five pillars each consist of two unique tactics of leadership. The five pillars are depicted in Figure 3.7 below.

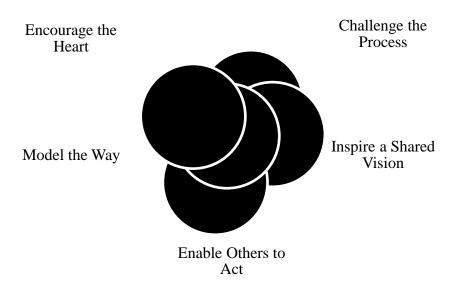


Figure 3.7 The Five Pillars of the *Leadership Practices Inventory*.

Challenge the process. Kouzes and Posner (1988) describe the *Challenge the Process* as containing two underlying strategies. The authors describe these two strategies as: a) Search for opportunities, and b) Experiment and take risks. Search for opportunities shows eagerness to achieve through leadership. Experiment and take risks helps to identify possibilities to succeed through leadership.

Inspire a shared vision. Kouzes and Posner (1988) define *Inspiring a Shared*Vision as containing two strategies. The authors detail these two strategies as: a) Envision the future, and b) Enlisting the support of others. Envisioning the future where the visualization is a mental picture of where you want your leadership to go. Set goals and objectives to plan the steps towards a future of success. Enlisting the support of others fosters an environment of inclusion, and helps to build a support system to learn and live by.

Enable others to act. Kouzes and Posner (1988) discuss *Enabling Others to Act* as containing two strategies. The authors describe these two strategies as a) Foster collaboration, and b) Strengthening others. Fostering collaboration encourages participation and continued dialog amongst the team players. Strengthening others enhances their skill set and knowledge base of leadership.

Model the way. Kouzes and Posner (1988) define *Modeling the Way* as containing two strategies. The authors define these two strategies as: a) Set the example, and b) Plan small wins. Setting the example, involves emphasizing personal leadership where others can use it as a model. Planning small wins means to set short term goals and achieve them, while simultaneously working towards long term goals and objectives.

Encourage the heart. Kouzes and Posner (1988) specify *Encouraging the Heart* as containing two strategies. The authors define these two strategies as: a) Recognizing contributions, and b) Celebrating accomplishments. Recognizing contributions shows one's involvement and input towards reaching organizational goals. Celebrating accomplishments observes accomplishments and honors team members for their valuable input to the organization.

In 1994, Kouzes and Posner modified "The *Leadership Practices Inventory (LPI)* originally developed for use with managerial populations, for use with non-managers and individual contributors" (p. 959). The authors outcome resulted in an instrument called the "*Leadership Practices Inventory – Individual Contributor (LPI-IC)*" (Posner & Kouzes, 1994, p. 960). The *LPI_IC* created by Kouzes and Posner (1994) resulted in "A 30 item instrument, with each of the five leadership practices being assessed" (p. 960). The authors indicate there are "Two forms of the *LPI-IC* that differ only in whether the behavior described is that of the respondent (Self) or that of some other specific person (Observer)" (Posner & Kouzes, 1994, p. 960).

Kouzes and Posner (2012) believe "Leadership is about relationships, about credibility, and about what you do. And everything you will ever do as a leader is based on one audacious assumption: that *you matter*" (p. 329). Kouzes and Posner (2012) specify the key is leadership is looking within, and believing in yourself, believing you can make a difference when being a leader.

Kouzes and Posner's (2012) LPI assessment was used extensively in numerous organizations for a 360 degree review of leadership with the corporate environment.

Corporations such as Silicone Valley Bank, and Orlando Magic utilized the *LPI*

assessment within their organizations. These corporations emphasized the needs of the human resources within their business, and recognized that people want to follow leaders with creditability. Kouzes and Posner (2012) specify "Credibility is the foundation of Leadership" (p. 37).

The literature indicates that Kouzes and Posner (1994) conducted a LPI survey during a multiple day leadership workshop to analyze the data collected with this survey instrument. The participants ranged from positions in the private sector with strong educational backgrounds, to others involved in manufacturing. The total participants for the *LPI-IC* Self were 1,651. For the *LPI-Observer* there were 7,073 respondents, totaling 8,724 participants. Kouzes and Posner (1994) indicate "Scores were generally higher on the *LPI* (completed by managers) then they were on the *LPI*-IC (completed by the individual contributors) within this organization" (p. 964).

The *LPI* assessment for this study involves a self-evaluation of my skills as a leader, and then an assessment of my leadership skills from that of my observers (the UPG and the USG teams). The *LPI* describes me as an adult leader and detailed the steps I needed to take to sharpen my leadership skills. As I learn to be a better leader, the *LPI* helped me to identify where my strengths and weaknesses were, as a leader in information technology, at Henry University.

Summary of the Literature Review

This literature review details theoretical views on organizational change, organizational development, and organizational learning. The research covered in this study also includes theoretical frameworks of adult learning. In particular, this study examines the organizational development of adults learning technology at work.

The research problem for this change project is to evaluate attitudes and experiences and meta-cognitive learning to determine if these factors helped shape adult capabilities when it comes to embracing a new software program. All members of the UPG and USG teams rapidly needed to become reporting writing experts. All team members were expected to become confident in creating new reports accurately, while simultaneously overcoming their fears of learning a new software. My rationale for identifying the gap in knowledgebase of these two reporting tools, amongst the UPG and the USG teams, is to discover what factors positively or negatively affected the teams in their learning abilities, as they moved to the new reporting tool. Motivating teams towards success may not be easy. Internal factors such as good communication skills and prior job knowledge can help to support the adult learner in learning the Cognos reporting tool. In some cases, the team members may suffer from external factors such as poor team communication skills, or lack of job knowledge or skill set, where productivity could be affected.

Chapter IV

Research Methods and Procedures

Context of the Study

Henry University is a mid-sized public university located in southern New Jersey. Henry University originated as the Normal School in 1923, providing a two year education to teachers in the region. As years passed, the Normal School became a four year institution, and in 1937 the name changed to Henry State College. In 1992, a philanthropic gift was bestowed to the institution for a 100 million dollars, and the name again changed to Henry College, then eventually to Henry University. The university now encompasses two medical schools, and most recently obtained research status. In the last 20 years, Henry University has transformed into a major university in the southern New Jersey region. The exponential growth of the university has required administrative offices to provide accurate and critical reporting for accreditation, and also including federal local and state reporting, as required by law.

Henry University and Information Technology

The setting of this research study occurs at Henry University. Henry University's population of students emerges from the pedagogical traditional student under the age of 25. Although most students at Henry University are not adult learners (non-traditional students 25 years of age or older), adult learners, are emerging, and their voices are being heard. According to the Henry University Common Data Set (2013) "The average age of all undergraduate students at Henry University is age 22. Thirteen percent of all

undergraduate students represent non-traditional students 25 years of age or older" (p. 15).

All students at Henry University need to adapt to the uses of technologies to help support their commitment to gaining a higher degree. Utilizing software to enroll students and keep them engaged, is a process that Henry University has sought to gain leverage in the higher education arena. Henry University also needs to adapt its departments and employees to accepting change, when software systems become obsolete.

The intention of this study is to understand the organizational development (OD) in learning a new reporting tool at Henry University. A mixed method methodology study provides for triangulation. A mixed methods research study blends and mixes quantitative and qualitative strands of data to answer the research questions of the study. Mixed methods research is becoming increasingly popular since it provides confirming evidence from several data points (Creswell & Plano Clark, 2011).

My rationale for choosing Henry University is because it provided a diverse population of employees for my study. The study targeted non-traditional adults learning a new reporting tool, named Cognos, that would be implemented in work groups at Henry University.

Non-traditional adults are a unique group of individuals. They come with a mindset that the information has to be beneficial to themselves and their careers.

This belief also aligns with Dynan, Cate, and Rhee (2008) who describe the richness and success an adult can achieve through self-directed learning. Moreover, Merriam et al. (2007) identify the goals of self-directed learning are "...to enhance the ability of adult learners to be self-directed in their learning, to foster transformational

learning as central to self-directed learning and to promote emancipatory learning and social action as an integral part of self-directed learning" (p. 107).

Henry University's Student Information System

Beginning in 2003, Henry University implemented the Banner software suite offered through the Ellucian software corporation, located in Malvern, PA, as it serves colleges, universities, and foundations in 40 countries worldwide, helping educators and learners learn. Currently, Ellucian supports over 1,600 higher education organizations, 10 million students, and thousands of educational communities worldwide. Ellucian provides software solutions and expertise to find improved ways to teach, learn, and manage. Ellucian offers Banner, an enterprise software solution for the higher education community, in particular community colleges, liberal arts colleges, and universities. The original reporting tool utilized with the Banner software suite was Oracle Discoverer.

The Banner suite of software purchased for Henry University consists of software solutions for finance, human resources, student, financial aid, and bursar functionality.

The student module contains all data collected for each student from application until graduation.

One problem the university faced was that the original reporting tool, Oracle Discoverer, was becoming obsolete. The university recognized the need for a new reporting tool to accommodate their federal and state reporting, as well as, support their various accreditations. In this case, accepting the change of reporting tools from the Oracle Discoverer reporting tool to another reporting tool, for all university departments, may be a difficult one. Almost everyone had become familiar with the Oracle Discoverer reporting tool since the Banner implementation.

During the fall of 2013 to 2014, senior administrators of the Information Resources and Technology Division at Henry University developed a team to evaluate and choose a new reporting tool for the university. The final decision was to purchase the Cognos reporting tool to replace the Oracle Discoverer tool. The Cognos reporting tool was purchased from Ellucian, as well as, a data warehouse, and an operational data store to be utilized as a main reporting repository.

With the purchase of a new reporting tool, all existing Oracle Discoverer reports would need to be converted to Cognos. The responsibility of this transition fell upon two particular work groups within the Henry University Information Technology division.

These two work groups are the UPG (University Planning Group) and the USG (University Software Group). As noted before, these workgroups are responsible for delivering software solutions for the university, as well as, ensuring alignment with the business solutions in the planning group.

The team members of the UPG and the USG are diversified with various skill levels. Some individuals are new employees to Henry University, while some have been employees for more than 10 years. The continued growth of Henry University requires a strong knowledgebase of the employees of the university to become technology proficient, to produce reports for the university that reflect accurate, and rich detailed data, to the senior administrators.

The organizational culture of these two work groups aligns with Bierema's (1999) perspective where the learning organizational culture is a framework that supports positive learning experiences and outcomes. Bierema (1999) specifies an organizational culture can only be successful if it has the full the commitment and assurance of senior

administrators. Many of the team members have families and outside work responsibilities. As adults balancing all of their personal responsibilities with work responsibilities, these employees may find little or no time to increase their skill levels to compete in the workplace. This aligns with perspectives from a federal and state level, as well as, a global governmental perspective. These perspectives build on learning as a society, and incorporating the essential skill sets that adults need to learn in the workplace, to learn a new software tool. Learning a new reporting tool named Cognos will certainly be a challenge, as these adult workers balance their life with work, family, and learning.

The Cognos Reporting Tool

Cognos is a software reporting tool that is available from IBM that works with the Ellucian Operations Data Store (ODS) that Henry University has purchased from Ellucian. The operations data store is a data warehouse provided by Ellucian to store a copy of the Banner database on a nightly basis. Cognos reports are then developed for all functional areas of the Banner system.

During the summer of 2014, Ellucian consultants arrived at Henry University to train the UPG and the USG work groups, as well as select functional user offices, and a technical training group. This series of training from Ellucian taught the learning organizational groups, the Ellucian Banner system functionality. Next, there was training to teach the work groups how to create Cognos reports based on the Banner functional data. Then, the teams began to create and maintain Cognos reports for each functional office of Henry University. Bierema (1999) describes this change in the learning organization as:

The learning organization process challenges employees and communities to use their collective intelligence, ability to learn, and creativity to transform existing systems. It helps people connect with each other, their work, and their community. It is not a program, but rather a new process for understanding and learning together. (p. 46)

Moreover, Fullan (2001) indicates "Learning in the setting where you work, or learning in context, is the learning with the greatest payoff because it is more specific (customized to the situation) and because it is social (involves the group)" (p. 126). Learning at work is part of the success of migrating to the Cognos reporting tool.

The UPG and the USG are learning the baseline knowledge of each of the functional areas of the Banner system, for each functional area. The groups together formed and created their learning organization at work. The two work groups bridged their knowledge bases; building on their strengths of each of the individual team members as they learn at work.

Short Comings of the New Reporting Tool

Adapting to the change of reporting tools has caused concerns and perhaps some resistance amongst some of the members of the UPG and the USG. The out-dated reporting tool, Oracle Discoverer, can collect data in a real-time environment against the Banner database. Senior administrators have decided that the Cognos reporting tool would run off of a copy of the Banner database from the day prior, not necessarily real-time Banner.

Additionally, there is a software licensing issue. For Oracle Discoverer, this reporting tool came at no extra cost when the university purchased the Oracle licensing to support Banner. Oracle Discoverer had no licensing costs.

For the Cognos reporting tool, the majority of the software licenses that were purchased are to run the reports not create, or modify the reports. Some end-users are displeased that the privileges they had in Oracle Discoverer would not be the same in Cognos. The end-users desire is to create, modify and run their own reports.

Another shortcoming may be all data fields in Banner are not populated with data. In some cases, functional offices have decided to store their data in a separate personal database, not in Banner. This is a problem. When a copy of Banner is extracted for the data warehouse, (the ODS- Operation Data Store is the data warehouse), many fields are empty because the functional offices are storing data in personal databases. An example of this is faculty publications. The university group currently stores some university data on publications in a personal database, not in Banner. Therefore, when it comes to producing a report in the new software tool called Cognos, the report would not contain information on faculty publications since it may not be in the system.

Population and Sample Section

The targeted population consisted of the individuals in the University Planning Group (UPG) and the University Software Group (USG) at Henry University. The UPG has 11 employees while the USG has 26 employees. Together, there were total of 37 participants in this total population study. The Jackson Group (n.d.) indicates a total population study includes all team members of the department, or as close to 100% of the team members of the departments.

In this case, the total population study would represent all members of the UPG and the USG teams. All team members are adult learners and are diverse in their ethnic backgrounds, and cultures. Table 4.1 identifies the characteristics of the adult participants in this study.

Table 4.1

Characteristics of Adult Participants

Team	UPG	USG	
	N= (11)	N = (26)	
Male	9	15	
Female	2	11	
Union (AFT)	7	2	
Union (CWA)	2	22	
Managerial	2	2	
Full Time	11	26	

The team members of the UPG and the USG are diverse in gender, a number of hours worked per week, as well as, union affiliation, and managerial status. The UPG consists of nine male team members and two female team members. For the USG, the

team consists of 15 male team members and 11 female team members. In totality, the total male team member count is 24. The total female team member count is 13.

Moreover, the subjects consisted of union team members and managerial levels. It is important to point out that all workers in the UPG and the USG form the organization in this study, however, they are unique in the fact that they are a blend of union and non-union subjects. The International Union of Operating Engineers, (2010) indicate Ellinger "Unions are important because they help set the standards for education, skill levels, wages, working conditions, and quality of life for workers" (p. 1). There are two unions represented within the UPG and the USG. There are seven American Federation of Teachers (AFT) union members and two Communication Workers Association (CWA) union members in the UPG. At the time of this study, in the USG, there are two AFT union members and 23 CWA union members, along with two managerial team members. There are 11 full time team members in the UPG. There are 26 full time team members in the USG.

The measurement of the progress that has been achieved was reflected in how the team members have worked together. Successful achievement requires the team members to participate and work together as a team. The diversity of the experience among members of the entire workgroup enhanced learning and project fulfillment. Team members with specialized report writing skill sets were recognized and were encouraged. All activities followed standards set forth by the department management team.

Instrumentation

For this study, I used a mixed methods approach in answering my research questions. Table 4.2 summarizes the instruments that utilized in this study. Table 4.2

identifies Part One and Part Two of this mixed methods study, the Quantitative and Qualitative strands.

Table 4.2

Mixed Method Instruments

Part	Quantitative	Qualitative			
Phase One	Dimensions of the Learning Organization				
	Questionnaire (DLOQ)				
	Demographic Questions				
	Margin in Life (MIL)				
	Leadership Practices Inventory (LPI)				
Phase Two		Interview protocol			

Phase one. For Part One, the quantitative strand, I conducted three surveys. First, I utilized the Marsick and Watkins (2003) the "Dimensions of the Learning Organization Questionnaire (DLOQ)" (Appendix B) survey. This survey evaluated the challenges and success of the individuals and team members in the UPG and the USG teams. This survey instrument contained 58 questions that helped to identify process improvements and gaps in the knowledgebase of both teams, from an individual, team, and organizational level.

The original Marsick and Watkins (2003) survey of the "Dimensions of the Learning Organization Questionnaire (DLOQ), was modified (for this setting) with the permission of the authors (see Appendix G). The original survey consisted of 55

questions on a six item Likert scale. The authors defined the Likert scale as a six point scale ranging from "Almost - Never to Almost-Always, on a scale of one through six" (p. 134). The survey itself is appropriate for this study, however, the sections on finance and performance knowledge were not applicable to this study, nor were the demographic questions. As a result, I contacted Marsick and Watkins (via email in Appendix G) and the authors granted me permission to modify their survey for this study, and to include my own questions and demographics. Also, the authors indicated that I must cite their work appropriately.

