EXEMPLARY PERFORMANCE IN FOUR AREAS OF EXPERTISE
IN WORKPLACE LEARNING AND PERFORMANCE (WLP): A CRITICAL
INCIDENT ANALYSIS

A Thesis in
Workforce Education and Development
by
Terri Freeman Smith

© 2006 Terri Freeman Smith

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

May 2006
The thesis of Terri Freeman Smith was reviewed and approved* by the following:

William J. Rothwell  
Professor of Education  
Professor-in-Charge, Workforce Education and Development  
Thesis Advisor  
Chair of Committee

Wesley E. Donahue  
Associate Professor of Management Programs

Judith A. Kolb  
Associate Professor of Education

Edgar P. Yoder  
Professor of Agricultural and Extension Education

*Signatures are on file in the Graduate School
ABSTRACT

The purpose of the study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise as described in ASTD’s *Mapping the Future: New Workplace Learning and Performance Competencies* (2004). The areas of expertise were (a) Delivering Training, (b) Designing Learning, (c) Improving Human Performance, and (d) Measuring and Evaluating. The research had a dual focus. The first focus was to ascertain the characteristics and behaviors differentiating the typical performer from the exemplary performer. The second focus was to contribute to the development of a rubric used for the core work product submission for the first national ASTD certification exam. Hunter, Schmidt, and Judiesch (1990) suggested that an exemplary performer could have productivity differences 12 times greater than performers at the bottom of the performance scale and 85% greater than an average performer. An understanding of these differences could help an organization to recruit and select top-performing applicants. The researcher utilized a modified competency model and compared and contrasted critical incidents from behavioral event interviews (BEI) of 23 exemplary performers and 9 typical WLP performers. The interviews were coded and classified into three foundational clusters. An analysis of the findings suggested that an exemplary performer had at least three key behaviors: taking calculated risks, entrepreneurial and visionary planning, and documented business performance support to influence change. The absence of criteria required to measure exemplary performance was a key limitation of the study and an important implication for further research.
# TABLE OF CONTENTS

LIST OF FIGURES .......................................................................................................................... vii

LIST OF TABLES .......................................................................................................................... viii

ACKNOWLEDGMENTS ................................................................................................................. x

CHAPTER 1 ......................................................................................................................................... 1

  Introduction .................................................................................................................................. 1
  Purpose of the Study ..................................................................................................................... 1
  Background of the Study .............................................................................................................. 4
  Research Problem ....................................................................................................................... 6
  Historical Perspectives .............................................................................................................. 9
  Conceptual Framework .......................................................................................................... 12
  Research Questions ............................................................................................................... 17
  Definitions of Terms .............................................................................................................. 17
  Significance of the Study .................................................................................................. 20
  Exemplary Status Assumptions ............................................................................................... 21
  Limitations .............................................................................................................................. 23
  Chapter Summary .................................................................................................................. 25

CHAPTER 2 ......................................................................................................................................... 26

  Review of Literature ................................................................................................................. 26
  Theoretical Framework ........................................................................................................... 27
  Competency Studies Sponsored by ASTD ............................................................................... 29
    1978 American Society for Training and Development Study ........................................... 29
    1983 Models for Excellence Study ...................................................................................... 31
    1989 Models for HRD Practice Study ................................................................................. 40
    1996 ASTD Models for Human Performance Improvement ........................................... 43
    1998 ASTD Models for Learning Technologies ................................................................. 45
    1999 ASTD Models for Workplace Learning and Performance ................................... 47
    2004 ASTM Mapping the Future .................................................................................... 51
  Relevant Research on the Exemplary and Average Performer .................................................. 57
    The Exemplary and Average Performer ............................................................................. 58
    The Differences .................................................................................................................... 59
  The 1970 McBer and Company Study ...................................................................................... 60
  The 1981 Boyatzis Distinguished Manager Study ................................................................. 65
    Characteristic Differences ................................................................................................. 70
    Strategizing Differences.................................................................................................... 71
    Cognitive Differences ....................................................................................................... 73
  Chapter Summary .................................................................................................................. 76

CHAPTER 3 ......................................................................................................................................... 77

  Methodology ............................................................................................................................ 77
  Research Approach ............................................................................................................... 78
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>Evolution chart of the four ‘roles’ in the major ASTD competency studies</td>
</tr>
<tr>
<td>2.6</td>
<td>Evolution chart of the roles in the major ASTD competency studies as migrated into the new Area of Expertise (AOE) for the four areas of the study</td>
</tr>
<tr>
<td>3.1</td>
<td>Process flow chart of the outline for the methodology chapter of the study</td>
</tr>
<tr>
<td>3.2</td>
<td>Gowin’s Vee</td>
</tr>
<tr>
<td>3.3</td>
<td>Gowin’s Vee of characteristics differentiating an average performer or qualified/(fully successful) and a superior performer, best-in-class (Exemplary) in the three AOE in WLP</td>
</tr>
<tr>
<td>4.1</td>
<td>Workplace Learning and Performance Job Competency Model</td>
</tr>
<tr>
<td>A.1</td>
<td>ASTD Human Resource Wheel</td>
</tr>
<tr>
<td>A.2</td>
<td>ASTD The WLP Wheel</td>
</tr>
<tr>
<td>A.3</td>
<td>2004 ASTD Competency Model: Mapping the Future</td>
</tr>
<tr>
<td>A.4</td>
<td>2004 ASTD Roles, Competencies, and Areas of Expertise</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Differences between Qualitative and Quantitative Research</td>
</tr>
<tr>
<td>4.1</td>
<td>Summary of Exemplary Participants in Each AOE</td>
</tr>
<tr>
<td>4.2</td>
<td>Summary of Demographic Employment Characteristics of Exemplar Participants</td>
</tr>
<tr>
<td>4.3</td>
<td>Summary of Demographic Employment Characteristics of Comparison Group of Typical Performer Participants</td>
</tr>
<tr>
<td>4.4</td>
<td>Delivering Training Exemplary: Competencies Identified from Research Questions 1 and 2</td>
</tr>
<tr>
<td>4.5</td>
<td>Designing Learning Exemplary: Competencies Identified from Research Questions 1 and 2</td>
</tr>
<tr>
<td>4.6</td>
<td>Improving Human Performance Exemplary: Competencies Identified from Research Questions 1 and 2</td>
</tr>
<tr>
<td>4.7</td>
<td>Measuring and Evaluating Exemplary - Competencies Identified from Research Questions 1 and 2</td>
</tr>
<tr>
<td>4.8</td>
<td>Competencies Identified by the Typical Performer, the Comparison Group of Typical Performers</td>
</tr>
<tr>
<td>4.9</td>
<td>Delivering Training Exemplary: Identified Final Competencies, Skills, Knowledge, and Abilities</td>
</tr>
<tr>
<td>4.10</td>
<td>Designing Learning Exemplary: Identified Final Competencies, Skills, Knowledge, and Abilities</td>
</tr>
<tr>
<td>4.11</td>
<td>Improving Human Performance Exemplary: Identified Final Competencies, Skills, Knowledge, and Abilities</td>
</tr>
<tr>
<td>4.12</td>
<td>Measuring &amp; Evaluating Exemplary - Identified Final Competencies, Skills, Knowledge, and Abilities</td>
</tr>
<tr>
<td>4.13</td>
<td>Typical Performer, the Comparison Group of Typical Performers, Identified Final Competencies, Skills, Knowledge, and Abilities</td>
</tr>
<tr>
<td>4.14</td>
<td>Delivering Training: Identified Exemplary Practice and Attribute Competencies (N = 6)</td>
</tr>
</tbody>
</table>
LIST OF TABLES (cont’d.)