The modified Marsick and Watkins (2003) *DLOQ* survey for this study is located in Appendix B and Appendix C. The financial and knowledge performance sections have been replaced with additional statements for Castle and Sir (2001) 5 I's, in order to answer my research questions. The final instrument consisted of a 50 question Likert scale, which represented a six point Likert scale ranging from Almost - Never to Almost-Also, with an additional eight demographic questions pertaining to the setting of this study. Appendix B is the modified survey. Appendix C is the modified answer sheet.

Secondly, the Stevenson (1982) *Margin in Life (MIL)* survey instrument followed the Marsick and Watkins (2003) *DLOQ* survey instrument. The Stevenson (1982) *MIL* instrument consists of a 58-item instrument. Appendix I represents the permission letter to use this instrument in my study. Appendix E is the *MIL* scale as detailed by Stevenson (1982).

Thirdly, to measure my leadership in this study, I surveyed the UPG and the USG teams by introducing the Kouzes and Posner (2012) *Leadership Practices Inventory* (*LPI*). The authors indicate this survey is a 30 item instrument measuring five factors of

leadership. The authors indicated they designed this survey to measure when leaders performed at their best. Also, the survey collected participant data on my leadership characteristics, identifying the strengths and weaknesses, of my leadership style. The survey also provided critical feedback to me as a project leader, and facilitator in this endeavor. This survey determined if I possessed the characteristics to help in leading lead these teams towards helping to achieve project success in the implementation of a reporting tool. Fowler (1993) indicates "the strength of survey research is asking people about their first hand experiences: what they have done, their current situations, and their feelings and perceptions" (p. 78).

For the Kouzes and Posner (2012) *Leadership Practices Inventory* survey (*LPI*), I received permission to use this survey in my study, for myself, and also for observers. Appendix H details the approval letter from the authors. I purchased this survey from the author's web site and also paid for services to provide the results of the data. This survey was conducted online.

Phase two. For Part Two of this study, the qualitative strand, I conducted one-onone interviews with the participants to identify the unique feelings, attitudes, and fears, of
the team members in learning a new reporting tool. Appendix F represents the one-onone interview questions I asked during the interviews. I conducted the one-on-one
interviews for a total of six interviews. Two interviews were conducted from the
participants in the UPG. Four interviews were conducted from the participants in the
USG. Additionally, I worked together with my participants, recognizing their
sensitivities, and ensuring that they were comfortable, and not marginalized within my
qualitative study of the mixed method approach. I examined the intangible factors of

learning technology at work through collecting the selected six interviewees thoughts, assumptions, bias and insights towards learning, in spite of the various external factors that challenge them. I then completed an assessment on each participant that was interviewed. Seidman (2006) observes "The researcher has to conceptualize the project, establish access and make contact with participants, interview them, transcribe the data, and then work with the material and then share what he or she has learned" (p. 12). As Rossman and Rallis (2003) specify, "Interviews are a conversation with a purpose" (p. 183). Figure 4.1 identifies the research design for the project.

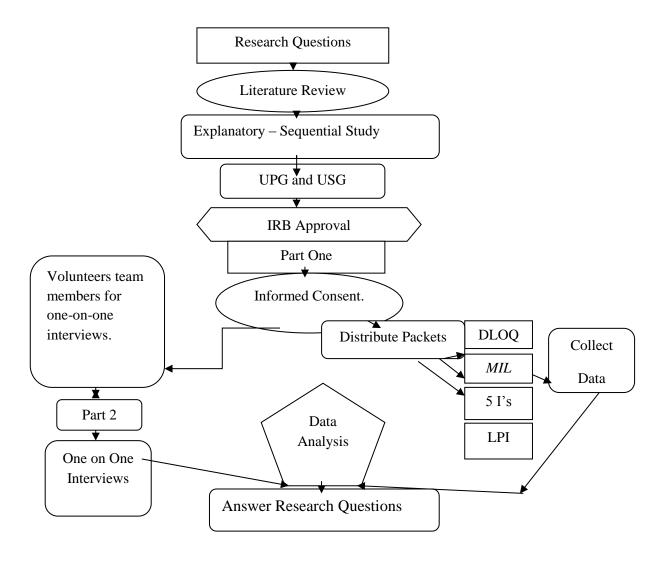


Figure 4.1 Schematic of my Research Design.

Validation and Reliability

Ellinger, Ellinger, Yang, and Howton (2002) confirmed the validity and reliability of the *DLOQ* in their empirical study where they identify the learning organization had a strong connection to organizational culture and overall employee performance.

Moreover, Yang et al. (2004) indicated in their research that the *DLOQ* had reasonable reliability. Yang et al. (2004) note:

As a step toward gaining a better understanding of the construct of the learning organization, this study was designed to develop and validate an instrument measuring an organization's dimensions. This study investigates the construct validity of the instrument by examining the number of dimensions thought to explain the interrelations among items included in the instrument, and by examining the relationship between learning characteristics of organizations measured on the instrument and organizational outcome variables. (pp. 35-36)

Yang et al. (2004) findings indicated these tests showed reasonable variability among different organizations. Yang et al. (2004) details "All of the correlations coefficients were significant at the level of .001, indicating strong convergent validity of the subscales in accessing one construct of a learning organization" (p. 43). The authors go on to state, there were not many correlations that were high, some such as correlations between people and system levels, thus supporting the theory that people and systems need to be a learning organization altogether.

Conversely, a threat to the validity of the *DLOQ* could be biased or personal gain.

One may desire to see themselves through a certain light for promotional opportunities or personal achievement while completing the *DLOQ*. As a researcher, I also focused on

eliminating bias and identify social injustices. Additionally, I analyzed all data I have collected, with a goal of finding answers to my research questions (Creswell & Plano Clark, 2011).

For the qualitative strand, I used member checking of the interview transcripts with my participants (Creswell & Plano Clark, 2011). I asked the participants to review the transcripts to ensure they were accurately recorded. I verified degrees of open-ended questions, and the responses received in my study (Onwuegbuzie & Johnson, 2006). Additionally, degrees of understanding and of being trustworthy are also considerations of validity (Onwuegbuzie & Johnson, 2006).

Triangulation was achieved through the mixture of Castle and Sir (2001) Five I's, Marsick and Watkins (2003) *Dimensions of the Learning Organization Questionnaire* (*DLOQ*), the Stevenson (1982) *MIL*, demographic data, one-on-one interviews, and Kouzes and Posner (1988) *Leadership Practices Inventory (LPI)* as depicted in Figure 4.2 below.

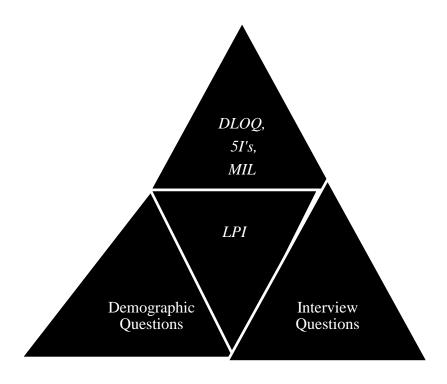


Figure 4.2 Triangulation of this Mixed Methods Study.

Data Collection Procedures

In collecting the data for this study, I completed the required CITI training for human subjects (Exhibit I). I obtained IRB approval for my study. Additionally, I asked the subjects to complete a consent form to certify that I have received personal written consent from the participants of the UPG and the USG to perform this study (Appendix D). All participation was voluntary. My data collection process consisted of Part One, the quantitative phase, and Part Two, the qualitative phase.

Phase one. Part One, the quantitative phase of my study included the survey instruments of the Marsick and Watkins (2003) *Dimensions of the Learning Organization Questionnaire* (*DLOQ*), including questions for the Castle and Sir (2001) Five I's, the Stevenson (1982) *MIL*, and the demographic data. I prepared these instruments in a packet that I gave to the subjects in the UPG and the USG. I invited them to participate in the surveys during their lunch time in a large conference room in their building. I also bought pizza for all of the team members of the UPG and the USG in gratitude for participating in my research process. Once the surveys and the demographic questions were completed, I asked an administrative assistant to collect the data packets and deliver them to me in a sealed envelope.

For the Kouzes and Posner (1988) *Leadership Practices Inventory (LPI)*, I requested that the survey be sent to the subjects in the UPG and the USG online at their email addresses. I then requested that the data for this survey be collected and analyzed by the Kouzes and Posner (*LPI*) team, as I paid this organization for their services.

Phase two. At the conclusion of all surveys and demographic questions, I asked the subjects if they were interested in participating in a one-on-one interview on learning a reporting tool. I then contacted the subjects who volunteered, via email. I conducted the interviews at the Henry University library, student center, or in the University coffee shop, at the convenience of the interviewees. Then, I began to analyze the data I collected from the study.

Data Analysis Procedures

The data analysis process began right after the data collection phase of this study was concluded. The total population of participants was 37 for this study. The data analysis were conducted in the quantitative phase and the qualitative phase.

Quantitative Phase

The quantitative data of my research consisted of three independent survey instruments, and demographic questions. The independent survey instruments consisted of: a) The modified Marsick and Watkins (2003) *Dimensions of the Learning Organization Questionnaire* (*DLOQ*), The modified Marsick and Watkins (2003) *DLOQ*, was modified to include seven questions concerning Castle and Sir (2001) 5 I's., b) The Stevenson (1982) *Margin in Life* (*MIL*) survey instrument, and c) The Kouzes and Posner (2012) *Leadership Practices Inventory* survey instrument (*LPI*). The demographic questions consisted of eight open ended questions.

For this study, the data were evaluated using a total population study. Basically, I focused around the averages of the data collected, and standard deviation for my quantitative strands. I utilized an Excel workbook to perform the calculations.

Dimensions of the learning organization questionnaire. First, I conducted the Marsick and Watkins (2003) survey, the modified Dimensions of the Learning Organization Questionnaire (DLOQ). This survey identified and measured the organization's learning ability (Appendix B). This survey accessed the learning organization on an individual level, team level, and entire organizational level. The authors identified the individual level consists of continuous learning, and dialog and inquiry. The team level consisted of team learning and collaboration (Marsick &

Watkins, 2003). The organizational level consisted of embedded systems, system connections, empowerment and provision of leadership in learning (Marsick & Watkins, 2003). This survey, created by Marsick and Watkins (2003), collected and evaluated the learning abilities of the UPG and the USG teams, at an individual level, and an organizational level (Appendix C). This survey was a 58 question instrument that helps to identify process improvement gaps in the knowledgebase of both teams while learning a new reporting tool. Marsick and Watkins (2003) carefully grouped the survey questions with the intention to help leaders to answer their research questions.

Five I's. The modified Marsick and Watkins (2003) *DLOQ* survey also included seven questions concerning Caste and Sirs (2001) 5 I's which includes: a) Incenting, b) Involving, c) Instructing, d) Intervening, and e) Informing. These five components are critical to the successful implementation of an information technology solution.

Demographic questions. The demographic questions helped me to identify characteristics of this total population study. The demographic questions asked about age, which group the subjects work in, what their role is at Henry University, as well as, how long have they been employed in their field, and how much time do they spend on work related learning outside of work. These demographic questions added thick rich data to the overall study.

Margin in life. Secondly, I conducted the Stevenson (1982) Margin in Life (MIL) survey instrument. This instrument was developed by Joanne Stevenson, a nurse. This instrument consisted of a 58 item survey instrument that measures the importance of factors in life, in combination with level of load, and level of power of adults.

Stevenson's (1982) original survey design consisted of a 211 item instrument that was

then reduced to a 94 item survey instrument, now further reduced to a 58 item survey instrument. Stevenson (1982) designed the *MIL* in three separate areas, consisting of a 10 point Likert scale to determine importance, a five point Likert scale to determine the load of a given person, and a five point Likert scale to measure the power of a person. There is also another category for the individual to indicate if the item is "Not Applicable."

Leadership practices inventory. Thirdly, I conducted the Kouzes and Posner (2012) Leadership Practices Inventory survey (LPI) on-line. This survey assessed my leadership characteristics as a leader in the division. This survey also helped me to identify areas of improvement in my leadership style. The data analysis for this survey was performed by the Kouzes and Posner (2012) Leadership Practices Inventory (LPI) staff, as I submitted payment to them for the data analysis.

Since this study involved a total population study, the Jackson Group (n.d.) indicates "The overall response rate becomes the key factor in determining the validity of the responses gathered" (p. 1). Therefore, the data from the total population of the UPG and the USG were analyzed from each survey to complete Part One of this mixed method study.

Oualitative Phase

Part Two of this study is the qualitative phase. This phase consisted of openended questions, in one-on-one interviews, with participants of the UPG and the USG teams. The one-on-one interviews followed the quantitative phase of the study. Tedlie and Tashakkori (2009) specify "Mixed methods analysis are the processes where the quantitative and qualitative data analysis strategies are combined, connected, or integrated in research studies" (p. 339). Volunteer sampling. The qualitative phase consisted of volunteer sampling of participants from the UPG and the USG for one-on-one interviews. For the one-on-one interviews, the results indicated there were two female participants (50%) from the University Software Group (USG), and two male participants from University Software Group (USG), (50%). For the University Planning Group (UPG), there were a total of two males interviewed, representing 100% of those interviewed for this group. For the combined total of both groups interviewed, the female participants signified a total of two participants, representing 33%, and four male participants involved in the one-on-one interviews representing 77% of those totally interviewed.

Open-ended questions. There were eight open-ended questions that were asked of the participants who volunteered for the one-on-one interviews. Appendix F details the open-ended questions for the participants. The open-ended questions asked the participants: a) What group they work in, b) Information about themselves, c) What attracted them to Henry University, d) What their contributions to the University are, e) Their feelings on reporting tools, f) Their reaction to changing reporting tools, and g) What would they do to change the implementation of the new Cognos reporting tool.

One-on-one interviews. The one-on-one interviews questioned the volunteer participants the open-ended questions detailed in Appendix F. The participants were asked to answer the questions to the best of their ability. The one-on-one interviews, discussing the open-ended questions were analyzed using the Rules and Procedures for Logical Analysis of Written Data (Sisco, 1981), (see Appendix A). The interviewees represented six of the total population study of the UPG and the USG teams and were reviewed by content analysis. The interview responses from the six UPG and USG team

members added a thick rich description to the qualitative portion of this study representing the team members' attitudes, feelings, and concerns, while implementing the new reporting tool. Figure 4.3 details the process for this mixed methods study as the quantitative phase informs the qualitative phase, to answer my research questions (Creswell, 2007).

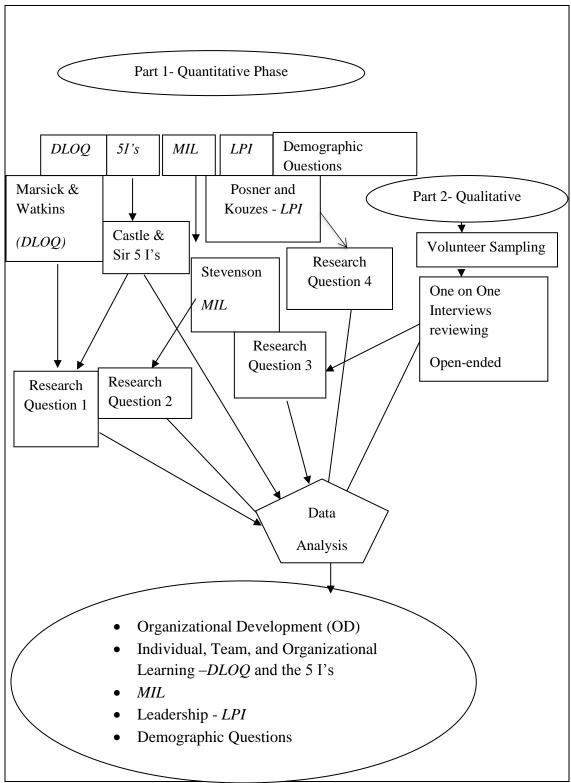


Figure 4.3 The Mixed Methods Design of this Research Project.

Timeline of the Study

In today's world, technology and software are constantly changing. Thus, teams such as the UPG and the USG are consistently learning new technologies and new software, to remain competitive within higher education. Migrating to a new reporting tool is an opportunity for these adult learners to adapt to the change that involves learning a new reporting tool, where these groups can learn independently, and also learn as a team. Time and resources are critical motivational factors in this research project. The following timeline identifies all of the numerous activities I must accomplish in order to complete the study. Figure 4.4 details the timeline of this project.

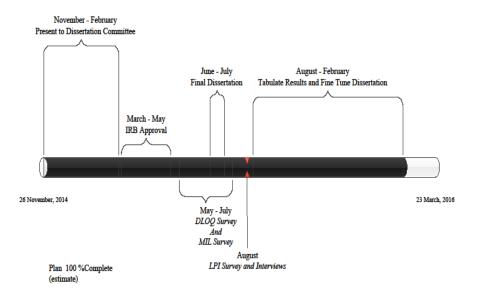


Figure 4.4 Timeline of the Study.

The timeline of this study identifies the submission of the first four chapters of my dissertation to my Chair and dissertation committee in November 2014. In February of 2015, I received approval from my dissertation committee and passed the second benchmark for this study. Next, I submitted my research protocol to the IRB in late March, 2015. In early May 2015, I received IRB approval to conduct my research.

During May and June of 2015, I administered the modified *DLOQ* (including the Castle and Sir 5 I's questions, as well as, the demographic questions for my population).