4.15 Designing Learning: Identified Exemplary Practice and Attribute Competencies ($N = 8$) ................................................................. 196

4.16 Improving Human Performance: Identified Exemplary Practice Competencies ($N = 5$) ................................................................. 197

4.17 Measuring and Evaluating: Identified Exemplary Practice and Attribute Competencies ($N = 4$) ................................................................. 198

4.18 Comparison Group - Typical Performer: Identified Practice and Attribute Competencies ($N = 9$) ................................................................. 199

4.19 Summary of Practice and Attribute Competencies Themes Found in Each of the Four Exemplary Areas of Expertise and Also Found in the Typical Performer ($N = 32$) .................................................................................. 200

4.20 Distinguishing Practice Competencies Themes Found in Each of the Four Exemplary Areas of Expertise and Also Found in the Typical Performer ....... 203

4.21 Distinguishing Attribute Competencies Themes Found in Each of the Four Exemplary Areas of Expertise and Also Found in the Typical Performer .................................................................................. 203

4.22 Identified Typical Competencies Missing from the Exemplary Performer in Delivering Training, Designing Learning, Improving Human Performance, and Measuring and Evaluating ($N = 23$) .................................................................................. 205

4.23 Identified Typical Final Missing Competencies, Skills, Knowledge, and Abilities from the Exemplary Performer in Delivering Training, Designing Learning, Improving Human Performance and Measuring and Evaluating ($N = 23$) .................................................................................. 205
ACKNOWLEDGMENTS

I would like to thank the many people in my life who have provided support, mentorship, and encouragement to me throughout the process of earning my doctoral degree. I especially would like to thank Dr. William J. Rothwell, my advisor and committee chair, who shared his vision for such a timely and meaningful research project. I believe it was day two of my very first course in Workforce Education and Development with Dr. Rothwell that our conversation inspired this research study. Thank you for supporting me through the entire process these past three years.

Sincere thanks to Dr. Edgar P. Yoder, who provided me with countless hours of his time so that I might better be able to embrace, understand, and appreciate qualitative methodology. I also want to thank Dr. Judith A. Kolb, who provided support, assistance, and expert teaching through the many hurdles of earning a Doctoral Degree. Special thanks to Dr. Wesley E. Donahue, who helped to keep this research study grounded in practice. I am grateful to my colleagues at ASTD, and especially to Jennifer Naughton, who provide generous support and a multitude of resources that were invaluable in completing this research. Many thanks go out to Tiffani Payne who took on the auspicious task of being my second coder for this study. I would also like to extend my appreciation to Matthew Bain who persisted through the long process of assisting me in the development of my literature review and initial coding process. Thank you all for your time, friendship, and dedication to this research project.

I would like to thank friends, family, and colleagues who tolerated me over the past three years, who understood when I constantly declined outside engagements, and for showing genuine interest in my research.
I especially would like to thank a wonderful colleague and dear friend, Dr. William G. Wallick, who encouraged me to start this journey and helped to challenge and enrich the quality of my work. Thank you for inspiring me to become a scholar and teacher. Thank you for assuring me that my fears, concerns, and stress levels were common and for bringing humor to the equation. In addition, his doctoral thesis provided me with insight, guidance, and support in my own qualitative research.

To my mother, Angie M. Freeman, who celebrated every milestone victory with me. Thank you for all the late night hours you talked with me, keeping me awake and motivated during my long drives to and from State College. Thank you for encouraging me through challenging times with your unselfish love and support.

To my husband and best friend Robert J. Smith, who is my greatest champion, who kept me sane, and loved through many demanding times. Thank you for always having my needs as a first priority and for sacrificing much these past three years. Without your encouragement, support, and patience I could have not completed this dissertation. Thank you for holding me up when I thought I no longer could stand.

I would like to dedicate this dissertation to the memory of my father, William J. Freeman, who believed in the pursuit and attainment of education. I know you have been there with me all the way. I miss you.
CHAPTER 1

Introduction

This opening chapter provides an introduction to the study. The first section highlights the purpose of the study and its dual focus areas. The second section contains a description of the background of the study, the identified research problem, and the reasons for conducting it. The third section presents the historical perspectives on performance and the exemplary performer, a conceptual framework that includes the research questions for the study, exemplary status assumptions, a list of definitions and terms used throughout the study, and a discussion of the study’s significance. The final section presents the assumptions and limitations of the study.

Purpose of the Study

The purpose of the study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise described in ASTD’s Mapping the Future: New Workplace Learning and Performance Competencies (2004a) through a combined methodology that included critical incidents and behavioral event interview questions. Rothwell, Sanders, and Soper (1999) stated it best when they wrote, “performance is the result of an effective interaction among the resources, the process, the people, and the environment” (p. 4). The study concentrated on ‘the people’ aspect of this statement and labeled the differentiating characteristics of performers who perform at higher levels (exemplary) than the average performer (fully-successful).

If past behavior is the best predictor of future behavior, perhaps employers would hire more fully competent people instead of trying
to infer confidence and commitment from a projected image in the job interview; if they required tangible evidence of success and competencies. (Hultman, 1988, pp. 36–37)

Thus, the study did not analyze the varied environmental conditions, conditions that would impact the performance of even a good performer (Rummler & Brache, 1995).

The first focus of the study was an examination of what constitutes a high-performing individual in Workplace Learning and Performance (WLP), the profession formerly known as Training and Development and more recently known as Human Resource Development (HRD). “Training and HRD are the most widely practiced approaches to improving performance in organizations today. However, they are not the most effective approaches to improving performance through learning: workplace learning and performance is” (Rothwell, Lindholm, & Wallick, 2003, p. 10). McLagan (1989) (as cited in ASTD, 2003) noted that:

Our role is to unleash human capabilities into the workplace and society by using all of the tools at our disposal. We need to align the human side of the business so that it fits these new paradigms. Calling it ‘training and development’ puts too much emphasis on what we do, not what we’re trying to create knowledge organizations that release and focus peoples’ energies for work performance. (p. 1)

The second focus of the study contributed significantly to the development of the rubric used for the core work product submission criteria for the first national ASTD certification exam that spanned four of the nine Areas of Expertise (AOE) as identified in the 2004 Mapping the Future study. This study focused on exploring and identifying the
characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise as described in ASTD’s (2004) *Mapping the Future: New Workplace Learning and Performance Competencies* by using an expert panel gathered by ASTD. Using these identified distinguishing competencies, ASTD planned to develop the performance standards necessary to implement their first pilot exam in 2005.