At this time, I also administered the *MIL* survey to my participants. In June I began to conduct the interviews. In July of 2015, I calculated the results of the above surveys and administered the electronic *LPI* survey, while I simultaneously conducted six interviews of members of the UPG and USG, who had volunteered to participate in the interview protocol. During August of 2015, I completed the calculations on all surveys and transcribed the interviews, searching for commonalities and themes. During the fall of 2015, I reframed and reshaped the entire dissertation in preparation for submitted to my dissertation committee for my final defense.

Chapter V

Findings

In this chapter, I offer the findings from the research study conducted at Henry University, organized by research questions posed in Chapter I of this dissertation. The total population that was surveyed in this study consisted of 37 subjects. The subjects were all team members of the University Planning Group (UPG) and the University Software Group (USG) at Henry University.

Phase One

In Phase one of the study, I collected survey data consisting of the Marsick and Watkins (2003) *Dimension if the Learning Organization Questionnaire (DLOQ)*, which was modified (approved by the authors) to include additional questions for the Castle and Sir Five I's, and demographic questions. Also, I collected data from Stevenson's (1982) *Margin in Life (MIL)* survey, measuring importance of adult characteristics, and the power and load these entities bear on the adult learner. Additionally, I also collected survey data in the *Leadership Practices Inventory (LPI)* to measure my leadership skills and ability.

Phase Two

The quantitative strand of this mixed methods study examined the organizational development of adults learning technology at work, focusing on the adult learners' characteristics, internal and external motivation, and core competencies through one-on-one interviews. The goal of this study was to access the attitudes and experiences and meta-cognitive learning to determine if these factors helped shape adult capabilities when embracing a new software program.

The qualitative strand of this mixed methods study identified selected members of the UPG and USG teams, detailing their experiences in learning the Cognos reporting tool at work. The integration of the quantitative and qualitative strands helped me to understand an overall perspective of the team members' attitudes, experiences, and learning involved in the study.

Profile of the Survey Population

In Table 5.1, the data collected from the subjects in answering the demographic questions. There was a total population of 37 subjects thus assuring a 100% response rate from the combined teams of the UPG and the USG. The following percentages were rounded off to the nearest percentage (Table 5.1).

Table 5.1 Profile of the Survey Population (n = 37)

Team	UPG (n=11) f %		USG (n=26)		
				f %	
Average Age	26.81		35.1	9	
Male	9	82	13	50	
Female	1	9	10	38	
Chose not to indicate	1	9	2	8	
Missing			1	4	
Role at the University					
Senior Management					
Middle Management		0	2	8	
Supervisory Non-Management Teek	1 10	9 91	22	88	
Non-Management Tech. Non-Management Admin.	10	91	23	88	
Missing			1	4	
			•	•	
Primary Responsibility					
Analyst	10	91	18	69	
Trainer or Support			3	11	
Manager	1	9	2	8	
Administrative			1	4	
Missing			2	8	
Length Employed in your Field					
Under 1					
1-2 years	1	10	2	8	
2-5 years	3	27	1	4	
5-10 years	2	18	4	15	
10+ years	5	45	18	69	
Missing			1	4	

Table 5.1 (Continued)

Team	UPG (n=11)		USG (n=26)		
	f %		f %		
Length Employed at University					
Under 1 year	1	9	2	8	
1-2 years	2	18	10	38	
2-5 years	5	45	3	11	
5-10 years	2	18	2	8	
10+years	1	9	8	31	
Missing			1	4	
Number of Hours spent on work related learning outside of work None	1	9	5	19	
One to three hours per week	4	36	12	46	
Four to six hours per week	4	36	7	27	
Seven to ten hours per week	1	9	1	4	
Over ten hours per week	1	9			
Missing			1	4	

Overall, the total subjects in the study ranged in age from 23 to age 67, with an average age of 32.70. There were a total of 22 male subjects (59%), and 11 female subjects (30%). There were a total of three subjects that chose not to indicate their gender (8%). There was one non-response to the gender question (3%).

In determining the subject's role at the university, 33 subjects identified themselves as a non-management Technical/Professional (90%). One subject identified him/himself as a supervisor (3%). Two subjects identified themselves as middle management (5%). There was one non-response to the subject's role at the university question (3%).

The next demographic question posed to the subjects was "What is your primary responsibility?" There were 28 subjects that indicated their primary responsibility was that of an analyst (76%). There were three subjects that indicated their primary responsibility was a trainer, or training support (8%). There were three subjects that indicated their primary responsibility was being a manager (8%). There was one subject who indicated their primary responsibility was administrative (3%). There were two subjects who indicated no response to this question (5%).

The next demographic question was "How long have you been employed in your field?" Three subjects indicated they have been employed in their field for less than one year (8%). Four subjects indicated they have been employed in their field for two-to-five years (11%). Six subjects specified they have been employed in their field for five-to-ten years (16%). Twenty-three subjects indicated they have been employed in their field for 10 plus years (62%). There was one non-response to the subject's employment at the university question (3%).

The next demographic question was "How long have you been employed at the university?" Three subjects indicated they have been employed at the university for less than one year (8%). Twelve subjects indicated they have been employed at the university one-to-two years (32%). Eight subjects indicated they have been employed at the university for two-to-five years (22%). Four subjects specified they have been employed at the university for five-to-ten years (11%). Nine subjects indicated they have been employed at the university for ten plus years (24%). There was one subject indicated no response to this question (3%).

The final demographic question posed to the subjects was "How much time do you spend on work related learning outside of the office? (Indicate hours per week.)" Six subjects indicated they spent no time outside of work on work related learning (16%). Sixteen subjects indicated they spent one-to-three hours per week, learning outside of work (43%). Eleven subjects indicated they spent four-to-six hours per week on learning outside of work (30%). Two subjects indicated they spent seven-to-ten hours per week on learning outside of work (5%). There was one subject who indicated spending over 10 hours per week on work related learning outside of work (3%). One subject indicated no response to this question (3%).

Analysis of the Data

Research question 1: What do members of the UPG and the USG teams report about learning the Cognos reporting tool at the individual, team, and organizational levels?

Research Question number one was analyzed using parameters of the total population study for the seven factor groupings of the *DLOQ*, the Five I's, and the demographic questions. For the purpose of this study, the Marsick and Watkins (2003) *Dimensions of the Learning Organization Questionnaire (DLOQ)* was modified (with the authors permission), to include seven items regarding the Five I's of organizational development. The Likert scale for the subject's response was a six-point scale ranging from Almost-Never to Almost-Always, on a scale of one through six, for the following Five I components of: a) Incenting, b) Informing, c) Intervening, d) Involving, and e) Instructing. All survey responses were calculated by determining the average, and

standard deviation. Additionally, all survey responses were evaluated for frequency of responses to all questions in each of these survey instruments.

For the *DLOQ and Five I's:* Watkins and O'Neil (2013) specify:

By averaging across multiple respondents, users can note which items and dimensions are above and below the overall mean in their organization. Thus, areas that are higher provide strategic advantage, and areas that are lower provide strategic leverage. Examining the highest and lowest item means help to interpret these points of advantage and leverage. (p.139)

DLOQ and five I's. For the *DLOQ*, all 37 subjects completed the survey. Each of the seven factor groupings of the *DLOQ* are indicated below. The seven dimensions of the learning organization are: a) Continuous learning, b) Inquiry and dialog, c) Collaboration and team learning, d) Systems to capture learning, e) Empower people, f) Connect the organization, and g) Strategic leadership. For the Five I's, the five components consist of a) Incenting, Involving, Instructing, d) Informing and Intervening are depicted in Table 5.2. Table 5.2 depicts the average and standard deviations of each factor grouping, from highest to lowest, per category (individual, team and organizational) levels.

Table 5.2 Survey Responses (Highest to Lowest) for the DLOQ (n=37)

Team	UPG		USG	
	(n=11)		(n=26)	
	Average	SD	Average	SD
Individual Level				
Inquiry and Dialog	4.12	1.30	3.69	1.28
Continuous Learning	3.73	1.30	3.47	1.47
Team Level				
Collaboration and Team Building	4.00	1.32	3.40	1.53
Organization Level	2.05	1 40	2.54	1 10
Empower People	3.85	1.40	3.54	1.42
Systems to Capture Learning	3.77	1.42	3.17	1.49
Strategic Leadership	3.55	1.46	2.81	1.55
Connect the Organization	3.09	1.49	2.93	1.56
Five I's				
Intervening	4.40	1.33	4.51	1.48
Involving	4.18	1.47	3.84	1.48
Instructing	3.95	1.64	3.78	1.72
Informing	3.63	1.68	3.19	1.52
Incenting	3.54	1.43	2.88	1.75

Note: The survey scale ranges from one to six. One represents rarely or never occurs, to six representing almost always true.

Based upon the seven dimensions of the *DLOQ*, the overall highest averages in all categories calculated for the UPG were: Inquiry and Dialog (4.12), and Collaboration and Team Building (4.00). The lowest averages calculated for the UPG were: Strategic Leadership (3.55), and Connect the Organization (3.09). Based upon the levels of individual, team and organization, the UPG averaged high averages in the individual

(Inquiry and Dialog) and Team (Collaboration and Team Building) levels. Based upon the lowest averaged scores for the UPG both were at the organizational level (Strategic Leadership and Connect the Organization.)

For the *DLOQ*, the overall highest averages in all categories calculated for the USG were: Inquiry and Dialog (3.69), and Empower People (3.54). The lowest averages calculated for the UPG were: Connect the Organization (2.93), and Strategic Leadership (2.81). Based upon the levels of individual, team and organization, the USG averaged high scores in the individual (Inquiry and Dialog) and organizational levels (Empower people). Based upon the lowest averaged scores for the USG both were at the organizational level (Connect the Organization and Strategic Leadership).

Since Castle and Sir (2001) did not utilize a survey tool of their own in their research, survey items concerning the Five I's were incorporated into the *DLOQ*, with the author's approval. Thus, the results for the Five I's are analyzed the same as they were be for the *DLOQ*.

Based upon the Five I's, for the UPG, the highest averages were: Intervening (4.40), and Involving (4.18). The lowest averages for the UPG were: Informing (3.63), and Incenting (3.54). For the USG the categories of Intervening (4.51), and Involving (3.84) had shown the highest averages. For the USG, for the lowest averages were: Informing (3.19), and Incenting (2.88).

Research question 2: To what extent do the categories of the *MIL* influence the UPG and the USG and their learning on an individual, team, and organizational level?

Research question number two was analyzed using parameters used in a total population study. For the *MIL* calculations were tabulated measuring importance, power, and load.

The *Margin in Life (MIL)* survey instrument consists of a 58 item survey that measures the power, and load, of an individual, thus determining the Margin for that individual. This instrument was developed by Joanne Stevenson, a nurse, based upon Howard McClusky's work. Stevenson (1982) indicates the load represents the amount of stress, or responsibilities an individual has in his/her life. She also states the power represents the resources, or support an individual has in his/her life. The formula developed by Stevenson (1982) for the *Margin in Life* is Margin = Load/Power. Stevenson (1982) specifies if the margin is between .30 and .80 then the individual has enough to manage the demands in their life.

The instrument asked the subject to evaluate each item determining the a) Importance of the question, b) Their load in reference to the question, and c) Their power in reference to the question. There is also another column where the subject can identify if the item is not applicable. For the UPG and the USG, the following *MIL* scores were calculated by Excel for all 58 questions in the survey instrument. I calculated the formula for the *MIL* as: (The Sum of Importance times the Sum of the Load), divided by (The Sum of the Importance times the Sum of Power), = (M). (1-M= *MIL*). Table 5.3 shows the individual *MIL*'s for the 37 subjects in the UPG and the USG. Note, the table shows

the data collection from highest to lowest averages, to allow the reader to review how members of each team scored for comparison purposes.

Table 5.3

Team MIL's for the Subjects in the UPG and the USG (n=37)

	UPG	USG
Catagory	n=11	n=26
Category	MIL	MIL
Membership in Religion	0.50	0.36
Employment	0.46	0.47
Coping with Problems	0.44	0.53
Religious Reading	0.43	0.34
The Need for Religion	0.43	0.40
Participating in Religious Practices	0.43	0.39
Decisions	0.42	0.44
Being Responsible	0.42	0.44
Family Members Cooperate	0.41	0.50
Belief in Religion	0.41	0.36
Controlling My Temper	0.41	0.54
Way My Children Act to Each Other	0.41	0.44
Spiritual Way of Life	0.41	0.41
Children's Progress in School	0.40	0.46
Children's Attitudes	0.39	0.38
Coworkers	0.39	0.38
The People I Have Met At Church	0.39	0.46
Eyes	0.38	0.33
Religious Faith	0.38	0.34
Independent	0.38	0.39
Being Married	0.38	0.51
My Digestion	0.38	0.37
Coordination	0.38	0.42

(McClusky indicates a Healthy MIL Ratio is .30 to .80)

Table 5.3 (Continued)

	UPG	USG
	n=11	n=26
Category	MIL	MIL
The Way my Spouse Handles	0.38	0.51
Responsibilities		
Getting Along with People	0.37	0.44
Finding It Necessary to Stand Up For Myself	0.37	0.49
Children	0.36	0.40
Rest Is	0.36	
Present Life	0.35	
Believe in God	0.35	0.37
Goals	0.35	0.45
My Back	0.35	0.46
Self-Reliance	0.35	0.42
Living with Spouse	0.34	0.41
Appetite	0.34	0.45
High Standard of Mortality	0.34	0.42
Manual Dexterity	0.34	0.40
My Attitude Towards My Family	0.33	0.39
Prayer	0.32	0.34
Physical Health	0.32	0.44
Self Confidence	0.32	0.42
Children and I Get Along	0.31	0.39
A Few Close Friends	0.31	0.38
Smell	0.30	0.33
Concentration	0.30	0.40
Sexual Abilities	0.30	0.44
Feet and Legs	0.30	0.37
Consideration of Others	0.30	0.44
Muscles Are	0.30	0.48
Concern for My Family	0.30	0.44
Health	0.29	0.43
Taste	0.28	0.32
Breath	0.27	0.34
Hand and Arms	0.27	0.30
Hearing	0.26	0.26

Table 5.3 (Continued)

	UPG	USG
Cotogogy	n=11	n=26
Category	MIL	MIL
Mobility	0.26	0.41
Blood Circulation	0.25	0.33
My Body	0.24	0.52

(McClusky indicates a Healthy MIL Ratio is .30 to .80)

Of the 58 items in the *MIL*, each question was categorized within five classifications. The five classifications are: a) Health, b) Religiosity, c) Interdependence, d) Self-confidence, and e) Parenting satisfaction. Table 5.4 below depicts the five classifications, as well as, the classification subcategories (which represented the questions in each area). When calculating the classifications, averages were calculated.

Table 5.4

Overall Classifications, MIL, and Sub-Classifications of the MIL

Classifications of the of the MIL	Classification Subcategories of <i>MIL</i> Questions
Health	1,2,6,7,9,11,12,14,16,17,22,24,28,29,32,37, 39,4244,50,53,57
Religiosity	5,8,13,15,30,38,46,47,49,52,56
Interdependence	3,18,21,25,26,34,36,40,48,51,58
Self Confidence	10,19,20,23,27,33,54,55
Parenting Satisfaction	4,31,35,41,43,45

Once the classification groups were determined, the *MIL* was calculated by group. The following table identifies the Classification Averages of the UPG and USG. The following shows the hierarchy of classifications for the UPG and the USG.

Table 5.5

Classification Averages of the UPG and USG

Classification	MIL		MIL
	UPG		USG
	(n=11)		(n=26)
Religion	.415	Religion	.435
Parent Satisfaction	.387	Parent Satisfaction	.392
Self Confidence	.364	Self Confidence	.403
Interdependence	.347	Interdependence	.455
Health	.322	Health	.440

(McClusky indicates a MIL Healthy Ratio is .30 to .80)

MIL. For the UPG, the highest average was found to be in "Religion" with an average of .415. The lowest average was found in "Health" with an average of .322. For the USG, the highest average was found to be in "Interdependence" with an average of .455. The lowest average was found in "Parent Satisfaction" with an average of .392.

Profile of the Interviews

A total of six interviews were conducted with the combined team members from the University Software Group (USG) and the University Planning Group (UPG). During the first phase of the study, when the *DLOQ* and *MIL* surveys were conducted for the subjects were verbally asked by me, if they would like to voluntarily participate in a one-on-one interview. If they were to volunteer to participate, they were asked to sign a written consent to be interviewed, and also a written consent to be audio taped. A list of the interview questions were then sent via email to the volunteers so that they would be aware of what the interview items.

The volunteers were then asked for a comfortable location where I could conduct the interview, and an agreeable time. Once I knew of the interview location, and the time of the interview, I set up the interviews. All volunteers agreed to be interviewed on their lunch hour, or work break, at the university, in my office, or their individual office. The volunteers were then told that if there were any questions in the interview where they were uncomfortable in responding, they were not required to answer the question. After the initial greeting with the participants, each participant was told that they could stop the interview from being conducted at any time. The interviews were very positive and the volunteers were very responsive. The interviews for the most part, were conducted in a very short time. Ten to 15 minutes was the average time for each interview.