*Section Summary*

This section described the foci of the study: (a) to define distinguishing characteristics that identify an exemplary performer in WLP in the area of Delivering Training, Designing Training, Improving Human Performance and Measuring and Evaluating; and (b) to identify the skills, knowledge, abilities and other aspects of an exemplary performer in the area of Delivering Training, Designing Training, Improving Human Performer, and Measuring and Evaluating. An exploration of these areas will contribute to the profession in two ways. First, this study will help to identify the distinguishing characteristics of an exemplary performer—information of importance in future training and hiring. Second, this study helped ASTD to identify criteria by which to judge or determine measurable criteria for the rubric used in the development of the core work product submission criteria for the Certified Professional in Learning and Performance (CPLP) certification exam. The next section contains a description of the background for this study, including a look at the need for and possible implications of this exploratory study.
Background of the Study

In answering the question, ‘what is higher level performance’, Spencer and Spencer (1993) labeled one standard deviation as the discriminating point at which higher performers (exemplary) are differentiated from qualified performers (typical/average). The standard deviation is based on the output value added in relation to salary. Hong (1999) stated that the top 5% of performers in a specific domain are considered higher (exemplary) performers. A Potential for Improving Performance (PIP) (Boyatzis, 1982; Gilbert, 1978) of approximately 1.0 was Gilbert’s answer to superior-level performance (an explanation of PIP will come later in this study).

In answering the question, ‘what are the individual characteristics’ that are commonly found in higher-performing individuals, an established definition of performance (Rothwell et al., 1999) includes other factors outside the scope of the individual; thus, there is a need to be more specific in vocabulary usage. Such factors include a) the external environment, b) clients or customers, c) the work itself, and d) the people who perform the work. This study focused on the fourth element, “the people who perform the work” (Rothwell et al., 1999, p. 115).

Fitz-Gibbon (1990) stated, “A performance indicator can be defined as an item of information collected at regular intervals to track the performance of a system” (p. 1). Boyatzis (1982) provided two definitions that were pertinent to this discussion. First, the definition of effective performance is “the attainment of specific results (i.e., outcomes) required by the job through specific actions while maintaining or being consistent with policies, procedures, and conditions of the organizational environment” (p. 62). Second, a
job competency is “an underlying characteristic of a person, which results in effective and/or superior performance in a job” (Boyatzis, 1982, p. 84).

The job competency definition is most important to this study because it is necessary to an understanding of the job competencies that are correlated with superior performance. At this point, the discussion was divided into two dispersions: (a) a definitive description of what superior performance is and how to measure it, and (b) what competencies are identified through research findings that may be correlated with superior performers. The identification of important distinctive behaviors and characteristics that reveal the gap between a typical or fully qualified performer and a superior or exemplary performer is the reason for separating the discussion about the competencies of exemplary performers and superior performance itself.

A major hurdle for researchers is the differentiation between an individual’s contribution to performance and the satellite contributors such as work environment. If a person is doing exceptionally well at a job, then what part of the exceptional performance resides in the individual and what part belongs to the environment?

To further exacerbate the problem, different types of performance can lead to high levels of performance. As Fletcher (1993) stated, “virtually every field of endeavor recognizes this simple fact: outstanding people in any field have their own individually unique ways of working” (p. 56). Gilbert (1978) added to the methodological debate by stating that behavior is largely covert and tough to observe. Further, similar high performance may be the manifestation of very different behaviors on behalf of each performer.
Several researchers have devised criteria by which performance can be measured. Gilbert (1978), Kushel (1994), Spencer and Spencer (1993), Boyatzis (1982), and Motowildo and Van Scotter (1994) all indicated behavior as a main criterion in measuring performance. However, some of the researchers argued that the surrounding environment played a key role in the level of performance (Boyatzis, 1982; Gilbert, 1978) and made measurement of performance attributed to the individual difficult. According to Rummler and Brache (1995), “If you pit a good performer against a bad system, the system will win almost every time” (p. 13).

A key point in this discussion is that *performance* is difficult to measure. The problem has led many researchers to focus on different avenues in measuring performance. Several researchers listed a survey or questionnaire given to subject matter experts (SME’s), peers, supervisors, and subordinates as a way to measure performance. Boyatzis (1982), Rothwell, Sanders, and Soper (1999), and Gilbert (1978) used surveys to extrapolate the common agreed-upon measurement of performance from the people who would know (i.e., the experts).

**Research Problem**

Gilbert (1978), in his book *Human Competence*, discussed the notion of Performance Improvement Potential (PIP). He noted that there was a big difference between the productivity of individual performers. A trend in recent years, coming from the human competency movement, was to focus attention on training or developing (and hiring) best-in-class performers, who are called exemplars, rather than on training or hiring merely qualified performers or typical performers (Dubois & Rothwell, 2004).
In 2004, ASTD published *Mapping the Future*, its newest competency study. Building upon previous research, the competency study was commissioned to update and develop the new WLP competencies. ASTD’s *Mapping the Future* provided the foundations for recruiting, hiring, developing, and appraising WLP staff. This important competency study, while crucial to professionalizing the field, left many questions unanswered. At least three unanswered questions are of key importance:

1. What are the differences between exemplary (best-in-class) and fully successful (typical/average) WLP performers?
2. What are the established performance standards?
3. What are the organizational (environmental) conditions that support WLP?

These issues are most important when looking at the future of the WLP profession. Organizations need to consider performance standards and environmental conditions by which to judge or determine productivity. “Behavioral data around each of the competencies can, and should, be collected on an ongoing basis to enhance the specificity and effectiveness of feedback” (Rothwell & Wellins, 2004, p. 99). Identified organizational conditions that support WLP goals can be “used as the basic content for individual and group ‘needs analysis,’ enabling organizations to target appropriate interventions to individual or team needs” (William & Wellins, 2004, p. 99). The circumstances of the business environment directly influence what and how specific competencies are demonstrated (Boyatzis, 1982).

In this study, the focus was on this first key area: identifying the competencies that uniquely distinguish best-in-class (exemplary) WLP practitioners from fully
successful (qualified) ones (key point number 1). An understanding of these competencies will guide an organization in the hiring and selection process by selecting applicants who are already top performers in the profession. “The competencies can be used, with customization, as a basis for generating interview guides, testing and assessment tools, and as the criteria for final hiring or promotion decisions in organizations” (William & Wellins, 2004, p. 99). One means of doing this is through critical incident and behavioral event interviews with identified exemplary performers. ASTD identified the four Areas of Expertise (AOE) that the researcher focused on in collecting the critical incident interviews. The four AOE in this study were:

1. Delivering Training
2. Designing Learning
3. Improving Human Performance
4. Measuring and Evaluating

“Research suggests that, while all people may be created equal for voting purposes, they are not all equal in their productivity” (Rothwell, W. J., personal communication, October 2004). Some people are outstanding (exemplary) performers who can achieve productivity differences far beyond those who are only qualified (fully successful or the typical performer). If those competencies that distinguish exemplary performers can be pinpointed, it might be possible to hire or develop fully successful performers closer to the productivity levels of exemplary performers.

Awareness of these competencies or behaviors and characteristics: (a) offers professionals a guide for hiring and promotion, (b) offers ASTD a method of identifying criteria for the workplace submission item of the ASTD WLP certification exam, and (c)
offers an area of exploration and further study in examining and justifying measurable outputs and standards of the profession.

Gilbert (1978) noted that “it is often difficult to specify exactly what behavior is required for exemplary performance…two exemplars may behave in considerably different ways” (p. 36). Rummler and Brache (1995) added environmental factors into the discussion of exemplary performance. Because there are many environmental factors, findings are not generalizeable or quantifiable for a specific industry. Further research is needed to specify or quantify the measurable outputs inclusive of environmental conditions and support in establishing performance standards and the organizational conditions that support Workplace Learning and Performance as identified previously.