Biographies of the Interview Participants

The one-on-one interviews were conducted asking the participants the open ended questions. The participants provided their personal responses, along with their feelings, and viewpoints, on each interview question. There were a total of four participants from the University Software Group (USG) and two participants from the University Planning Group (UPG). The following depicts a brief biography of each of the participants in the study.

Participant A. Participant A is a female information analyst in the USG. She recently joined Henry University after working at a local state university for almost 28 years. At the time of the interview, Participant A had worked at Henry University for approximately seven months. Participant A is married with two twin daughters. Shortly after the interview, Participant A announced her retirement and left Henry University.

Participant B. Participant B is an information analyst in the Information

Security office within the USG, who also handles workflows within the Banner system at

Henry University. Participant B is a single male, approximately 38 years old. Participant

B enjoys his short commute to work at Henry University, and has worked at Henry

University for approximately one and one half years at the time of the interview.

Participant C. Participant C is a female lead technical trainer in the USG at the time of the interview. Participant C worked previously in another position in the grants department at Henry University for the past 17 years. Participant C is married with grown children.

Participant D. Participant D is a married male who previously worked for the parent company of Ellucian (the provider of the Banner software Henry University utilized to manage students). Participant D is a technical trainer in the USG. Participant D valued his short commute to work at Henry University since he traveled on numerous assignments with his previous job, thus resulting in not seeing his wife and daughter every day. Participant D has worked at Henry University approximately two plus years at the time of the interview.

Participant E. Participant E came to Henry University looking for a job when his wife had taken a transfer from her job some 20 years ago. Participant C is a married male with children and grandchildren. Participant E works in the UPG at Henry University, preparing reports for federal and state agencies.

Participant F. Participant F is a married male who serves as a research analyst in the UPG. Participant F previously worked in data analysis positions at several other companies. Participant F has been at Henry University for three years at the time of the

interview. Participant F also produces reports for federal and state agencies, as well as provides reporting in the news and other publications.

At the beginning of each interview, I thanked the participant and informed each that I would like to audio record the proceedings. I further explained that transcripts would be typed and made available to each interviewee to verify the accuracy of the transcription, through a process called member checking. After each interview, I sent the transcripts to an outside firm to be transcribed. I paid for the transcripts to be typed.

The one-on-one interviews represent the qualitative data collection process. The one-on-one interviews, discussing the open-ended questions were analyzed using the Rules and Procedures for Logical Analysis of Written Data (Sisco, 1981), (see Appendix A). The data were interrogated, and then reduced. Codes were counted and combined to uncover emergent themes throughout the data collection. Manual review of each transcription was conducted with results determined by hand. Themes were then developed and frequencies were calculated and noted.

Research question 3: What do selected members of the UPG and USG, report about their experiences in learning the Cognos reporting tool at work?

The first interview question centered on which group the interviewee worked in.

The participants were asked to describe the specific role they had within that group. The frequency of each entity and subcategory were documented and categorized. The reporting duties of the participants as gathered from this first interview question are noted in Table 5.6.

Table 5.6

Reporting Duties

Category	Employee Responsibilities	Frequency	Total
USG			4
	Banner Information Analyst	1	
	Banner Workflow/Security	1	
	Analyst		
	Process Improvement	2	
	Analyst/Trainers		
			2
UPG			
	Assistant Director – for	1	
	Institutional Reporting		
	Research Analyst for	1	
	Institutional Reporting		

Interview Themes

In response to the question asking the participants to tell me a little about themselves, the responses were grouped into distinct characteristics of the participants. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses gathered from this second interview question are noted in Table 5.7.

Table 5.7

Interviewees Characteristics

Category	Subcategory	Frequency	Rank
Previous Experience	Worked at Henry University or elsewhere	5	1
Data Analysis	Performed data analysis	3	2
Software System	Banner	2	3
Positive	Spends time with family and friends	1	4
Negative	Age	1	5

Interview Question- Can you tell me a little bit about you?

Here are the responses from Participant B and Participant E.

Participant B: "I am a male. I'm unmarried right now. I work at Henry University. In my free time I like to exercise and spend time with friends and family. I'm 38 years old. That's really about it."

Participant E: "I've been at Rowan 20-some years. Started out in UPG at that time. Moved over here when the new department was formed and I probably will be here until they cart me away from my desk. My background is actually in science and statistics and things like that, and I became involved in basically counting students. That's basically what we do."

For the next question as to what attracted the participants to the job, there were themes that surfaced from the interviews. The third interview question in the one-on-one interviews centered on what attracted the interviewee to their position at the University. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses are noted in Table 5.8.

Table 5.8

What Attracted Interviewees to Position at University

Category	Subcategory	Frequency	Rank
Change Oriented	Ready for a change	3	1
Job Enrichment	Helping Others	3	2
Commute	Twelve miles away	2	3
Credibility	Good Reputation	2	4
Positive	Perfect Opportunity	2	5

Interview Question- What attracted you to your position here at the University?

Here are the responses from Participant A and Participant C.

Participant A: "There appeared to be an opportunity to work on the Web time entry implementation and I was ready for a change."

Participant C: "As far as the technical training part, I always liked technology and I always helped other people in my department. At my other position, I was in for 17 years was actually temporary because I was grant funded and could see that the grants were starting to dry up. So when this position opened up, I thought it would be the perfect opportunity, it would be the perfect job for me, and so I applied for it and I got it."

The fourth interview question in the one-on-one interviews centered on how the interviewee feels their contributions make a difference in their position at the University. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses are noted in Table 5.9.

Table 5.9

Contributions to Make a Difference in Their Position at the University

Category	Subcategory	Frequency	Rank
Job Enrichment	Helping Others	20	1
Team	Empower the Client	3	2
Job Enhancement	Training	2	2

Interview Question- How do you feel that your contributions make a difference in your position here at the University?

Responses from Participant B and Participant C are noted below.

Participant B: "I do work for the workflow and security office. So that's sending out communications to people. So I give people information that they need so that they can use it to make decisions. And it frees up their ad hoc work so that they don't have to do as much paperwork. And I also do USG security, which I give people access to forms and reports and stuff that they need to do their job. So it helps people in a way because I enable people to do their jobs better throughout the University."

Participant C: "Well, I think as a trainer, I was able to help people. Because I had my other position as a grant coordinator, I knew a lot of the functional people for instance in purchasing, accounts payable. And plus other secretaries that use it that do a lot of things in finance. So I was able to bridge the gap I think that we had before. And when I first started here, I went out and I interviewed all the functional groups, and I put together different programs where they would come to the class and everything, and help with the policy questions, and things like that. So, I think that was one unique thing, having worked in both as, you know, as a person on the outside of USG and now a person on the inside of USG, what people really need as far as training and that kind of thing."

The fifth interview question in the one-on-one interviews centered on how important is reporting to their institution, through their lens. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses gathered are noted in Table 5.10.

Table 5.10

Importance of Reporting to Institution

Category	Subcategory	Frequency	Rank
Reports	Accurate Reporting	10	1
Importance	Critical	8	2
Money	Cost	5	3
Job Enrichment	Help others	5	4
Required	Mandated	3	5

Interview Question- Through your lens, how important is reporting to your institution?

Responses from Participant A and Participant C are noted below.

Participant A: "Oh it's critical. It's critical. Because you've got to have good data for good reports."

Participant C: "Well, I know, for instance, working on grants reporting was very important or we wouldn't get grants. If we didn't do the reporting correctly, exactly as they wanted, then the grants would not be funded. So I guess it would be the same thing for anything that the University gets funded for. That's probably the most important reason why we need the reporting."

The sixth interview question in the one-on-one interviews centered on how the participant reacted when they learned the Cognos reporting tool was replacing the Oracle

Discoverer tool. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses gathered are noted in the Table 5.11.

Table 5.11

Reaction in Learning Cognos Would be Replacing Discoverer

Category	Subcategory	Frequency	Rank
Reporting Positive	Discoverer Since I helped select it, I felt pretty good about it	11 10	5 1
Improved Reporting Reporting Tool Short Comings	Cognos Discoverer	8	2
Use of Cognos	Easy to use	3	4
Report Tool Challenges	Cognos	2	5

Interview Question- How did you react when you learned the Cognos reporting tool was replacing the Oracle Discoverer tool?

Responses from Participant A and Participant B are noted below.

Participant A: "I think that's a natural progression. Cognos has a few more features than Discoverer and you can make dashboards and pretty up a report,

whereas Discoverer is very plain. And that's more for the executive level. I like Cognos."

Participant B: "I took it as a positive because Cognos is a much better tool than Discoverer, and there's a lot more you can do with it. Discoverer is older and Cognos is more cutting edge, and it's better for the future of the University."

The seventh interview question in the one-on-one interviews centered on asking participants if they could change something about the Cognos reporting tool, what would it be. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses are noted in table 5.12.

Table 5.12

What Would You Change About the Cognos Reporting Tool?

Category	Subcategory	Frequency	Rank
Cognos Report	Cognos Lacks Reporting Features	24	1
Deficiencies			
Improvements	Training	4	2
Human Error	People Make Mistakes	4	3

Interview Question- If you could change something about the Cognos reporting tool, what would it be?

Responses from participant A and Participant C are noted below.

Participant A: "To have the ability to have different tabs of reports that all relate with a summary on one tab, detail on the other."

Participant C: "I think, well as far as what I hear from other people, is that they don't have the flexibility that they used to have with Discoverer. A lot of people complained about not being able to have the report studio, where they could pull from different groups like finance, and student, and things like that. So that was the big complaint when I was training."

The eighth interview question in the one-on-one interviews centered on what improvements would participants make in the implementation of the Cognos reporting tool. The frequency of each entity and subcategory were documented and categorized. The themes identified from the responses are noted in the table 5.13.

Table 5.13

Improvements in the Implementation of the Cognos Reporting Tool

Category	Subcategory	Frequency	Rank
Training	Educate the End User	14	1
Communications	Upfront communication from management concerning the Cognos reporting policies	10	2
Improvements Software System	Slower Implementation Banner Data	9	3

Interview Question- What improvements would you make in the implementation of the Cognos reporting tool?

Here are the responses from Participant C and Participant F.

Participant C: "I think with the implementation it came out all at once too fast and people were very unhappy. A lot of people who did the other way, with Discoverer, and they had more flexibility and they knew how to read SQL and things like that, they were the most resistant. And I think if we had done it one department at a time, kind of like we are doing with Web-time Entry, a few departments at a time, maybe it would have been better received. But the way we just kind of said like everybody's doing it, and it's being cut off at the end of August 2014, I think that gave a lot of negative feedback for that. And they kind of blame the training, the trainers. They gave us the hard time. It is just what we were told that we had to do, too. But I think if they had brought it out more slowly, then maybe it would have been a little better."

Participant F: "Documentation. A better "To Do" book, "This is How You Do" book I think for Cognos would help, tremendously. Two, the training. If the training was different."

LPI

In late June 2015, I purchased the individual and observer *LPI* assessment by using my credit card. I also requested a webinar on how to best utilize the *LPI*. The *LPI* customer service representative, who conducted the webinar, also explained how to

complete the assessment myself. The *LPI* customer service representative then reviewed how to set up the assessment for the total population of my study. For the setup, I needed to list all the names and email addresses of each participant that would be taking the *LPI* assessment as an observer. Once I completed the setup, I then set the time period for the observers to complete the *LPI*, being 07/01/2015 to 07/31/2015.

On July 1, 2015, I completed the *LPI* self-assessment. Then, I requested the participation of the 37 participants from the UPG and the USG, to take the *LPI* leadership assessment, to evaluate my leadership within the division. I requested the observers to participate by pressing a button on the *LPI* assessment screen, to electronically send the email to the observers. During the month of July, 2015, I was able to electronically remind the observers who did not take the assessment, to take the assessment. At the close of 07/31/2015, thirty-five out of 37 participants completed the *LPI* assessment as observers for my study (95%).

Once the LPI survey closed, I taught myself how to produce reports from the *LPI* assessment website. I first created a report for my scores. Then I created a combined report which represented my scores combined with all of the observer scores.

Research question 4: What is the impact of my leadership in the migration of the Cognos reporting tool with the UPG and USG groups?

Question number four was analyzed using parameters of the total population study. For the *LPI*, all survey responses were calculated by determining the mean, and standard deviation. Additionally, all survey responses were evaluated for frequency of responses to all questions in each of these survey instruments. The calculations were processed by the *LPI* website administrators, as I paid for the survey to be available for

my participants. The *LPI* administrators provided me with a reporting portal to access the results of the *LPI* survey.

The *LPI* report (Appendix K), identifies my self-assessment, along with the assessment of my co-workers, within the UPG and the USG. As noted, the *LPI* assessment details five categories within the assessment. Kouzes and Posner (2008) indicate these categories are: "a) Model the way, b) Inspire a shared vision, c) Challenge the process, d) Enable others to act, and e) Encourage the heart" (p. 485). The following identifies each category and a description of the intended meaning from the authors, Kouzes and Posner (2008).

Table 5.14

Kouzes and Posner (2008) Leadership Behavior Descriptions

Leadership Behavior	Description	
Model the Way	This process details the values and views of the leader. The leader also should be able to speak their voice as a leader.	
Inspire a Shared Vision	This process defines the listening skills of the leader. The leader also needs to share his/her vision, as well as, accept the vision of others.	
Challenge the Process	This process allows the leader to take risks and to change current processes to adapt to the change.	
Enable Others to Act	This process monitors the effectiveness of the leader, building trust, and team building.	
Encourage the Heart	This process allows the leader to give recognition and praise to others.	

LPI Overall Results

For the *LPI*, thirty-five of the 37 total participants completed the assessment (95%). For each category of the *LPI*, my self-assessment scores were ranked against the scores from the observer participants. The ranges were ranked as (0 to 29- low leadership ability), (30 to 69- moderate leadership ability), and (70-100- high leadership ability). The scores calculated for this study, have been compared to the scores of anyone who had taken this version of the *LPI* assessment on the *LPI* website. Overall, my scores were higher than the observer's scores. The observer scores ranked me less than I ranked myself. In summation, the observer's scores indicated my leadership was positioned into the moderate leadership ability category.

The results of this assessment were calculated by the *LPI* website administrators, and the aggregate data report data was available to me to create the report, as the leader and self-administrator. The *LPI* was used by me and my coworkers to perform a 360-degree assessment of my leadership. The *LPI* assessment is a 30 item instrument that assesses my leadership skills in five categories. The following tables depict the results of the group summary of the *LPI* for me, and my coworker observers.

Table 5.15

Group Summary by Leadership Practice for Self and Observers (n=35)

Leadership Behavior	Self-Mean	Overall Observer Mean
Model the Way	55.0	46.3
Inspire a Shared Vision	46.0	41.7
Challenge the Process	53.0	42.4
Enable Others to Act	57.0	47.7
Encourage the Heart	53.0	45.6

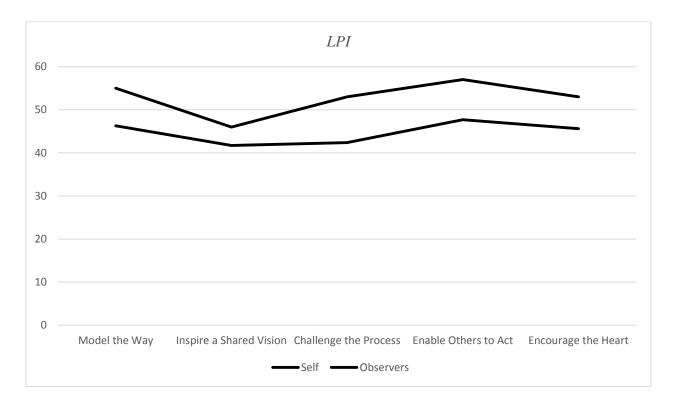
(Kouzes and Posner (2012) indicate the 30 item survey shows a response scale:

1-Almost Never, 2-Rarely 3-Seldom, 4-Once in a While, 5-Occasionally, 6-Sometimes,

7-Fairly Often, 8-Usually, 9-Very frequently, and 10-Almost always. (p.1))

The following table identifies the *LPI* scores for myself and also for the observers. In all cases, I scored higher that of the observers. In all for all five categories, I scored an average mean of 9.0.

In conclusion, my overall responses were considerably higher than my coworker observers. Each of the five categories surveyed in the *LPI*, identified strengths, and weaknesses of my leadership abilities. Figure 5.1 identifies group percentile rankings identify my self-evaluation scores, along with the overall coworker observer scores.



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Figure 5.1 Group Percentile Rankings of the LPI

Chapter VI

Summary, Discussion, Conclusions, Recommendations, and Reflections on Leadership and Organizational Change

Summary of the Study

The intention of this study was to understand, and examine the learning attitudes, experiences and learning abilities of the University Planning Group (UPG) and the University Software Group (USG), as they migrated from the Oracle Discoverer reporting tool to the Cognos reporting tool. I intended to understand how they achieved success through overcoming barriers in learning technology at work. I recognized the barriers and challenges of each of these groups, through a mixed methods approach, as these two groups dealt with a major change within their organization. In this study, I utilized the descriptive and exploratory questioning techniques to uncover emerging trends, patterns, and threads amongst these team members. Each participant provided a unique lens, voice, and perspective that helped to discover a common thread or strand in learning a new reporting tool at work.