Section Summary

The study background was presented and included a discussion and use of the term performance as used in this study. A brief history of the research problem and the four areas of expertise (AOE) in Workplace Learning and Performance (WLP) used in this study was provided and discussed. The historical perspective, the conceptual framework, and the significance of this study are presented next.

Historical Perspectives

A major future development for Workplace Learning and Performance professionals is the need be more business-aware or performance-oriented (Colteryahn & Davis, 2004). Firms facing the quickly changing business world are now faced with rapidly changing workforces, a focus on increased productivity, and a focused view on return on investments (Rothwell, 1996).
Performance, in the world of ‘benchmarking’, assists organizations in deciding which of their own processes holds the key to future success. In the benchmarking process, organizations:

- identify best in-class performers of those crucial operations, examine the practices of best-in-class performers, note differences that distinguish those practices from their own operations, and adapt key practices for their own use in an effort to close the performance gap.

(Alberta Government Finance, 2000, p. 5)

The word *performance* is becoming more and more prevalent in the literature because of the desire to encapsulate the expert performer (Kuchinke, 1997). The impressive results achieved through the benchmarking process have made benchmarking an important element in elevating an organization’s performance. The objective of benchmarking is for an organization to learn from top performers and adapt the practices of top performing units within an organization. Learning from the “best-in-class” can improve the performance of poorer performers in the same organization.

Much of this focus on expertise (or what Gilbert [1978] and Herling [2000] called exemplary performance) is also driven by the need for increased skill level in the “American workplace and the level of training being provided or paid for by employers” (Kuchinke, 1997, p. 72). Training implies the desire for expertise and is “explicitly and implicitly directed toward building expertise” (Kuchinke, 1997, p. 73).

As in the benchmarking process, Spencer and Spencer (1993) suggested, that “Organizations should use the characteristics of superior performers as their ‘template’ or ‘blueprint’ for employee selection and development. Failure to do so is essentially to
select and train mediocrity – an organization’s current average level of performance” (p. 15). The “strategic imperative of developing expertise” (Kuchinke, 1997, p. 72) has made research on the notion of expertise one of the most rapidly expanding areas and the core of Human Resource Development (HRD) (Herling, 2000). An HRD faculty member at the University of Minnesota (1994) stated: “To gain competitive advantage, organizations are requiring that employees be top performers, and thus it is the development of workplace expertise, not just competence, that is becoming vital to optimal organization performance, and it is HRD that holds the key to ‘improving performance through the development and/or unleashing of human expertise’” (as cited in Herling, 2000, p. 716). In order to conceptualize the expert practitioner in HRD or the Workplace Learning and Performance (WLP) genre, it is necessary to discuss the characteristics of the high or exemplary performer.

To accomplish this task, it was necessary to first describe the many synonyms for exemplary performance. Further, it was important to construct a thorough definition for the purpose and describe attributes of the exemplary performer. In order to successfully provide an accurate picture of an exemplary performer, some of the methodology behind the descriptive puzzle of exemplary performance was also described.

One of the most demanding challenges in defining an exemplary performer was the discontinuity in the verbal usage that permeated the literature. From one genre to another, and from one researcher to the next, the verbal variation in the concept of the exemplary performer was vast. In fact, Campbell, McCloy, Oppler, and Sager (1993) stated that “the word performance was misused and exploited to the extreme in society at large and is frequently butchered beyond recognition in Psychology” (as cited in
Kuchinke, 1997, p. 74). Before providing a definition of an exemplary performer, the
purpose of the inquiry is described next.

The researcher’s mission was to ascertain the characteristics or behaviors that
differentiated the typical performer from the exemplary performer through Behavioral
Event Interviews (BEI), a modified version of the Critical Incident Technique (CIT).
Despite numerous variations in procedures for gathering and analyzing critical incidents,
researchers and practitioners agreed about the definition of the purpose of critical incident
technique (CIT) analysis. The critical incident technique is defined as a set of procedures
for systematically identifying behaviors that contribute to the success or failure of
individuals or organizations in specific situations (Flanagan, 1954). This method of
collecting critical incidents, using an interview protocol called the Behavioral Event
Interview (BEI), was developed by McClelland and his colleague Dailey, and was based
on Flanagan’s critical incident technique. The BEI method of critical incident collection
is commonly used in competency modeling.

**Conceptual Framework**

A competency model is a behavioral description of the performance level that an
organization needs to attain in order to achieve current and future business goals. The
performance model includes the design of a competency model. It enlarges the project
scope so that the competency model is viewed as one part of a total performance
improvement process. A performance model describes the performance needed to
achieve an organization’s goals.

Critical incident identification is arguably the single most important kind of
information associated with task performance in a usability-oriented context (Andersson
& Nilsson, 1964). Critical incident identification is an event observed within task performance that is a significant indicator of some factor that defines the objective of the study (Andersson & Nilsson, 1964). Several methods have been developed for the conduct of usability evaluation without direct observation of a user by an evaluator. However, contrary to the modern ‘user reported critical incident method’, none of the existing remote evaluation methods (or even traditional laboratory-based evaluation) meets all of the criteria for a successful Critical Incident Technique analysis. The criteria include the following: (a) data are centered on real critical incidents that occur during a task performance; (b) tasks are performed by real users; (c) users are located in their normal working environment; (d) data are captured in normal task situations, not contrived laboratory settings; (e) users self report their own critical incidents after they have happened; and (f) quality data can be captured at low cost to the user.

As noted, performance measurement and differentiating distinguishing competencies are contingent on many factors and rely on expert information. Traditionally, researchers have been concerned with distinguishing and separating the knowledge, skills, and abilities (KSAs) required for effective job performance. At present, however, it is recognized that a cluster of demonstrated KSAs defines a competency and makes a real difference in the success of each organizational environment (Wisher, 1994). Another way to differentiate exemplary performers from qualified performers is PIP (Potential for Improving Performance). Gilbert (1978) postulated that people show their performance level and how much they can improve by using a numerical value in describing performance levels – PIP. Gilbert measured quality, quantity, and cost of the historically best instance of performance. This helped define
exemplary performance according to PIP. Exemplary performance is the “worth of the historically best instance of the performance, or the most sustained worthy performance that we can reasonably expect to attain” (Gilbert, 1978, p. 40).

To identify the worth of performance, Gilbert pointed to a need for sufficient reliable data on how to perform. Identifying the behaviors of exemplary performers was critical to the study. Because performance was being judged against historical record, ample surveying and statistical analysis about behaviors exhibited by experts was necessary. Gilbert (1978) noted that “there is a great difference in what people accomplish, but small differences in their repertoires of behavior” (p. 39). The researcher did not identify the amount of behavior missing from an average performer. Instead, the researcher identified specific competencies and behaviors required to bridge the gap between an average or fully successful WLP performer and an exemplary or best-in-class WLP performer. According to Gilbert (1978), “we do not need to know the ‘amount’ of behavior missing from a repertory; rather, we wish to know which specific behaviors are required to fill the accomplishment potential” (p. 39).

Competence, a social subjective concept, does not alone equal performance. Competence is judged by the social comparative worth of performance and measured by the values of the accomplishment. In this case, the following theorem was used to measure such worth. Gilbert (1978) defined the First Leisurly Theorem to measure performance meaningfully. He stated that “Human Competence as a function of worthy performance (W), which is a function of the ratio of valuable accomplishment (A) to costly behavior (B)” (p. 18). To elaborate on some of the functions of this theorem, accomplishment (A) is equated to value (V) of the accomplishment and behavior (B) is
equated to the cost (C) of changes in behavior. According to Gilbert (1978), the Second Leisurely Theorem is:

Typical competence is inversely proportional to the potential for improving performance (the PIP), which is the ratio of exemplary performance to typical performance. The ratio, to be meaningful, must be stated for an identifiable accomplishment, because there is no ‘general quality of competence’. In shorthand, the theorem states that:

\[
P\text{IP} = \frac{W\text{ex}}{Wt}. \quad (p. 30)
\]

The Second Leisurely Theorem states that one must identify the competence of any one person by comparing the “very best instance of that performance with what is typical” (Gilbert, 1978, p. 30). This would serve as a basis for identifying how much competence a person has (the ratio) with how much potential the other person has to improve their performance—the Potential for Improving Performance (PIP).

One way to assist the reader in understanding the method is to provide an example. The following vignette from the book *Human Competence* by Gilbert (1978) describes the PIP’s use and functionality.

If a greenhorn’s acre yields $1000 in grain at a cost of $500, typical worth index (Wt) is 2. If the best green thumb yields $2000 in value at a cost of $250, the exemplary worth index (Wex) is 8. Then the greenhorn’s PIP is 4, meaning that the greenhorn has the potential for doing four times as well. (p. 30)

In this vignette, the formula calculation is: greenhorn’s worth index (typical performance) is $1000/$500 = 2 (Wt); the green thumb’s worth index (exemplary performance) is $2000/$250 = 8 (Wex). The PIP is calculated as:

\[
P\text{IP} = \frac{W\text{ex}}{Wt} = \frac{8}{2} = 4.
\]
(performance) is $2000/$250 = 8 (Wex). Therefore, the PIP = Wex / Wt, which is 8 / 2 = 4. A few descriptive and cautionary notes provided by Gilbert (1978) are important to the conceptual and practical understanding of this theorem. He stated:

The PIP is principally a conceptual tool, which gives us a basis for comparing potential opportunities to improve performance. In general, the smaller the PIP, the less possibility there is to improve performance and the more difficult it is to reduce the PIP to 1.0. It is easier to reduce the PIP from, say, 4.0 to 1.5 than it is to shrink the PIP of 1.2 to 1.1. This rule is no longer true, however, if two circumstances hold. One is if we have full knowledge of why the exemplary is a superior performer, and we also have full control over these variables – that is, when we can give typical performers the training, information, tools, or motivation they require emulating the exemplary. The second circumstance is even more important: When we can improve on the exemplary….Thus, the PIP is a ‘dynamic’ measure, because new exemplary standards can always be set. (p. 31)

One last contribution to the discussion provided by Gilbert (1978) is the statement that “The worst misconception about exemplary performers is that they work harder, know more, or are more highly motivated than others and that exemplary performers do things more easily than others do them” (p. 40).
Research Questions

The following research questions guided this study:

1. What are the competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully successful (typical/average) in the following four Areas of Expertise (AOE):
   1) Designing Learning
   2) Delivering Training
   3) Improving Human Performance
   4) Measuring and Evaluating

2. What knowledge, skills, abilities, and other attributes (characteristics) does an “exemplary” WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the following four Areas of Expertise (AOE):
   1) Designing Learning
   2) Delivering Training
   3) Improving Human Performance
   4) Measuring and Evaluating

Definitions of Terms

To begin, a list of conceptually similar words, in alphabetical order and as used throughout the literature, is provided. Ten key terms were identified and defined for this study. For the purpose of this dissertation the word typical, in relation to the performer, is used synonymously with the words average, fully successful and qualified. The term
exemplary, when used in relation to the performer, is used synonymously throughout this study with the words star, best-in-class, and outstanding.

*CPLP:* Certified Professional in Learning and Performance (CPLP) is the new certification exam offered through ASTD.

*AOE:* “Areas of Expertise: Professional areas of expertise are the specific technical and professional skills and knowledge required for success in WLP specialty areas” (ASTD, 2004b, ¶ 7). The following four AOE’s were researched in this study

1. *Designing Learning Practitioner:* Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact. http://www.astd.org/astd/Research/competency_study

2. *Delivering Training Practitioner:* Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner. http://www.astd.org/astd/Research/competency_study

3. *Improving Human Performance Practitioner:* Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results. http://www.astd.org/astd/Research/competency_study
4. Measuring and Evaluating Practitioner: Gathering data to answer specific questions regarding the value or impact of learning and performance solutions; focusing on the impact of individual programs and creating overall measures of system effectiveness: leveraging findings to increase effectiveness and provide recommendations for change.

http://www.astd.org/astd/Research/competency_study

ASTD: Formerly known as American Society for Training and Development, ASTD is the leading association of workplace learning and performance professionals, forming a world-class community of practice.

Average: “People neither identified as outstanding nor identified as poor” (Klemp, 1982, p. 58) and synonymously used with novice, typical and fully-successful (Chi, Glasser & Farr, 1988, p. xviii), mid-level (Toropov, 1999, p. 53), and effective (Fitzenz, 1984, p. 16).

Competencies: Characteristics of the people doing the work—knowledge, skills, and attitudes inclusive of values, orientation and commitment (McLagan, 1997).

Exemplary Performance: “The worth of the historically best instance of the performance” (Gilbert, 1978, p. 30). “Exemplary performers do things more easily than others do them. They usually don’t work harder, know more, or are more motivated” (Gilbert, 1978, p. 96). The following were used synonymously with exemplary:

star: (Froiland, 1993, p. 33), top (Toropov, 1999, p. 36), high (Fletcher, 1993, p. 11), competent (Spencer & Spencer, 1993, p. 9), superior (Spencer & Spencer, 1993), expert (Chi, Glasser & Farr, 1988, p. xviii; Starkes & Ericsson, 2003), peak (Kushel,
1994, p. 3), proficient (Benner, 2001, p. 27) and exemplary (Benner, 2001, p. 49), skilled (Benner, 2001, p. 110), and best-in-class, super performer (Stines, 2003, p. 251).

Performance: “Performance is the result of an effective interaction among the resources, the process, the people, and the environment” (Rothwell, Sanders, & Soper, 1999, p. 4), competency (Rothwell & Sredl, 2000, p. 116), effectiveness, outputs (McLagan, Suchadolnik, 1989, p. 77), and behavior (Herling, 2000, p. 18).

SPHR: Senior Professional in Human Resources, an internationally recognized advanced-level certification offered through the Human Resource Certification Institute (HRCI)—this certification is recognized as proficient demonstration of mastery in the human resources profession.

WLP: “Workplace Learning and Performance. The integrated use of learning and other interventions for the purpose of improving individual and organizational performance. It uses a systematic process of analyzing performance and responding to individual, group, and organizational needs. WLP creates positive, progressive change within organizations by balancing human, ethical, technological, and operational considerations” (Rothwell, Sanders & Soper, 1999, p. 9).