For this total population study, there were three quantitative surveys. The first two quantitative surveys were the modified *Dimensions of the Learning Organization*Questionnaire (DLOQ), and the Margin in Life (MIL), along with demographic questions, that were collected manually. Within the DLOQ, questions were added concerning the Castle and Sir (2001) Five I's theory of organizational development, and to also modify the demographic questions to accommodate the setting at Henry University. For the modified DLOQ, and the MIL, I had a 100% response rate to each of these survey instruments.

The third survey, the *Leadership Practices Inventory (LPI)*, was conducted electronically. The results for this survey instrument were calculated by the copyright administrators, as they provided me a report portal, where I could create my own assessment reports, for a fee. For the *LPI*, I had a 95% response rate to this electronic survey.

For the one-on-one interviews, I conducted six interviews, (two interviews from the UPG), and (four interviews for the USG). All interviews were transcribed and then coded, and evaluated, for commonalities, and major themes.

Discussion of the Findings

Research question 1: What do members of the UPG and the USG teams report about learning the Cognos reporting tool at the individual, team, and organizational levels?

For the *DLOQ* and five I's: The literature indicates that Marsick and Watkins (2003) conducted an:

International study of the *Dimensions of the Learning Organization Questionnaire* (*DLOQ*) with 389 participants. The means for the seven dimensions of the *DLOQ*, along with performance factors were: a) Inquiry and Dialog (3.91), b) Continuous Learning (3.94), c) Collaboration and Team Learning (3.98), d) Create Systems (3.50), e) Empower People (3.74), f) Connect the Organization (4.0), g) Strategic Leadership (4.13), h) Financial Performance (4.18), i) Knowledge Performance (4.15), and j) Mission Performance (N/A). p. (140-141)

Marsick and Watkins (2003) also discuss and compare other theorists in their study and explain that their results "Nevertheless suggest an important relationship between the learning dimensions measured here and perceived changes in knowledge and financial performance" pp. (138-139). Moreover, the authors suggest that there is an indication of an association between the seven dimensions of the learning organization and performance of the actual organization. In learning to measure how the means were analyzed, Watkins and O'Neil (2013) specify:

By averaging across multiple respondents, users can note which items and dimensions are above and below the overall mean in their organization. Thus, areas that are higher provide strategic advantage, and areas that are lower provide strategic leverage. Examining the highest and lowest item means help to interpret these points of advantage and leverage. (p.139)

Based upon the seven dimensions of the *DLOQ* for this study, the overall highest averages in all categories calculated for the UPG were: Inquiry and Dialog (4.12), and Collaboration and Team Building (4.00). The lowest averages calculated for the UPG were: Strategic Leadership (3.55), and Connect the Organization (3.09). Based upon the levels of individual, team and organization, the UPG had high averages in the individual (Inquiry and Dialog) and Team (Collaboration and Team Building) levels. Based upon the lowest averaged scores for the UPG both were at the organizational level (Strategic Leadership and Connect the Organization.)

For the *DLOQ*, the overall highest averages in all categories calculated for the USG were: Inquiry and Dialog (3.69), and Empower People (3.54). The lowest averages calculated for the UPG were: Connect the Organization (2.93), and Strategic Leadership

(2.81). Based upon the levels of individual, team and organization, the USG averaged high scores in the individual (Inquiry and Dialog) and organizational levels (Empower people). Based upon the lowest averaged scores for the USG both were at the organizational level (Connect the Organization and Strategic Leadership).

When comparing the results from Watkins and O'Neil to this study, the Watkins and O'Neil total population was much larger being 398, rather than 37 participants for this study. The two highest scores in the Watkins and O'Neil study were found in the Strategic Leadership area at 4.13, and Connect the Organization at 4.0. Compared to the UPG highest scores were 4.12 for Inquiry and Dialog, and 4.0 for Team Learning. For the USG the highest scores were 3.69 for Inquiry and Dialog and 3.54 for Empowering people. For the UPG and the USG, their lowest scores were found in Connect the Organization (3.09, 2.93), and Strategic Leadership (2.93 and 2.81) respectively.

For this study, the financial, knowledge, and mission performance factors were not considered, with permission of the authors. The survey was modified to include the Five I questions, and demographic questions for this study. Marsick and Watkins (2003) specify "Human resources developers can influence the conversation of leaders in their organizations by better talking the language of business and learning" (p. 141).

Five I's. As indicated above, Castle and Sir (2001) did not utilize a survey tool of their own in their research, thus the survey questions concerning the Five I's were incorporated into the *DLOQ*. Therefore, the results for the Five I's are analyzed the same as they would be for the *DLOQ*.

Based upon the Five I's, for the UPG, the highest averages were: Intervening (4.40), and Involving (4.18). The lowest averages for the UPG were: Informing (3.63),

and Incenting (3.54). For the USG the categories of Intervening (4.51), and Involving (3.84) had shown the highest averages. For the USG, for the lowest averages were: Informing (3.19), and Incenting (2.88). Both the UPG and the USG formed the highest averages in intervening and Involving. Also, the lowest average for these two groups were in the same two categories of Incenting and Informing.

The following depicts the Castle and Sir (2001) Five I's and then a comparison of the UPG and the USG teams with the Five I's in highest to lowest order.

Intervening. Castle and Sir (2001) specified this team incorporated a transition workshop, a rewards program, and coaching workshops.

For the UPG and the USG, training sessions were and continue to be offered at all campus' to promote learning and empower the functional offices with the ability to run their own reports in Cognos. Popularity with the Cognos reporting tool is now a reality.

Soon, the ability to run Oracle Discoverer reports will no longer be available.

Involving. Castle and Sir (2001) indicated each business unit was assigned a designated person as a single point of contact for the project. Relationship building was a key factor in involving all levels of employees for the change initiative. For the UPG and the USG, there was also single point of contact for each area that supported Banner reporting. Building relationships was also important in order to foster a positive environment for learning in the change initiative. Functional team members were often invited to perform a quality review of each report as it was converted from Oracle Discoverer to Cognos.

Instructing. Castle and Sir (2001) specified the training group at Project ECOM utilized various methods of training to the end-users such as: online, videotape,

interactive training, and used surveys for evaluation of the trainers. Moreover, the trainers in the USG provided numerous training methods for the university community for the Cognos reporting tool. Most trainings were instructor led, as well as, one on one training sessions. Surveys were utilized for evaluation of the trainers.

Incenting. According to Castle and Sir (2001) "Each member of project ECOM committed their monetary performance bonuses to those measures" (p.3). The employees of the UPG and USG are state employees, therefore, there would not be incentives in public education, but the administrators of Henry University would often provide donuts, and coffee to the staff as an incentive in this initiative.

Informing. Castle and Sir (2001) specify "Two way communication events, such as online bulletin boards, and discussion groups, coffee klatches, town hall meetings, and lunch and learn sessions" (p. 4). For the UPG and the USG, a communications expert was asked to join the division of Information Resources and Technology. This expert helped to communicate messages to the university community via daily announcements and emails, concerning the Cognos reporting tool and the trainings that were offered. The division of Information Resources and Technology, did indicate information about Cognos on their various websites and the support desk.

Castle and Sir (2001) discuss their partnership with the business unit of ECOM which provided success in their implementation of organizational development and change. The partnership that Castle and Sir (2001) discuss also aligns with this study. Driving change in an organization involves a partnership with open communications, trust, and inclusion. Castle and Sir (2001) acknowledge that organizational change includes a change model and credit that contribution to Lewin. Castle and Sir (2001)

strongly emphasize the inclusion of human resources within organizational development and change, to achieve positive outcomes.

Research question 2: To what extent do the categories of the *MIL* influence the UPG and the USG and their learning on an individual, team, and organizational level?

MIL. The literature indicates a number of researchers have utilized the Stevenson MIL survey instrument in their studies on adults. In particular, Piper (2012) applied the Stevenson MIL amongst nursing students in her study to measure the six subscales of Stevenson's instrument. Stevenson (1980) identifies the subscales as:

"Religiosity/spirituality, self-concept, body (physical functioning), family, extra-familial human relationships, and non-person environment" (p. 223). Piper (2012) found "The smallest average PLM rate was in Parenting Satisfaction for all participants and the largest was in Religiosity" (p. 82).

Moreover, Johnson (1996) and Johnson, Schwartz and Bower (2000) determined the *MIL* for 350 community college females in their study, again analyzing the subscales that Stevenson (1982) had developed for Health, Religiosity/Spirituality, Self Confidence, Interdependence, and Parenting Satisfaction. From highest to lowest, Self Confidence was the highest *MIL* at (.47). Interdependence was (.46). Religion was (.35) and Health was (.35). Parent Satisfaction was below .30.

For the *MIL* that was administrated at Henry University for the UPG and the USG, the sample size was 37, which is much smaller than the subjects that Piper or Johnson and Johnson et al. had utilized in their studies. Piper studied nurses and Johnson and Johnson et al. studied only female community college students. For the UPG and USG team members, they consisted of primarily men, with a smaller percentage of

women. Both groups at Henry University were technical while collar workers or administrators.

According to Stevenson (1982), if the *MIL* is between .30 and .80, then the individuals are coping with the stresses of life. For the UPG, the highest average was found to be in "Religion" with an average of .415. The lowest average was found in "Health" with an average of .322. For the USG, the highest average was found to be in "Interdependence" with an average of .455. The lowest average was found in "Parent Satisfaction" with an average of .392.

Piper (2012) and the UPG both had shown the highest *MIL* being "Religion." For Piper (2012), Johnson (1996) and Johnson et al. (2000), and the USG, the lowest *MIL* was found to be in "Parent Satisfaction." Stevenson (1982) discusses McClusky's theory of the *MIL* and indicates:

Margins below .30 may reflect danger, indicating that a person is living beyond the tolerable limits of stress or is in the terminal stages of life. A margin above .70 may reflect too little load indicating that the person is not operating to potential. (p. 222)

Research question 3: What do selected members of the UPG and USG, report about their experiences in learning the Cognos reporting tool at work?

The qualitative findings in this study substantiated the quantitative findings in identifying content analysis of consistent themes throughout. Interviewing these six participants, provided an opportunity for the participants to share their experiences, attitudes, and beliefs, through their involvement, in the change of Oracle Discoverer reporting tool to the Cognos reporting tool. The overarching themes, through my

findings, emerged as a result of my study of adults within the context of migrating from the Discoverer reporting tool to the Cognos reporting tool, I have provided the highlights as follows:

Helping others. In many instances, helping others to do their jobs became prevalent. Most of the interviewees, although not trainers, enjoyed helping others to do their jobs. In some cases, the interviewees felt valued that they could support their functional offices.

Communications. The lack of early communications was a theme that became very obvious. End users attending training and realizing they did not have the same privileges as they previously had with Discoverer. Many end users were upset that they did not know the Discoverer reporting tool was being phased out.

Positivism. The most recurrent theme throughout the interviews was the theme of "Positivism," where positive comments occurred. For example, "Enables people to do a better job," and "Team/Team building" skills were developed. Positive comments were also listed five times for the UPG. The UPG said they were "Very happy" about the new Cognos reporting tool and were "Excited about it."

Report importance. The six participants unanimously agreed, reporting was important. Voices declaring the importance of reporting to the institution as being critical, valuable, vital, important to the administration of the university, and the criticality of federal and state reporting.

Report deficiencies. The next theme that was discovered was that of deficiencies in the Cognos reporting tool. All participants unanimously stated there were numerous deficiencies. Comments such as: Lacks report tabs, lacks flexibility, too many report

flavors, needs more documentation, needs more on-line help, and needs better dashboards.

Reporting and report improvements. All participants again, offered their improvements towards the effort. Voices stating people need to be educated and empowered, increased documentation, a slower implementation, and more communication upfront from senior administration, concerning the Cognos reporting tools policies and procedures.

Previous experience. Previous experience or experience of others was determined to be a common learning style amongst the participants. Previous experience was a strong theme when the participants were asked to describe themselves. Four participants spoke professionally of their years of experience, within the context of their job.

Change oriented. The themes that developed from the reaction to the change to the Cognos reporting tool question, five participants were very positive in stating they were: very happy, felt good about it, very positive, and excited, and moving to the Cognos reporting tool was a natural progression. One participant stated she never used Discoverer so she had no opinion.

Training. In several instances the training of Cognos reporting was uncovered.

Some participants felt that training was just the basic level. Some felt that the trainers could have provided support to the user community. Others found training to be helpful.

Kotter (1996) emphasizes human resource empowerment is critical in change.

Kotter (1996) specifies: Empowering people to Effect Change:

Communicate a sensible vision to employees: If employees have a shared sense of purpose, it will be easier to initiate actions to achieve that purpose.

Make Structures compatible with the vision: Unaligned structures block needed attention. Provide the training employees need: Without the right skills and attitudes, people feel disempowered. Align information and personnel systems to the vision: Unaligned systems also block needed attention. Confront supervisors who undercut needed change: Nothing disempowers people the way a bad boss can. (p. 115)

The following figure identifies the overarching themes that were developed through the qualitative phase of the study. "Drawing a graphic representation of ideas and how each idea is related to a general theme." (Craig, 2009, p. 40)

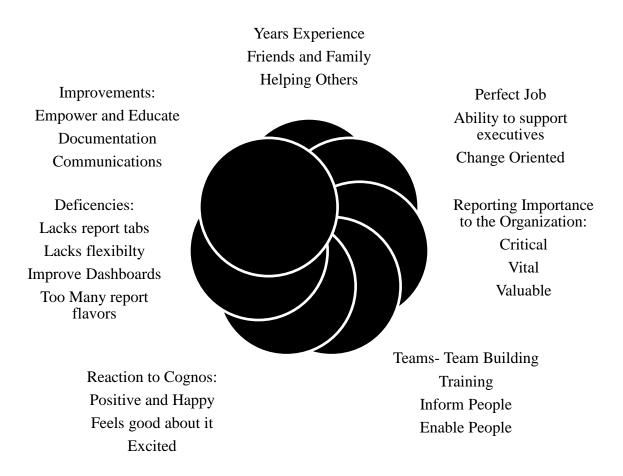


Figure 6.1 *Interview Themes*

Research question 4: What is the impact of my leadership in the migration of the Cognos reporting tool with the UPG and USG groups?

LPI. The literature indicates that Kouzes and Posner (1994) conducted a LPI survey during a multiple day leadership workshop. The participants ranged from positions in the private sector with strong educational backgrounds, to others involved in manufacturing. The total participants for the *LPI-IC* Self were 1,651. For the *LPI-Observer* there were 7,073 respondents, totaling 8,724 participants. Kouzes and Posner

(1994) indicate "Scores were generally higher on the *LPI* (completed by managers) then they were on the *LPI*-IC (completed by the individual contributors) within this organization" (p. 964).

For the *LPI*, my overall responses were considerably higher in this study than my observers. Each of the five categories surveyed in the *LPI*, identified strengths, and weaknesses of my leadership abilities. Listed below, I have a comparison of each of the five components in the survey, comparing the results Kouzes and Posner had compared to the results for this study.

Model the way. Kouzes and Posner (1994) indicate the self-mean in their study was 22.03 and the Observer mean was 21.62. For this category, my self-mean was 55.0. The overall Observer mean was 46.3. My self-mean was 8.7 % higher than the Observer mean.

Inspire a shared vision. Kouzes and Posner (1994) indicate the self-mean in their study was 19.64 and the Observer mean was 18.81. For this category, my self-mean was 46.0. The overall Observer mean was 41.7. My self-mean was 4.3 % higher than the Observer mean.

Challenge the process. Kouzes and Posner (1994) indicate the self-mean in their study was 21.34 and the Observer mean was 21.16. For this category, my self-mean was 53.0. The overall Observer mean was 42.4. My self-mean was 10.6 % higher than the Observer mean.

Enable others to act. Kouzes and Posner (1994) indicate the self-mean in their study was 23.30 and the Observer mean was 23.21. For this category, my self-mean was

57.0. The overall Observer mean was 47.7. My self-mean was 9.3 % higher than the Observer mean.

Encourage the heart. Kouzes and Posner (1994) indicate the self-mean in their study was 22.08 and the Observer mean was 21.97. For this category, my self-mean was 53.0, The overall Observer mean was 45.6. My self-mean was 7.4 % higher than the Observer mean.

Based on the data collected in the Kouzes and Posner (1994) survey, their self-responses were closer to the Observer responses in their study. The closest category where my self-mean was the most aligned with that of the Observer mean was in the "Inspire a shared vision" (4. 3%). The largest variance in the five categories occurred in "Challenge the Process" (10.6%). Based upon Kouzes & Posner (2008) scoring framework, my leadership moderately contributed to the migration of the Oracle Discoverer tool to the Cognos reporting tool.

Conclusions

Based upon the seven dimensions of the *DLOQ* for this study, the overall highest averages in all categories calculated for the UPG were: Inquiry and Dialog (4.12), and Collaboration and Team Building (4.00). Based upon the levels of individual, team and organization, the UPG averaged high averages in the individual (Inquiry and Dialog) and Team (Collaboration and Team Building) levels.

For the *DLOQ*, the overall highest averages in all categories calculated for the USG were: Inquiry and Dialog (3.69), and Empower People (3.54). Based upon the levels of individual, team and organization, the USG averaged high scores in the individual (Inquiry and Dialog) and organizational levels (Empower people).