Significance of the Study

The ASTD 2004 Competency Study, Mapping the Future: Shaping New Workplace Learning and Performance Competencies, provided the foundations for recruiting, hiring, developing, and appraising Workplace Learning and Performance (WLP) staff. Approved by the ASTD’s Board of Directors, the model was used as the basis for a new professional certification exam. The pilot was rolled out in 2005.
Specifically, this research effort supported ASTD in two important areas: (1) the identification of the subset of competencies that differentiate best-in-class or exemplary performers from typical or fully qualified performers; and (2) the development of certification assessments for the core work product. This type of certification will stimulate personal development and career growth in the profession. In collaboration with ASTD, Thomson Prometric, Inc., and Dr. William Rothwell (chair of the researcher’s doctoral committee), this study explored and extrapolated the differences between Typical and Exemplary WLP performers in the development of the Core Work Product submission portion of the exam questions used in the pilot instrument for the Workplace Learning and Performance (WLP) certification. Critical incidents for both qualified (typical)-level WLP and exemplary (best-in-class)-level WLP practitioners were used by ASTD to formalize the performance standards required for the four Areas of Expertise (AOEs) certification exam.

Section Summary

This section presented the historical perspective and conceptual framework for this study. A list of the research questions was provided in support of the use of the CIT (Critical Incident Technique) as a tool in this study. Definitions and terms used in describing the profession and used in this study were described. The section concluded with a discussion of the study’s significance. Assumptions and limitations are presented next.

Exemplary Status Assumptions

What differentiates exemplary performers from qualified performers if they do not work harder, know more, or are more motivated? Many competencies for the work
world hold steady and are essential to exemplary performance. However, are they essential in all areas of performance? A few competencies and strategies as revealed in research suggest that experience, exposure, and cognitive strategies hold the key to exemplary performance.

Cognitive styles are regarded by Baron (1994) as stable, general dispositions to behave a certain way in mental tasks, and as the most general level of decision making skill that is learnable. Experience suggests that a person is quicker when using in familiar situations a repertoire of patterns and associated responses to recognize and deal with an accumulated amount of information (Klein, 1993; Larkin, McDermott, Simon, & Simon, 1980). Exposure is the number of situations they regard as familiar (Klein, 1993).

How individuals structure and conceive cognitive representations and their level of depth seem to bear on an individual’s performance level on a task that requires cognitive representation. One other contention is present throughout the literature. Performance and its measurement have a contingency factor that is critical in separating competency differences in qualified and exemplary performers.

Another assumption in this study was that those who nominated the exemplary performer, EIP and BEST award recipients of ASTD (selected as experts themselves) would have knowledge of the criteria used in the selection of expert performers in the discipline. A second assumption was that the performers being interviewed would better understand the term qualified than, for example, typical or average, in identifying and describing the comparison group for this study.
Limitations

The limitations placed on this study were necessary based on its purpose. The limitations inherit to the study were as follows:

- Due to the time and expense involved in interviewing and collecting qualitative data, the sample size of 23 exemplary participants and 9 typical performers should not be used to form a basis for broad generalization.

- The methodology used in this study was experimental and was guided by a pre-set of requirements needed by ASTD. The methodology allowed for corrections as the study progressed. The use of the researcher’s verification procedures involving member checks is described in chapter 3.

- A key limitation was the absence of measurable criteria that could be used by the researcher in identifying the exemplary performers in this research. Unlike many professions, the WLP profession has yet to determine defined key performance parameters in the areas of expertise studied. Performance parameters may be classified into five categories: (1) efficiency, (2) quality, (3) flexibility, (4) speed, and (5) dependability (Slack, Chambers, & Johnston, 2003).

- The data collected for the design and development of the Core Work Product had not been verified for transferability. The term transferability is used in qualitative studies; it is known as external validity in quantitative studies. This process refers to “the degree to which the results of qualitative research can be generalized or transfer[ed] to other context and settings” (Trochum, 1999, p.167), and thus is not a conclusive predictor of an acceptable core work product submission to the ASTD exam. Verification of the data and rubric used to judge or measure the
Core Work sample needs to demonstrate that the rubric does predict an acceptable core work product for the exam process. This can be done using the following suggested procedure. A core work product sample may be collected from identified exemplary WLP performers in the four areas researched in this study; their core work sample may then be scored using the rubric developed from the data collected to establish whether the samples showed the same measurable criteria.

- Bias might be present during the CIT Behavioral Event Interview. Several researchers suggested not letting the interviewers know whether a person they were interviewing was rated as outstanding (exemplary) or average (typical) (Spencer & Spencer, 1993). The researcher attempted to give each group of participants (exemplary and typical) equal opportunity to express their stories, using a consistent script and probing questions during the interview. Due to several confidentiality factors, and to the time and expense in conducting this type of data analysis, it was unrealistic to utilize another interviewer.

- Bias could be present in the analysis and interpretation of data relating to the distinguishing characteristics of an exemplary performer in Workplace Learning and Performance. The researcher attempted to remain objective and used several procedures to approach viable validity, such as using a second coder in identifying categories and themes, utilizing an external auditor, and drawing on several sessions in a peer review and debriefing process. The researcher plans to verify the findings and interpretations with an additional fourth process called member checks. In this process, the researcher will go back to the nominators and
findings about all 32 participants in an attempt to design and develop a rubric or guide to articulate levels of performance by which one could identify exemplary performers.

- The findings are not intended to be a definitive list of exemplary characteristics or behaviors in WLP. However, this study is the first attempt to provide the basis for future research in WLP and define observable and measurable criteria for identifying levels and types of professionals.

Section Summary

This section described the assumptions used in this study. Seven limitations were presented, describing the weaknesses central to this study. The discussion included possible verification methods to use in further validating findings presented in chapter 4.

Chapter Summary

This chapter provided an introduction to the study—its purpose and background. Information and an historical perspective were presented on the research problem. A conceptual framework on the Human Competency Movement and Performance Improvement were discussed, citing pertinent theory in reference to exemplary performance. The evolution of exemplary assumptions and defined terminologies used throughout the study were presented, concluding with assumptions about and limitations in the study, and a discussion of the study’s significance. A review of the literature focusing on the evolution of Workplace Learning and Performance competency studies to date is presented next, in conjunction with a description of relevant exemplary performer’s studies that served as a guide and theoretical foundation for this exploratory study.
CHAPTER 2

Review of Literature

The review of literature provides an analysis of relevant ASTD competency studies in Workplace Learning and Performance (WLP) and other research findings related to the exemplary and average performer. The first section of this chapter contains a review of HRD and WLP competency studies sponsored by ASTD. These models of competency research follow a chronological progression from the first publication in 1978 to the current 2004 ASTD competency study publication. The study used for the direct links to the four Areas of Expertise (AOEs) are: (a) Designing Learning, (b) Delivering Training, (c) Improving Human and Performance, and (d) Measuring and Evaluating in this study. Each ASTD competency study was analyzed and the findings arranged into five subsections: (a) research study, (b) study objectives, (c) methodology, (d) sampling, and (e) results. The second section of this chapter focuses on research relevant to discovering differences between exemplary and average performers, which is the background of the current study.

Due to exploratory nature of this study, it was vital to review past competency studies in Workplace Learning and Performance inclusive of studies that identified exemplary performers for methodological use. This information guided the researcher in understanding the progression and birth of the current foundational competencies and provided a methodological guide to identifying exceptional performers. A discussion of the theoretical framework is presented next.
**Theoretical Framework**

An explanation of complex human behavior requires the support of a theoretical foundation. This research explored what distinguished an exemplary Workplace Learning and Performance performer—that is, what may cause such exemplary behavior or predict individual exemplary performance. Theories help to explain this type of behavior. Three types of theories were explored in explaining such behaviors of exemplary performers. An individual’s knowledge was defined in terms of behavior. This type of behavior is measured, or judged, relative to the rule of competence (Scandura, 1970). These three theories were suggested to be the most important in describing exemplary performance and an individual’s motivation in working as a high performer. The theories explored include Goal-Setting, Social Cognitive, and Organizational Justice (Lathan & Pinder, 2005). Presented next are the three theoretical foundations for exceptional performance in the workplace.