Reviewing the *DLOQ* results for the UPG and the USG the results provide insights as to the strengths and weaknesses of the two groups. For example, both groups had shown high scores in the Inquiry and Dialog portion of the survey instrument. Team building was the second highest score for the UPG, where the USG second highest score was in Empower people. For the lowest scores, both teams had scored the lowest averages in Strategic Leadership and Connect the Organization but in opposite order. The UPG had scored a 3.55 for Strategic Leadership, and a 3.09 for Connect the Organization. The USG scored 2.93 for Connect the Organization, and 2.81 for Strategic Leadership. Both teams had shown a weakness in the organization area of the survey instrument. Moreover, these findings follow Argyris (1964) perspective on the development of the learning organization which includes learning on an individual, team and organizational level.

For the Five I's, intervening, instructing, and involving showed the highest average based upon the data collected for the UPG and the USG. The data analysis determined successes of the individual, team, and organizational levels. For the Five I's, "Incenting" may not be a valid challenge since the UPG and the USG work within a state institution, therefore, incentive may not be a factor they would be influenced by as state employees. Informing would be a factor that the organization could improve upon in communications, and training, within the UPG and the USG.

Reviewing the results for the Five I's for the UPG and the USG, the results provide insights as to the strengths and weaknesses of the two groups. It is obvious that intervening, instructing and involving the team members of both groups is a strength to the organization. Weaknesses of the two groups involve incenting and informing can be

overcome by the organization providing small tokens of appreciation through employee recognition and improved communications.

The *MIL*, "Membership in Religion" scored the highest interest of the UPG (.50). For the USG, the highest interest concerned "Rest" (.57). Both groups had the third largest interest in common at "Coping with Problems." The UPG had .44 for this interest and .53 for the USG. The highest average *MIL* per group resulted in "Religion" (.415) for the UPG, and "Interdependence" (.455) for the USG.

Reviewing the results for the *MIL* for the UPG and the USG, the results provide insights as to the strengths and weaknesses of the two groups. The UPG has shown religion to be a strength, as well as, per group, their highest averages were found to be in the religion group. For the USG, rest had shown to be substantial, and the highest group result was found in Interdependence. For weaknesses, the UPG found their body averaged a low *MIL* of .24 and the USG found to be in hearing of .26.

Reviewing the results for the One-on-One interviews for the UPG and the USG, the results provide insights as to the strengths and weaknesses of the two groups. For the interview protocol, positive factors were a reoccurring theme in the one-on-one interviews, uncovering the need to help others, communications, training, report importance, report deficiencies and reporting improvements about the Cognos reporting tool. A weakness in the interview protocol on my part was that I requested volunteers to be interviewed, instead of randomly selecting the participants.

Reviewing the results for the *LPI* for the UPG and the USG, the results provide insights as to the strengths and weaknesses of the two groups. For the *LPI*, my overall responses were considerably higher than my coworker observers. Each of the five

categories surveyed in the *LPI*, identified strengths, and weaknesses of my leadership abilities. Based upon Kouzes & Posner (2008) scoring framework, my leadership moderately contributed to the migration of the Oracle Discoverer tool to the Cognos reporting tool. In particular, the closest scores I achieved that were mostly aligned with that of the observers were in the category of inspire a shared vision. In particular, Senge (1990a) suggests "Leadership has inspired organizations for thousands of years, it's the capacity to hold a shared picture of the future we seek to create" (p. 8).

In thinking about the widespread differences in mean scores between myself and the observers, I believe the scores are different for this reason. Since I began my employment at Henry University in 2003, the leadership at that time, and throughout the years was driven by a leader who was primarily interested in accountability. I followed that leader's methodology because I reported beneath him and that this was the way he wanted the department managed. Being the transactional leader as I sometimes am, I did what I was told to do. As a result, some team members disapproved the accountability aspects of productivity reports, department controls, and measures.

In July of 2013, a new CIO replaced the previous leader and the organization changed. Productivity reports were no longer required for most, and customer service became a leading priority to the Henry University functional offices. In January of 2015, my role was changed to a Project Manager.

In late July of 2015, the division reorganization and combined the UPG and the USG together into a business intelligence group, and a technical group. From my observations now, the teams, although submerged in work, seem to work together more collaboratively. The teams are very diligent workers and produce strong results for

university reporting for state, and federal reports, as well as, managing software implementation successfully. Employees are critical to the success of the organization and should be treated with respect and dignity.

In conclusion, this study translated three tools the (*DLOQ* (with the Five I's), the *MIL*, and the *LPI*), and one-one-one interviews, into the framework of organizational development and leadership of the UPG and the USG at Henry University. This study also verified the differences and similarities between the two groups of employees at Henry University, as well as, it measured strengths and weaknesses of the two groups in implementing the change from one reporting tool to another. Castle and Sir (2001) specify that information technology organizations must adapt to change in order to keep pace with the ever changing demands of the business they are in, as this is applicable to the organizational development of the workgroups studied here.

Fullan, as well as Kotter, helped to frame the importance of change in this organization. Deming provided the critical path of success through his 14 principals. According to the W. Edwards Deming Institute (2016) Deming's belief that trust, and inclusion, tied with leadership that empowers the employees towards successful outcomes, provides continuous process improvement and overall improved quality. Marsick and Watkins (2003) helped to provide structure to the workgroups in this study from an individual, team or organization levels. Stevenson (1982) facilitated the magnitude of measuring one's Margin, as it relates to one's load and power. Kouzes and Posner (1994) helped to understand the differences and similarities I had with measuring my leadership with the UPG and the USG, in this organizational change.

Recommendations For Practice

The purpose of this study was to identify the gaps in the knowledgebase between the Oracle Discoverer tool and learning the Cognos reporting, in order to answer the research questions. As I sought to fulfill the purpose of this study, I learned there was a paucity of research in changing reporting tools in learning organizations.

Moreover, the survey instruments utilized in this study (*DLOQ*, *MIL*, and the *LPI*), as well as, the Five I's and the one-on-one interviews, revealed inadequacies in both the Oracle Discoverer reporting tool and also the Cognos reporting tool. Through my lens, these tools helped to provide improvements in the learning organization, as I believe it would help practitioners to identify strengths and weaknesses in their own organization, when it comes to changing reporting tools. In particular, the one-on-one interviews identified deficiencies in the Cognos reporting tool as: Lacks report tabs, lacks flexibility, too many report flavors, needs more documentation, needs more on-line help, and needs better dashboards. Another recommendation would be to try to improve the deficiencies in the Cognos reporting tool, if possible.

Additionally, a recommendation for this study would be to improve communications throughout both the UPG, and the USG, teams, and the learning organization community, when learning a new reporting tool. Moreover, this study identified the need for a communications team to support the scaffold of organizational change, disseminating information, to build confidence and strength amongst individuals, teams, and organizations, when changing reporting tools. More upfront communication could be a lessoned learned within this implementation.

Continuous, on the job training, could enhance the learning experiences of the Henry University individuals, teams, and organizations. These team members could share ideas and lessons learned, within their own learning community. Training opportunities could be offered on different levels, since the one-on-one interviews identified a gap in the training for more difficult reporting levels.

Administrators of the UPG, and the USG, could implement improvements such as: educate and empower people on learning the Cognos reporting tool, increase documentation of the Cognos reporting tool, and provide a slower implementation so that people are more comfortable accepting the change of moving to the Cognos reporting tool. These recommendations were primarily identified in the one-on-one interviews for this study.

Additionally, administrators of the UPG and the USG, could encourage aging adults workers to soar for higher goals and recognize their needs if they are struggling to work, manage their families, or deal with an aging parent, or disabled child. As the baby boomers of the 1950s continue to age, more adult workers will be a major part of seniors in the workplace. Balancing work, school, and family, and trying to cope with everyday life surprises, can be a barrier to learning.

Moreover, the Castle and Sir theory of organizational development, with the theory of the Five I's, was a very interesting aspect of this study. I find this interesting because the authors applied the Five I theory to a business setting and succeeded in implementation. I would suggest that the Castle and Sir theory of the Five I's, be implemented as an ongoing organizational development process, in every information technology department of Henry University. With implementation of the Five I's, the

individuals, team and organizations, could enhance, develop, and encourage employees to embrace the change.

As a leader at Henry University, I would strongly recommend that the *Leadership Practices Inventory (LPI)* become an annual survey for the management team to gauge their listening ability, when it comes to adult workers. This survey instrument helps to bridge the gap between adult workers and management. The necessity to work together towards common goals is paramount, with less funding and more work to be accomplished.

Recommendations for Future Research

This study was conducted with a small population consisting of two work groups of the USG and the UPG, at Henry University. Within these two work groups there were a total of 37 participants in this study. For future research, perhaps the study could include all functional users from all departments of Henry University, and examine how they cope with change as adult learners. This further research could help and identify how these adult learners accept the change from the Oracle Discoverer tool, to the Cognos reporting tool. According to Castle & Sir (2001) "Future research may serve to test the notion of whether or not IT performance is enhanced by managing change (ie. Reducing resistance and increasing support)" (p. 5).

Another idea for future research could involve a total population study with a much bigger sample in the sense of several public universities participating in the study. This broaden view may help to shape process improvements, and identify gaps in the process of adapting to change. Utilizing more schools, could help to frame standardized

process improvements, and a sharing of ideas, and a development of best practices for implementing a new reporting tool.

Another thought would be to perform this study with the same instruments but include the financial, knowledge, and mission performance factors of the *DLOQ*. Marsick and Watkins (2003) specify: "The *DLOQ* and other such instruments can help build the business case for learning by showing how learning interventions can lead to improved performance and business results" (p. 141). The authors also discuss the importance of a learning culture to drive change in business performance.

Another consideration would be to utilize different survey instruments in this study, in place of the (*DLOQ*, *MIL*, and *LPI*). Although the (*DLOQ*, *MIL*, and *LPI*) were suitable tools for this study, other survey instruments may show different results. The *DLOQ* was created by Marsick and Watkins in the 1990s, and the *MIL* was created by Stevenson in 1982. Although the *LPI* was also created in the 1980s, the authors continuously update their information on their web site, as well as, continue to produce reports, and books on the *Leadership Practices Inventory* (*LPI*) survey instrument.

Another opportunity for further research would be to design and compare a mixed method study identifying the organizational development and learning organizations of higher educational institutions, to that of corporations. Measuring like characteristics, could help to improve higher education arenas. As many theorists have identified, education is becoming more like running a business.

I would also recommend a total qualitative study of organizational development.

Although the survey instruments identified strengths and weaknesses, the qualitative oneon-one interviews provided the thick and rich data.

Kasworm (2010) also discusses adults as they attempt to achieve career success at four-year institutions:

Future research should explore the facets of adult coconstruction of various life role identities and how those identities influence their engagement in learning and action, their sense of power, place, and personhood. This study specifically suggests exploration of theory and understandings of adult undergraduate coconstruction of student identities through different learning cultures and multisegmented adult role memberships and support systems. (p. 156)

Reflections on Leadership and Organizational Change

During the course of this research project, I faced many challenges as I have had a full life, as an adult learner. What I mean is I have a full time job, I am married, I have a 15 year old son, as well as, trying to pursue my dream, and achieve the goals, and requirements, for my doctorate degree.

Early on, growing up within a large catholic family helped me to share and adapt to the circumstances given to me. As I look back, I did exactly what my Father wanted me to do, without ever realizing it. My Father told me to go work at Colonial Penn and find myself a nice husband to marry me. I did that, I met Marty my husband at Colonial Penn and we will now be married 35 years.

During the journey of my life, I never realized how much I was just like my Mother. I am very charitable, and kind. Often, I will make meals or donate to the poor because I remember the days when we, my brothers and sisters, ate mustard sandwiches for dinner. My Mother and Father did the best they could do with what they had. I am very grateful to very caring and loving parents.

Again I never thought this before this study, that I was a product of the woman's rights movement back in the 70s. I resonate with Betty Friedman. It took the research in this study, to crystalize to me why I stand up for myself, and feel I should be heard.

Additionally, Helen Reddy's song, "I am woman" certainly applies to me.

As I wrote this dissertation, I felt that the doctorate program at Rowan University made a difference in my leadership style. As I reflected back on my leadership, as well as the results of the *LPI*, I learned I need to listen, and observe, as well as, participate, and communicate with others. My continual deep reflection, enhanced my leadership skills, leadership effectiveness, and leadership ability, as I conducted this study. My reflection increased my self-awareness, and helped me to learn more about change. I am a stronger leader than I had been before.

My leadership framework is based on my transactional and transformative leadership styles. From my personal lens as a leader, a well-designed project creates a challenge or a need to know premise that motivates team based learning of both knowledge and skills. From my perspective, tasks required to complete the project are bona fide in that they mimic, more or less, work in the particular area or across different areas. In my experience, an effective project cannot be completed without learning and applying new knowledge and skills. Although my leadership is transactional, numerous added bonuses accompany my transactional leadership that are transforming. I have transformed myself from a caterpillar into a beautiful butterfly. My Mother's inspiration has lead me towards transforming myself through my learning and leadership.

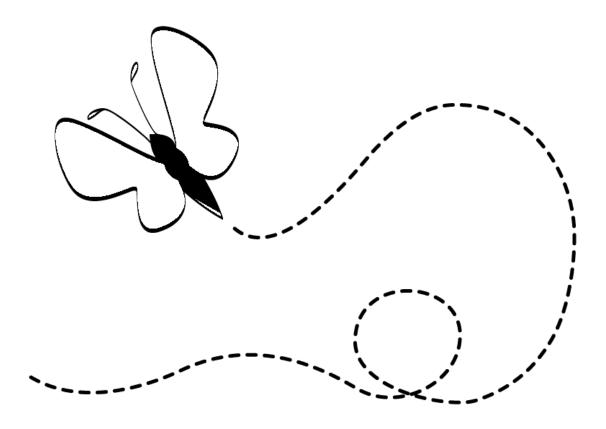


Figure 6.2. The Symbol of my Leadership.

In my context, my personal leadership encourages team members in learning, inspiring, and planning upcoming events. I can be a cheerleader at a moment's notice and I have been told that I am very inspiring to some people. I am also a strong feminist leader who possesses caring and nurturing leadership styles within me. I also am drawn to team, and organizational leadership since I have been in a supervisory capacity for many years throughout my career. My leadership is part of my soul and guides me in driving change. In today's marketplace of fast paced technological change, my leadership is a primary benefit to the organization.

References

- Anderson, E. L. (2003). Changing U.S. Demographics and American Higher Education. *New Directions For Higher Education*, (121), 3-12.
- Argyris, C. (1964). *Integrating the individual and the organization*. New York: Wiley.
- Austin, W. J. (2009). *Strategic planning for smart leadership* (2nd ed.). Stillwater, OK: New Forums Press.
- Bartunek, J. M., & Moch, M. K. (1987). First-order, second-order, and third-order change and organization development interventions: A cognitive approach. *The Journal of Applied Behavioral Science*, 23, 483-500.
- Bierema L. (1999). The process of the learning organization: Making sense of change. *National Associations of Secondary School Systems. NASSP School Bulletin.* 83(604), 46.
- Bontis, N., Crossan M., & Hulland, J. (2002). Managing an organizational learning System by aligning stocks and flows. *Journal of Management Studies*. *39*, 437-469.
- Brymer, E., & Gray, T. (2006). Effective leadership: Transformational or transactional? (Undetermined). *Australian Journal Of Outdoor Education*, 10(2), 13-19.
- Bucherati, S. (2009). Diversity and inclusion are business imperatives. Group Director of Global Diversity and Workplace Fairness. Retrieved from: http://www.nxtbook.com/nxtbooks/mediatec/de_20091112/#/38/OnePage
- Castle, D. (1996). Organizational development: The art and science of reengineering. Proceedings of the 1996 Annual Organization Development Network Conference, 189-195.
- Castle, D., & Sir, M. (2001). Organizational development: A framework for successful information technology assimilations. *Organization Development Journal*, 19 (1), 59-72.

- Chansky, D.. (2008). Usable performance feminism for our time: Reconsidering Betty Friedan. *Theatre Journal*, 60(3), 341–364.
- Cranton, P. (2006). *Understanding and promoting transformative learning: A guide for educators of adults* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Creative Research Systems (1982). Significance in statistics & surveys Retrieved from: http://www.surveysystem.com/signif.htm
- Craig, D. (2009). Action research essentials. San Francisco, CA: Jossey-Bass.
- Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Los Angeles, CA: Sage.
- Cross, K. P. (1977). A Critical Review of State and National Studies of the Needs and Interests of Adult Learners.
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of management review*, 24(3), 522-537.
- Deming, W. E. (1986). Out of the crisis Cambridge. *Massachusetts: Massachusetts Institute of Technology*.
- Dugan, T. (2015). The implication of transactional leadership style. Retrieved from: http://smallbusiness.chron.com/implication-transactional-leadership-style-10265.html
- Dynan, L., Cate, T., & Rhee, K. (2008). The impact of learning structure on students' readiness for self-directed learning. *Journal of Education for Business*, 84(2), 96-100.
- Ellinger, A. D., Ellinger, A. E., Yang, B., & Howton, S. W. (2002). The relationship between the learning organization concept and firms' financial performance. *Human Resource Development Quarterly*, 13(1), 5-21.
- Evans, P. (2015). Open online spaces of professional learning: Context, personalization and facilitation. *Techtrends: Linking Research & Practice to Improve Learning*, 59(1), 31-36.

- Falasca, M. (2011). Barriers to adult learning: Bridging the gap. *Australian Journal of Adult Learning*, *51*(3), 583-590.
- Fowler, F. J. (1993). Survey research methods. Thousand Oaks, CA: Sage.
- Friedman, V. J., Lipshitz, R., & Overmeer, W. (2001). Creating conditions for organizational learning. In M. Dierkes, A. Berthoin Antal, J. Child, & I. Nonaka (Eds.), *Handbook of organizational learning and knowledge* (pp. 757-774). New York: Oxford University Press.
- Fullan, M. (2001). Leading in a culture of change. San Francisco, CA: Jossey-Bass.
- Fullan, M., & Scott, G. (2009). *Turnaround leadership for higher education*. San Francisco, CA: Jossey-Bass.
- Gonzales, J. (2011). Adult-education leaders visit capitol hill to push for more federal dollars. Retrieved from: http://chronicle.com/article/Adult-Education-Leaders-Visit/127448/
- Gorard, S., Selwyn, N., & Williams, S. (2000). Must try harder! Problems facing technological solutions to non-participation in adult learning. *British Educational Research Journal*, (26)4, 507-521.
- Hanpachern, C., Morgan, G. A., & Griego, O. (1998). An extension of the Theory of Margin: A framework for assessing readiness for change. *Human Resource Development Quarterly*, 9(4), 339-350.
- Heifetz, R. A., & Linsky, M. (2002). Leadership on the line: Staying alive through the dangers of leading. Boston, MA: Harvard Business School Press.
- Henry University. (2013). Retrieved from: http://www.rowan.edu/president/ierp/snapshot/pdf/10th_day_snapshot_Fall2013.

 pdf
- Henry University. (2013). *Common Data Set*. Retrieved from: http://www.rowan.edu/president/ierp/cds/pdf/CDS_2013_2014.pdf

- Hiemstra, R. (1980). Howard Yale McClusky: Adult education pioneer and statesman. *Lifelong Learning: The Adult Years*, 4(2), 5-7.
- Hiemstra, R. (2002). The theory of margin. Retrieved from http://www-distance.syr.edu/margin.html
- Hitt, M. A., Keats, B. W., & Samuel M. DeMarie. (1998). Navigating in the new competitive landscape: building strategic flexibility and competitive advantage in the 21st Century. *The Academy of Management Executive (1993-2005)*, *12*(4), 22–42.
- Horsley, D. L., & Loucks-Horsley, S. (1998). Tornado of change. *Journal Of Staff Development*, 19(4), 17-20
- Jehn, K., Northcraft, G., & Neale, M. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, *44*(4), 741-763.
- Johnson, L.G. (1996). Load/Power ratios in specific life areas among adult female community college students as a function of their age, marital status, and parental status. Available from ProQuest Dissertations and Theses database. (UMI No. 9711682).
- Johnson, L.G., Schwartz, R.A., & Bower, B.L. (2000). Managing stress among adult women students in community college. *Community College Journal of Research and Practice*, 24, 289-300.
- Kasworm, C. E. (2010). Adult learners in a research university: Negotiating undergraduate student identity. *Adult Education Quarterly*, 60(2), 143-160.
- Knowles, M. (1973). The adult learner: a neglected species.
- Kotter, J. (1996). Leading change. Boston, MA: Harvard Business School Press.
- Kouzes, J. & Posner, B. (2012). *The leadership challenge: How to make extraordinary things happen in organizations*. San Francisco, CA: The Leadership Challenge.
- Kritsonis, A. (2004). Comparison of change theories. *International Journal of Scholarly Academic Intellectual Diversity*, 8(1), 1-7.

- Levine, A. (2001). The remaking of the American University. *Innovative Higher Education*, 25(4), 253-267.
- Marsick, V. J., & Watkins, K. E. (1999). *Facilitating learning organizations: Making learning count.* Aldershot, UK: Gower.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, *5*(2), 132-151.
- Merriam S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Mezirow, J., & Columbia Univ., N. E. (1975). Evaluating Statewide Programs of Adult Basic Education: A Design With Instrumentation.
- Mezirow, J. (1981). A critical theory of adult learning and education.

 *Adult Education Quarterly, 32, 3-24.Mochal, T. (2003). Organizational culture and structure influence project management more than you realize. Retrieved from: http://www.techrepublic.com/article/organizational-culture-and-structure-influence-project-management-more-than-you-realize/
- Mortimer K. P., & O'Brian Sathre C. (2007). *The art and politics of academic governance. Relations among boards, presidents and faculty.* Lanham, MD: Rowman and Littlefield.
- Northouse, P. G. (2010). *Leadership theory and practice* (5th ed.). Thousand Oaks, CA: Sage.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Parker, R. (2009). Senior Vice President and Global Chief Diversity and Inclusion Officer Retrieved from:
 http://www.nxtbook.com/nxtbooks/mediatec/de_20091112/#/38/OnePage
- Pelled, L. (1996). Demographic diversity, conflict, and work group outcomes: An Intervening process theory. *Organizational Science*, 7(6), 615-631.

- Piper, L. (2012). *No nursing student left behind: Non-cognitive screening*. (Doctoral dissertation, Rowan University) Retrieved from ProQuest Digital Dissertations.
- Posner, B. Z., & Kouzes, J. (1988). Development and validation of the Leadership Practices Inventory. *Educational & Psychological Measurement*, 48, 483-496.
- Posner, B. Z., & Kouzes, J. (1994). An extension of the Leadership Practices Inventory to individual contributors. *Educational & Psychological Measurement*, 54, 959-966.
- Prensky, M. (2001). Digital natives, digital immigrants. *University Press*, 9(5), 1-6.
- Rossman, G., & Rallis, S. (2003). *Learning in the field: An introduction to qualitative research.* Thousand Oaks, CA: Sage.
- Sandilands, T. (2015). What type of organizations employ transactional leadership? Retrieved from: http://smallbusiness.chron.com/type-organizations-employ-transactional-leadership-38770.html
- Seidman, I. (2006). *Interviewing as qualitative research:* A guide for researchers in education and the social sciences. New York: Teachers College Press.
- Senge, P. (1990a). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Senge, P. (1990b). The leaders new work: Building learning organizations. *Sloan Management Review*, 32(1), 7-23.
- Sisco, B. R. (1981). A study of the attitudes of selected academics and selected decision-makers toward adult learners. Unpublished doctoral dissertation, Syracuse University.
- Smee, G. (2013). Dispositional barriers- It is time to use the buddy system!

 Retrieved from: http://www.pcitraining.edu/blog/non-traditional-adult-students/
- Spears, L. (1996). Reflections on Robert K. Greenleaf and servant-leadership, Leadership & Organization Development Journal, Vol. 17(7), 33 – 35

- Stevenson, J. (1980). Load, power, and margin in older adults. *Geriatric Nursing*, 52-55.
- Stevenson, J. (1982). Construction of a scale to measure load, power, and margin in life. *Nursing Research*, 31(4), 222-228.
- Tedlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research:

 Integrating quantitative and qualitative approaches in the social and behavioral sciences. Los Angeles: Sage.
- The Jackson Group. (n.d.). *The Jackson Group Sampling vs. Population*Studies Retrieved from:
 http://www.thejacksongroup.com/jackson/TJG_Sampling_vs_Population_Studies.pdf
- Theoharis, G. (2007). Social justice educational leaders and resistance: Toward a theory of social justice leadership. *Educational Administration Quarterly*, 43(2), 221-258.
- The W. Edwards Deming Institute@ (2016). Retrieved from: https://www.deming.org/
- Tight, M. (1998). Lifelong learning: Opportunity or compulsion? *British Journal of Educational Studies*, 46(3), 251-263.
- Tyre, M. J., & Von Hippel, E. (1997). The situated nature of adaptive learning in organizations. *Organization Science*, 8(1), 71-83.
- U. S. Department of Labor (2014). Regional and state unemployment (annual) news release. Retrieved from: http://www.bls.gov/home.htm
- Voorhees, R. A., & Lingenfelter, P. E. (2003). Adult learners and state policy. Retrieved from:http://www.voorheesgroup.org/voorheesgroup-pubs/State%20Policy%20and%20Adult%20Learner
- Watkins, K. E., & O'Neil, J. (2013). The Dimensions of the Learning Organization Questionnaire (the *DLOQ*): a nontechnical manual. *Advances in Developing Human Resources*, 1523422313475854.

Wentland, D. M. (2010). Examining and testing Michael Fullan's eight elements of sustainability (Order No. 3451857). Available from ProQuest Dissertations & Theses Global. (863473133).

Wesleyan University. (2014). Retrieved from: http://www.wesleyan.edu/acaf/

Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The construct of the learning organization: Dimensions, measurement, and validation. *Human Resource Development Quarterly*, 15, 31–55.

Appendix A

Rules and Procedures for Logical Analysis of Written Data (Sisco, 1981)

The following decisions were made regarding what was to be the unit of data analysis:

- 1. A phrase or clause will be the basic unit of analysis.
- 2. Verbiage not considered essential to the phrase or clause will be edited out--e.g., articles of speech, possessives, some adjectives, elaborative examples.
- 3. Where there is a violation of convention syntax in the data, it will be corrected.
- 4. Where there are compound thoughts in a phrase or clause, each unit of thought will be represented separately (unless one was an elaboration of the other).
- 5. Where information seems important to add to the statement in order to clarify it in a context, this information will be added to the unit by using parentheses.
- 6. The following decisions were made regarding the procedures for categorization of content units:
- a. After several units are listed on a sheet of paper, they will be scanned in order to determine differences and similarities.
- b. From this tentative analysis, local categories will be derived for the units.
- c. When additional units of data suggest further categories, they will be added to the classification schema.
- d. After all the units from a particular question response are thus classified, the categories are further reduced to broader clusters (collapsing of categories).
- e. Frequencies of units in each cluster category are determined and further analysis steps are undertaken, depending on the nature of the data--i.e., ranking of categories with verbatim quotes which represent the range of ideas or opinions.

Appendix B

Dimensions of the Learning Organization Questionnaire Self-Scoring Instrument

A learning organization is one that learns continuously and transforms itself.

Learning is a continuous, strategically used process—integrated with and running parallel to work. In the past decade, organizations have experienced wave after wave of rapid transformation as global markets and external political and economic changes make it impossible for any business or service—whether private, public, or nonprofit—to cling to past ways of doing work. A learning organization arises from the total change strategies that institutions of all types are using to help navigate these challenges. Learning organizations proactively use learning in an integrated way to support and catalyze growth for individuals, teams, and other groups, entire organizations, and (at times) the institutions and communities with which they are linked.

In this questionnaire, you are asked to think about how your organization supports and uses learning at an individual, team, and organizational level. From this data, you and your organization will be able to identify the strengths you can continue to build on and the areas of greatest strategic leverage for development toward becoming a learning organization.

Please respond to each of the following items. For each item, determine the degree to which this is something that is or is not true of your organization. If the item refers to a practice that rarely or never occurs, score it a one [1]. If it is almost always true of your department or work group, score the item as six [6]. Fill in your response by marking the appropriate number on the answer sheet provided.

Example

Example: In this example, if you believe that leaders often look for opportunities to learn, you might score this as a four [4] by filling in the 4 on the answer sheet provided. There are no right or wrong answers. We are interested in your perception of where things are at this time.

Individual Level

- 1. In my organization, people openly discuss mistakes in order to learn from them.
- 2. In my organization, people identify skills they need for future work tasks.
- 3. In my organization, people help each other learn.
- 4. In my organization, people can get money and other resources to support their learning.
- 5. In my organization, people are given time to support learning.
- 6. In my organization, people view problems in their work as an opportunity to learn.
- 7. In my organization, people are rewarded for learning.
- 8. In my organization, people give open and honest feedback to each other.
- 9. In my organization, people listen to others' views before speaking.
- 10. In my organization, people are encouraged to ask "why" regardless of rank
- 11. In my organization, whenever people state their view, they also ask what others think.

- 12. In my organization, people treat each other with respect.
- 13. In my organization, people spend time building trust with each other.

Team or Group Level

- 14. In my organization, teams/groups have the freedom to adapt their goals as needed.
- 15. In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.
- 16. In my organization, teams/groups focus both on the group's task and on how well the group is working.
- 17. In my organization, teams/groups revise their thinking as a result of group discussions or information collected.
- 18. In my organization, teams/groups are rewarded for their achievements as a team/group.
- 19. In my organization, teams/groups are confident that the organization will act on their recommendations.

Organization Level

- 20. My organization uses two-way communication on a regular basis, such as suggestion systems, electronic bulletin boards, or town hall/open meetings.
- 21. My organization enables people to get needed information at any time quickly and easily.
- 22. My organization maintains an up-to-date database of employee skills.
- 23. My organization creates systems to measure gaps between current and expected performance.

- 24. My organization makes its lessons learned available to all employees.
- 25. My organization measures the results of the time and resources spent on training.
- 26. My organization recognizes people for taking initiative.
- 27. My organization gives people choices in their work assignments.
- 28. My organization invites people to contribute to the organization's vision.
- 29. My organization gives people control over the resources they need to accomplish their work.
- 30. My organization supports employees who take calculated risks.
- 31. My organization builds alignment of visions across different levels and work groups.
- 32. My organization helps employees balance work and family.
- 33. My organization encourages people to think from a global perspective.
- 34. My organization encourages everyone to bring the customers' views into the decision making process.
- 35. My organization considers the impact of decisions on employee morale.
- 36. My organization works together with the outside community to meet mutual needs.
- 37. My organization encourages people to get answers from across the organization when solving problems.
- 38. In my organization, leaders generally support requests for learning opportunities and training.
- 39. In my organization, leaders share up-to-date information with employees about competitors, industry trends, and organizational directions.

- 40. In my organization, leaders empower others to help carry out the organization's vision.
- 41. In my organization, leaders mentor and coach those they lead.
- 42. In my organization, leaders continually look for opportunities to learn.
- 43. In my organization, leaders ensure that the organization's actions are consistent with its values.

Measuring The Learning Organization

Results at the Organizational Level

In this section, we ask you to reflect on the relative performance of the organization. You will be asked to rate the extent to which each statement is accurate about the organization's current performance when compared to the previous year. There are no right or wrong answers.

We are interested in your perception of current performance. For example, if the statement is true of your organization, i.e., "yes," fill in a [5] on the answer sheet provided. If the statement is not very true of your organization, i.e., "no," fill in a [2] on the answer sheet provided.

- 44. In my organization, there is incentive for me to change reporting tools.
- 45. In my organization, I am well informed about the updates and changes involved in writing Cognos reports.
- 46. In my organization, team members are encouraged to learn the Cognos.
- 47. In my organization, collaboration and team learning is encouraged.
- 48. In my organization, there is a focus on transferring knowledge from one reporting tool to another.

- 49. In my organization, there are mentors to help me with my questions about reporting.
- 50. In my organization, I can count on others to help me when there are differences in reporting tool results.

Additional Information about You and Your Organization

In this section, fill in the number on the answer sheet which corresponds to the answer which best describes you or your organization.

51.	What	is	your	age?	
-----	------	----	------	------	--

- 52. Please indicate your gender.
- 1. Male
- 2. Female
- 3. Do not choose to indicate
- 53. Which group are you in?
- 1. UPG
- 2. USG
- 54. What is your role at the University?
- 1. Senior Management
- 2. Middle Management
- 3. Supervisory
- 4. Non-Management Technical/Professional
- 5. Non-Management (Admin)
- 55. What is your primary responsibility?
- 1. Analyst
- 2. Trainer or Training Support

- 3. Manager
- 4. Administrative

56. How long have you been employed in your field?

- 1. Under 1 year
- 2. 1-2 years
- 3. 2-5 years
- 4. 5 -10 years
- 5. 10+ years

57. How long have you been an employee of the University?

- 1. Under 1 year
- 2. 1-2 years
- 3. 2-5 years
- 4. 5 -10 years
- 5. 10+ years

58. How much time do you spend on work related learning outside the office?

(Indicate hours per week)?

- 1. None
- 2. One to three hours per week
- 3. Four to six hours per week
- 4. Seven to ten hours per week
- 5. Over ten hours per week

(Marsick & Watkins, 2003, p. 142-149)

Appendix C

DLOQ Answer Sheet

Mark your answer by circling the appropriate response on each item. Then add all of your responses in a category, divide by the number indicated, and record an average for that category. Finally, plot your average response for each category on the chart given.

Questions	Almost	Never			Almost	Always
1.	1	2	3	4	5	6
2.	1	2	3	4	5	6
3.	1	2	3	4	5	6
4.	1	2	3	4	5	6
5.	1	2	3	4	5	6
6.	1	2	3	4	5	6
7.	1	2	3	4	5	6

A. Total for Continuous Learning

Sum____/7=____.

Questions	Almost	Never			Almost	Always
8.	1	2	3	4	5	6

9.	1	2	3	4	5	6
10.	1	2	3	4	5	6
11.	1	2	3	4	5	6
12.	1	2	3	4	5	6
13.	1	2	3	4	5	6

B. Total for Inquiry and Dialogue

Sum____/6=____.

Questions	Almost	Never			Almost	Always
14.	1	2	3	4	5	6
15.	1	2	3	4	5	6
16.	1	2	3	4	5	6
17.	1	2	3	4	5	6
18.	1	2	3	4	5	6
19.	1	2	3	4	5	6

C. Total for Collaboration and Team Learning

Sum_____/6=____.