**Goal-Setting Theory**

Goal-Setting Theory, one of the many motivational theories, suggests that the higher the goal, the higher the outcomes. Schmitt, Cortina, Ingerick, and Wiechmann, (2003) believed that a primary predictor of performance was personality. In a study of entrepreneurs, Baum and Locke (2004) suggested that passion and persistence, combined, affect success through an indirect approach using Goal Setting Theory. Individuals make calculated decisions regarding the achievement of these set goals. This goal-setting process motivates the individual to attain the goals set (Locke, 1968, 1990). The effect is a change in behavior and job-related performance. Locke (as cited in Erez, Kleinbeck, & Thierry, 2001) referred to the effects of incentives and personality traits that affect
performance through the use of goal-setting. For example, Zetik and Stuhlmacher (2002) found that those who have challenging, explicit, and sometimes conflicting goals consistently achieved an increase in profits compared to those without goals.

**Social Cognitive Theory**

Social Cognitive Theory, one of the many personality theories, suggests that the environment affects behavior and this behavior leads to changes in the environment. This process is called reciprocal determinism (Bandura, 1977). Reciprocal determinism, or changes in behavior, is caused by a reciprocal relationship between the world and the person’s behavior. Bandura’s further finding suggested that personality causes change that leads to interaction among three variables: (a) the environment, (b) behavior, and (c) the person’s psychological processes (Bandura, 1977). Bandura argued that people were viewed as self-organizing, proactive, self-reflecting, and self-regulating, driven by concealed inner impulses. This theoretical viewpoint suggests a dynamic relationship among personal, behavioral, and environmental influences (Bandura, 1986). This theory, social cognitive theory, is believed to be “one of the most significant theories to influence motivation research today” (Latham & Pinder, 2005, p. 491).

**Organizational Justice Theory**

A significant body of research on work motivation was based on the belief in Organizational Justice Theory (Greenberg, 1987). Organizational Justice, a derivative of Adam’s (1965) Equity Theory, suggests that one’s input and output and the sum of the two is compared with others’ input and output. The premise of Organizational Justice is that fair procedures enhance employee acceptance of organizational outcomes.
The concept of Organization Justice in motivating best or exceptional performance includes organizational outcomes in predicing or advancing performance. Becker and Gehart (1996) suggested that this significant variable leads to competitive corporate performance. Organizational success can be accomplished by rewarding more productive employees. This reward system indicates that an organization values employees who contribute to the organization through higher performance.

Section Summary

It is important to study why individuals excel in performance and the variables that can influence such performance. Goal Setting Theory and Social Cognitive Theory were presented in this section. The concept of Organization Justice was presented to help the reader understand the connection to each theory and to introduce a third variable relevant to increased performance. Workplace Learning and Performance competency studies are presented next, followed by two studies outside the discipline for exemplary status.

Competency Studies Sponsored by ASTD

Six foundational competency studies are presented in this section. The analysis of each study was divided into six subsections: significance to the field, research focus, objectives, methodology, sampling, and results.

1978 American Society for Training and Development Study

The evolution of the performance improvement field started with the Pinto and Walker (1978) study. This first major study of the roles of training and development was sponsored by ASTD. An analysis of the study is presented next.
Significance to the Field

This was the first ASTD study to identify knowledge, skills and attitudes (KSAs) needed to perform successfully. Identification of these KSAs helped to define ‘training’ as a role needed in organizations, along with the development of this type of practitioner.

Research Study Focus

Analysis of trainer competencies needed for effective performance was the focus of the Pinto and Walker study. “In 1976 the Professional Committee undertook the assignment to identify the basic roles and the core competences for its members in an effort to assess more precisely the professional development needs of training and development practitioners” (Pinto & Walker, 1978, p. 58).

1978 Study Objectives

The objective of the study was “to identify basic roles performed by training and development practitioners and the basic competences required to perform these activities” (Pinto & Walker, 1978, p. 58). Concurrently, the committee sought to provide training practitioners with a “process for managing” career development opportunities.

Methodology

Using information from a literature search, a survey was developed by Towers, Perrin, Forster, and Crosby (TPF & C) and sent to current members with the question, “what do training and development professionals really do?” (Pinto & Walker, 1978, p. 58). The survey identified five categories; 1,000 activities were identified as performed by training practitioners. Preliminary questions led to the selection of 403 items for the survey. Six local ASTD chapters served as panels. These panels reviewed the questioner and classified each activity for the final development of the survey.
**Sampling**

In November 1977, 14,028 questionnaires were mailed to ASTD national members (13,001 in the USA and 1,027 in other countries). Usable surveys totaled 2,790, representing 20% of the mailed surveys.

**Results**

A list of activities was developed and the ASTD national membership was asked to rate the activities based on frequency and importance. Through statistical factor analysis, the study determined the common dimension of the behavior of trainers. Prior studies focused on either role categories or competencies. The study represented “clusters of activities”—the defined definition of a role (Pinto & Walker, 1978, p. 59). A total of 14 areas or common activities emerged. The new model suggested the stages in which trainers carry out their responsibilities as trainers.

**1983 Models for Excellence Study**

The second major competency study in the field of Workplace Learning and Performance was the Models for Excellence. Sponsored by ASTD, the study focused on competencies and the role of the performance in the profession, known at that time as Training and Development. An analysis of the study is presented next.

**Significance to the Field**

This study emphasized the need to provide for the career development of employees in the training function. This second foundational study grounded the training and development field as an accepted specialty area in business and industry.
**Research Study Focus**

The training and development field has metamorphosed over the years into the foundation for the Workplace Learning and Performance genre. McLagan (1983) helped solidify the movement by formulating and analyzing the basic roles of training and development practitioners. An analysis of the second major study sponsored by ASTD regarding the development of training roles and competencies of practitioners are presented next.

**1983 Study Objectives**

McLagan (1983) started with the research question, “Why a competency study?” (p. 1). In 1981, ASTD created a commission whose purpose was to encapsulate the training and development field with definable boundaries as a field of endeavor and with a definable body of knowledge.

Specifically, the charge to the study team was ‘to produce a detailed and updatable definition of excellence in the training and development field in a format that will be useful to and used as a standard of professional performance and development by ASTD, educational institutions, training and development departments, and individuals practicing or expected to practice in the training and development departments, and individuals practicing or expected to practice in the training and development field. (McLagan, 1983, p. 2)

The research objectives in McLagan’s (1983) study were: (a) “what can training and development contribute to individuals and organization?; (b) is training and development a profession?; (c) what skills or knowledge do I need to work in this field?;
(d) what’s the difference between training and development, organization development, and human resource development (if there is a difference)?; (e) what will the requirements of the field be in the near future?; and (f) should the training and development field have a certifying or accrediting function?” (p. 2).

To accomplish the task of creating the model, McLagan (1983) devised a series of studies that had used seven steps with “each having its own methodological approach” (p. 7). The steps were: (a) determine the domain of the training and development field, (b) determine the key roles of the T&D field, (c) identify the major environmental forces expected to affect the field in the near future, (d) identify the critical outputs which the T&D function is expected to produce, (e) identify the critical competencies for the T&D field, (f) develop behavioral anchors for the competencies, and (g) cluster the roles to reflect common competency requirements.