Questions	Almost	Never			Almost	Always
20.	1	2	3	4	5	6
21.	1	2	3	4	5	6
22.	1	2	3	4	5	6
23.	1	2	3	4	5	6
24.	1	2	3	4	5	6
25.	1	2	3	4	5	6

D. Total for Systems to Capture Learning

Sum____/6=____.

Questions

	Almost	Never			Almost	Always	
26.	1	2	3	4	5	6	
27.	1	2	3	4	5	6	
28.	1	2	3	4	5	6	
29.	1	2	3	4	5	6	
30.	1	2	3	4	5	6	

31. 1 2 3 4 5 6

E. Total for Empowered People

Sum____/6=____.

Question	s Almost	Never			Almost	Always
32.	1	2	3	4	5	6
33.	1	2	3	4	5	6
34.	1	2	3	4	5	6
35.	1	2	3	4	5	6
36.	1	2	3	4	5	6
37.	1	2	3	4	5	6

F. Total for Connect the Organization

Sum____/6=___.

Questions	Almost	Never			Almost	Always
38.	1	2	3	4	5	6
39.	1	2	3	4	5	6

40.	1	2	3	4	5	6
41.	1	2	3	4	5	6
42.	1	2	3	4	5	6
43.	1	2	3	4	5	6

G. Total for Provide Strategic Leadership for Learning

Sum____/6=____.

Questions	Almost	Never			Almost	Always
44.	1	2	3	4	5	6
45.	1	2	3	4	5	6
46.	1	2	3	4	5	6
47.	1	2	3	4	5	6
48.	1	2	3	4	5	6
49.	1	2	3	4	5	6
50.	1	2	3	4	5	6

H. Total for Five I's

Sum____/7=____.

Demographic Questions

51 . <i>A</i>	\ge:	
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Dimensions of the Learning Organization

Profiling Your Results

On the graph below, plot your average scores from your questionnaire responses on the vertical line denoting each learning organization dimension (marked A to I).

MEAN SCORES

DIMENSIONS OF THE LEARNING ORGANIZATION

(Marsick & Watkins, 2003, pp. 142-149)

	Continuous Learning	Inquiry and Dialog	Collaboration and Team Learning	Create System	Empower People	Connect The Organization	Strategic Leadership	Five I's
6.0								
5.5								
5.0								
4.5								
4.0								
3.5								
3.0								
2.5								
2.0								
1.5								
1.0								

Appendix D

Informed Consent for Phase One

Consent Form for Participation in Research

Email and Letter Text

Dear Participant Name:

As a doctorate student, I am conducting a study entitled "Organizational Development and Learning Technology in the Workplace: The Implementation of a New Reporting Tool.

The purpose of this research is to identify the gap in knowledgebase when writing reports from one reporting tool to another. This study emphasizes organizational development as it pertains to learning on an individual level, team or group level, and overall organizational level, when learning a new reporting tool.

Those who voluntarily participate in this research study will be asked to complete a Research Packet which contains a 58-item questionnaire, and a additional 58-item questionnaire. The actual time involved in answering the questions will take approximately 30-45 minutes. It is not necessary that you answer all of the questions.

If you wish to participate please feel free to contact me at Anne C. Pinder, 136 Colson Lane, Mullica Hill, NJ 08062. Telephone 609-970-4291or email at pinder-@rowan.edu.

Thank you.

Anne Pinder

Appendix E

Margin In Life Survey Instrument

Margin In Life Instructions:

- 1. IMPORTANE OF ITEM COLUMN: In the IMPORTANE OF ITEM column you will find a row of numbers from 1 to 10. The object is for you to circle any number from 1 to 10 to indicate the relative importance of the *Generally Speaking...* item in your life. The higher the number, the more important the item is to you.
- **2. LOAD COLUMN:** In the LOAD column you will find a row of numbers from 1 to 5. Load refers to the amount of burden or responsibility each *Generally Speaking...* item puts upon you. The object is for you to circle any number from 1 to 5 to indicate the relative LOAD that item places on your life. The higher the number the higher the LOAD, or burden the item places on you.
- **3. POWER COLUMN:** In the POWER column you will find a row of numbers from 1 to 5. POWER refers to the joy, pleasure, strength, or richness, added to your life by each *Generally Speaking...* item. The object is for you to circle any number from 1 to 5 to indicate the relative POWER that item places on your life. The higher the number the higher the POWER, or added richness that item gives you.
- **4. ITEM NOT APPLICABLE COLUMN:** If a *Generally Speaking...* item does not apply to you, for example, you are asked about your children, and you do not have children, place an X in the column labeled ITEM NOT APPLICABLE.
- **5. PLEASE NOTE:** It is necessary that you circle both a POWER and a LOAD number for all *Generally Speaking...* items that are applicable to you.

Generally Speaking:	Importance	Load	Power	Item Not Applicable
	(Circle One)	(Circle One)	(Circle One)	
 My health is My eyesight is 	1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10		1 2 3 4 5 1 2 3 4 5	X

For example:

Stevenson (1982)

In this example, this person feels eyesight is very important because (s)he assigned an IMPORTANCE of 10 to the item. Eyesight is not a burden to this person, because (s)he assigned a LOAD of 1, and (s)he believes that eyesight adds richness to life as evidenced by the POWER score of 4. This person must not be married because (s)he placed an X in the ITEM NOT APPLICABLE COLUMN when asked about a spouse.

Stevenson (1982) Margin in Life Survey

Generally Speaking:	Importance	Load	Power	Item Not Applicable
	(Circle One)	(Circle One)	(Circle One)	тррисцые
	(Circle One)	One)	One)	
3. My health is 4. My eyesight is	1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 1 2 3 4 5	1 2 3 4 5 1 2 3 4 5	
4. My Cycsight is	12343070710	12343	12343	
5. Living with my spouse is	1 2 3 4 5 6 7 8 9 10	12345	12345	
6. Our children are	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
7. Frequent prayer is	1 2 3 4 5 6 7 8 9 10	12345	12345	
8. My hearing is	1 2 3 4 5 6 7 8 9 10	12345	12345	
9. My physical health is	1 2 3 4 5 6 7 8 9 10	12345	12345	
10. Reading	1 2 3 4 5 6 7 8 9 10	12345	12345	
religious material is 11. My sense of smell is	1 2 3 4 5 6 7 8 9 10	12345	12 3 4 5	
12. I would rate my	1 2 3 4 5 6 7 8 9 10	12345	12345	
present life as 13. Breathing is	1 2 3 4 5 6 7 8 9 10	12345	12345	
12. My sense of taste is	1 2 3 4 5 6 7 8 9 10	12345	12345	
13. Religious faith is	1 2 3 4 5 6 7 8 9 10	12345	12345	
14. My ability to concentrate is	1 2 3 4 5 6 7 8 9 10	12345	12345	
15. Belief in God (a higher power) is	12345678910	12345	12345	

Stevenson (1982) Margin in Life Survey (Continued)

Generally Speaking:	Importance	Load	Power	Item Not
	(Circle One)	(Circle One)	(Circle One)	Applicable
16. My blood circulation is	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	1 2 3 4 5	
17. My appetite is				
10 701	1 2 3 4 5 6 7 8 9 10		1 2 3 4 5	
18. The extent to which my family members cooperate with each other is	1 2 3 4 5 6 7 8 9 10	12345	12345	
19. Having goals in life is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
20. Being independent is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
21.My children's attitude toward me is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
22. My sexual abilities are	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
23. Making decisions is	12345678910	12345	1 2 3 4 5	
24. My hands and arms are	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
25. Being married is	22345678910	12 3 4 5	12 3 4 5	
26. My type of	22345678910	12345	1 2 3 4 5	
employment is 27. Being responsible is	12345678910	12345	12345	
28. My digestion is	1 2 3 4 5 6 7 8 9 10	12345	12345	
29. My back is	12345678910	1 2 3 4 5	1 2 3 4 5	

Stevenson (1982) Margin in Life Survey (Continued)

Generally Speaking:	Importance	Load	Power	Item Not Applicable
		(Circle	(Circle	пррисави
	(Circle One)	One)	One)	
30. Belief in religion is				
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5		
31. My family's way of coping with problems is	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	12345	
32. My feet and legs are	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	1 2 3 4 5	
33. Self-reliance is	1 2 3 4 5 6 7 8 9 10	12345	12345	
34. Relating with my co-workers is	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	1 2 3 4 5	
35. The way my	12345678910	12345	12345	
children get along is				
36. Having a few close friends is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
37. Controlling my temper is	3 2 3 4 5 6 7 8 9 10	12 3 4 5	12 3 4 5	
38. A high standard of mortality is	3 2 3 4 5 6 7 8 9 10	1 2 3 4 5	1 2 3 4 5	
39. My coordination is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
40. Consideration of others is	1 2 3 4 5 6 7 8 9 10	12345	12345	
41.The way my children act to each other is	1 2 3 4 5 6 7 8 9 10	12345	12345	
42. My body is	1 2 3 4 5 6 7 8 9 10	12345	12345	
43. The way my spouse handles				
responsibility is	12345678910	12345	12345	
44. Mobility is	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	1 2 3 4 5	

Generally Speaking:	Importance	Load	Power	Item Not Applicable
	(Circle One)	(Circle One)	(Circle One)	rippiicubic
45. My children's progress in school is	12345678910	12345	12345	
46. The need for religion is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
47. The people I've met at church are	1 2 3 4 5 6 7 8 9 10	12345	12345	
48. My attitude toward my family is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
49. Membership in religion is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
50. My muscles are	42345678910	12 3 4 5	12 3 4 5	
51. Getting along with people is	42345678910	12345	12345	
52. A spiritual way of life is	1 2 3 4 5 6 7 8 9 10	12345	1 2 3 4 5	
53. Rest is	1 2 3 4 5 6 7 8 9 10	12345	12345	
54. Frequent finding if necessary to stand for what I believe in	12345678910	12345	1 2 3 4 5	
55. Self Confidence	1 2 3 4 5 6 7 8 9 10	12345	12345	
56. Participating in religious practices is	12345678910	12345	1 2 3 4 5	
57. Manual dexterity is	1 2 3 4 5 6 7 8 9 10	12345	12345	
58. My concern for my family is	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5	12345	

Stevenson (1982)

Appendix F

One-on-One Interview Questions

- 1. Which group do you work in?
- 2. Can you tell me a little about you.
- 3. What attracted you to your position here at the University?
- 4. How do you feel that your contributions make a difference in your position here at the University? Please explain.
- 5. Through your lens, how important is reporting to your institution?
- 6. How did you react when you learned the Cognos reporting tool was replacing Oracle Discoverer tool?
- 7. If you could change something about the Cognos reporting tool, what would it be?
- 8. What improvements would you make in the implementation of the Cognos reporting tool?

Appendix G

Email Granting Permission to Use an Altered DLOQ Instrument

From: Karen Watkins [kwatkins@uga.edu]

Sent: Monday, October 27, 2014 10:58 AM

To: Pinder, Anne Clare

Cc: marsick@tc.columbia.edu

Subject: Re: Second Request for Permission to use the: DIMENSIONS OF THE

LEARNING ORGANIZATION QUESTIONNAIRE:

Categories: Red Category

We are delighted to grant permission for these changes and for your use of the instrument in your study with appropriate citation. See watkins and Oneil, a nontechnical manual article in advances in developing human resources.

Best Regards

Karen watkins.

Sent from my iPhone

Karen E Watkins

The University of Georgia

Athens. GA 30602

> On Oct 26, 2014, at 8:20 AM, Pinder, Anne Clare pinder@rowan.edu> wrote:

> Hello Dr. Marsick and Dr. Watkins,

> I have attached my abstract for my dissertation study so that you will have an idea of what I am researching.

> I am requesting permission to use the DLOQ in my dissertation, modified to

eliminate the financial and knowledge performance sections, since they are not applicable to my study.

- > I am also requesting your permission to change the demographic questions to reflect the Rowan University setting.
- > Third I am requesting your permission to show your DLOQ as an Appendix
- > in my dissertation (citing you for your work.) I will share my results with you when I have completed my study.
- > Please let me know.
- > Thank you so much.
- > Anne

>_____

- > From: Pinder, Anne Clare
- > Sent: Wednesday, October 8, 2014 3:24 PM
- > To: marsick@exchange.tc.columbia.edu
- > Cc: kwatkins@uga.edu; marsick@tc.columbia.edu; Pinder, Anne Clare
- > Subject: FW: DIMENSIONS OF THE LEARNING ORGANIZATION QUESTIONNAIRE:
- > Hello.
- > I have attached my abstract for my dissertation study so that you will have an idea of what I am researching.
- > I am requesting permission to use the DLOQ in my dissertation, modified to eliminate the financial and knowledge performance sections, since they are not applicable to my study.

- > I am also requesting your permission to change the demographic questions to reflect the Rowan University setting.
- > Third I am requesting your permission to show your DLOQ as an Appendix
- > in my dissertation (citing you for your work.) I will share my results with you when I have completed my study.
- > Please let me know.
- > Thank you so much.
- > Anne
- > Anne C. Pinder
- > Assistant Director, Enterprise Information Services (EIS) Rowan
- > University
- > 201 Mullica Hill Road
- > Glassboro, NJ 08028-1701
- > Voice: (856) 256-4181
- > FAX: (856) 256-4387
- > E-mail: pinder@rowan.edu < mailto:pinder@rowan.edu >
- >> From: Marsick, Victoria [marsick@exchange.tc.columbia.edu]
- >> Sent: Thursday, September 18, 2014 10:53 PM
- >> To: Pinder, Anne Clare
- >> Cc: kwatkins@uga.edu; marsick@tc.columbia.edu
- >> Subject: Re: DIMENSIONS OF THE LEARNING ORGANIZATION QUESTIONNAIRE:
- >> We do give permission to doctoral students to use the DLOQ in their

- >> dissertations. Please do send us information about your study and we
- >> would would appreciate your sharing results.
- >> Victoria Marsick
- >> On Tue, Sep 16, 2014 at 10:39 AM, Pinder, Anne Clare
- >> <pinder@rowan.edu<mailto:pinder@rowan.edu>> wrote:
- >> Hi Dr. Watkins and Dr. Marsick,
- >> I am a doctorate student at Rowan University and I am interested in
- >> using the DIMENSIONS OF THE LEARNING ORGANIZATION

QUESTIONNAIRE in my

- >> dissertation study on organizational learning.
- >> May I please have your permission to use the DIMENSIONS OF THE
- >> LEARNING ORGANIZATION QUESTIONNAIRE in my dissertation study?
- >> Thank you.
- >> Anne Pinder
- >> Anne C. Pinder
- >> Assistant Director, Enterprise Information Services (EIS) Rowan
- >> University
- >> 201 Mullica Hill Road
- >> Glassboro, NJ 08028-1701
- >> Voice: (856) 256-4181<tel:%28856%29%20256-4181>
- >> FAX: (856) 256-4387<tel:%28856%29%20256-4387>

>>

>> E-mail: pinder@rowan.edu<mailto:pinder@rowan.edu>

- <mailto:pinder@rowan.edu>
- >> >> Victoria J. Marsick, Ph.D.
- >> Professor and Academic Program Coordinator, Adult & Organizational
- >> Learning Department of Organization & Leadership Co-Director, J. M.
- >> Huber Institute for Research on Learning in Organizations
- >> 207 Zankel
- >> 525 West 120 Street
- >> New York, NY 10027
- >> 212-678-3754
- >> marsick@tc.edu<mailto:marsick@tc.edu>

Appendix H

Permission to Use the LPI

October 8, 2014

Anne Pinder

136 Colson Lane

Mullica Hill, New Jersey 08062

Dear Ms. Pinder:

Thank you for your request to use the LPI®: Leadership Practices Inventory® in your dissertation. This letter grants you permission to use either the print or electronic LPI [Self/Observer/Self and Observer] instrument[s] in your research. You may *reproduce* the instrument in printed form at no charge beyond the discounted one-time cost of purchasing a single copy; however, you may not distribute any photocopies except for specific research purposes. If you prefer to use the electronic distribution of the LPI you will need to separately contact Marisa Kelley (mkelley@wiley.com) directly for further details regarding product access and payment. Please be sure to review the product information resources before reaching out with pricing questions.

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- (1) The LPI may be used only for research purposes and may not be sold or used in conjunction with any compensated activities;
- (2) Copyright in the LPI, and all derivative works based on the LPI, is retained by James M. Kouzes and Barry Z. Posner. The following

copyright statement must be included on (3) One (1) <u>electronic</u> copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data must be sent <u>promptly</u> to my attention at the address below; and,

(4) We have the right to include the results of your research in publication, promotion, distribution and sale of the LPI and all related products.

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Best wishes for every success with your research project.

Cordially,

Ellen Peterson

Permissions Editor

Epeterson4@gmail.com

Blen Wo

One Montgomery, Suite 1200, San Francisco, CA 94104-4594 U.S.

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www.wiley.com

Appendix I

Margin In Life Permission Letter

Dr. L. A. Szalacha

College of Nursing

396 Newton Hall

1585 Neil Avenue

Columbus, OH 43210

Phone (614) 688-0394

E-mail Szalacha.1@osu.edu

December 1, 2014

Dear Ms. Pinder,

Before she died Dr. Joanne Stevenson granted the Associate Dean for Research in the College of Nursing permission to release the Margin in Life scale to any investigator who requests it. I have sent the scale to other investigators who requested access. I ask that you cite Dr. Stevenson's work when you publish anything using the scale.

Best wishes for success in your scholarship.