Methodology

Because the 1983 McLagan study was dynamic and broad in nature, the methodology description that follows is broken into subsections. These subsections describe the methods involved, the sampling used, and the results produced, for each objective listed above.

Step 1: Methodology. Step 1 determined the domain of the training and development field. Determining the competencies of the training and development field necessitated a description of the boundaries in the domain. The study began by creating a preliminary list taken from McLagan’s 1981 Strategic Planning for Training and Development, notating the 10 sub-functions of human resources. The list was then revised twice for accuracy and the addition of any delineation of the definitions.
Step 1: Sampling. This part of the study was divided into two iterations. The first iteration assembled the first list of sub-functions in human resources from McLagan’s (1981) publication. The first iteration participants (called the Pre-Study review team) included the “ASTD Board of Directors, Professional Development Committee and staff” (McLagan, 1983, p. 7). The second iteration participants took the list and revised it, including “senior professionals” in “business, government, academia, not-for-profit organizations, and consulting and instructional systems companies” (McLagan, 1983, p. 191).

Step 1: Results. From this portion of the study, two outputs were produced: the “Human Resource Wheel” (McLagan, 1983, p. 23) depicted in Figure A.1 in Appendix A (HR Wheel). The study also produced a definition of Training and Development—“identifying, assessing - and through planned learning – helping develop the key competencies which enable individuals to perform current or future jobs” (McLagan, 1983, p. 25).

Step 2: Methodology. Step 2 determined the key roles of the T&D field. To specify the different roles in the T&D field, the McLagan study team started by listing roles formulated from previous studies and hypothesized additional roles. The list of roles was put into questionnaire form and sent to experts from various business genres. The questionnaire was then reviewed and revised in preparation for the last research step: output – role match. The study team extrapolated 143 outputs commonly found in previous research to ensure that each output had a corresponding role responsible for the output. At each step in the process, the research study team revised and condensed the role list to ensure completeness and non-repetitiveness.
Step 1: Sampling. The first role list formulated through the study originated from the McLagan study team’s review of the literature. The second list of expanded and condensed roles was formed from the distribution of the questionnaire described above as formulated by the Pre-Study review team. The questionnaire was distributed to “seventy (70) experts from a cross section of public, private, and not-for-profit sectors” (McLagan, 1983, p. 11). Thirty-six of these questionnaires were returned and reviewed by the McLagan study team. Finally, the nine members of the Professional Development Committee and Pre-Study Review Team identified outputs for each of the roles solidified so far. The study team then produced 143 outputs (from previous research) to match each output to a role for thoroughness of information.

Step 2: Results. The output from this step in the research resulted in the identification of 15 roles as components of the Training and Development field. These roles were Evaluator, Group Facilitator, Individual Development Counselor, Instructional Writer, Instructor, Manager, Marketer, Media Specialist, Needs Analyst, Program Administrator, Program Designer, Strategist, Task Analyst, Theoretician, and Transfer Agent.

Step 3: Methodology. Step 3 identified major environmental forces expected to affect the Training and Development field in the future. The McLagan Study Team reviewed recent literature on forces predicted to affect the T&D field in the future. Further, the ASTD Professional Development Committee and the Study Review Board were also asked to list up to ten forces likely to affect the T&D field in the future. A culmination of these responses was included in a questionnaire sent to the Study Review Board, the ASTD Professional Development Committee, and three experts in each of the
future force categories identified to this point. The questionnaire probed for the probability of each of the forces affecting the T&D field in the next ten years. The information (expert responses) was then correlated to the probability responses of the Study Review Board and the ASTD Professional Development Committee.

Step 3: Sampling. As with previous parts of the study, the third step began with information from the McLagan Study Team. The gathered information was then disseminated to the ASTD Professional Development Committee and the Study Review Board. Added to these groups were three (3) experts from each of the 11 identified future forces or categories.

Step 3: Results. From this step in the study, the McLagan Study Team identified 34 future forces that would probably affect the Training & Development field. These forces were divided into seven categories: Technological, Organizational, Educational System, Learning, Sociological, Economic, and Governmental/Political.

Step 4: Methodology. Step 4 identified the critical outputs which the T&D function is expected to produce. The McLagan Study Team reviewed past literature on training and development tasks and activities. This information was translated into output language that led to 143 outputs. Checking for consistency, the output list was condensed into 74 outputs. Role experts then reviewed the outputs and produced a list of 108 outputs, which were then checked for criticality. The output was viewed as critical if 50% of the expert respondents saw it as critical now, in the next five years, or both.

Step 4: Sampling. As with previous portions of the study, the initial framework began with information from the McLagan Study Team. Once the output language was adequately formulated, role experts were introduced to ensure accuracy and completeness
of information. Three-hundred and seventy role experts were questioned from both business and academic professions (McLagan, 1983, 2000).

**Step 4: Results.** Three main points were produced from this part of the study. First, the study found that 102 different outputs were or will be important to the T&D profession. Second, six outputs were expected to decline in frequency over the next five years after the study. The six assumptions were: (1) the demands on the training and development field are changing and intensifying; (2) training and development professionals are moving into higher positions in their organizations; (3) there are many structures and job designs for practicing in the field; (4) the range of functions performed by training and development practitioners is so broad that we can’t expect any individual to be able to define excellence for the entire field; (5) practices in the field are and should be rich, varied and creative; and (6) the training and development field is a separate and distinct discipline within the larger HR field (McLagan, 1998, pp. 5–6). Third, this portion of the study helped connect each of the outputs to one of the 15 roles defined previously (McLagan, 1983).

**Step 5: Methodology.** Step 5 identified the critical competencies for the T&D field. By reviewing previous research and project assumptions, the study team created a foundational competency list to begin this portion of the study. The list was comprised of 36 competencies that were included on the first-round questionnaire to role experts. The respondents to the questionnaire were asked to review, edit, and add any competencies and definitions to the list while also reviewing the 34 future forces to ensure that the competencies allowed for future trends. The questionnaire responses were then categorized into specific role areas and adapted into a new questionnaire that probed for...
the criticality of each competency in the future and the level of expertise believed to be needed in the future.

*Step 5: Sampling.* As previously stated, the role experts consisted of 370 experts from both business and academic professions (for a complete list of the role experts, see McLagan, 1983, pp. 192–200). The original competency list was formulated by the McLagan Study Team.

*Step 5: Results.* From this step in the study, a list of 31 competencies and their definitions was created. In addition, each competency was assigned to an aforementioned role in the Training and Development field.

*Step 6: Methodology.* Step 6 developed behavioral anchors for the competencies. Using an adapted form of Smith and Kendall’s (1963) approach to developing behavioral anchors, the Study Team elicited role experts to draft behavioral anchors needed at an expert level for each competency. This information was collected and condensed to ensure that each competency had at least nine behavioral anchors for validation purposes. Further validation efforts used a matching system to ensure professionals in the field agreed with the competency – behavioral anchor match.

*Step 6: Sampling.* This step of the study used the aforementioned role experts and Study Team, but added eight training and development experts from the Washington, DC area. The study team also asked 12 senior professionals from the Southern Minnesota Chapter of ASTD and the consulting services of McLagan & Associates for the several validation protocols used.

Step 7: Methodology. Step 7 clustered the roles to reflect common competency requirements. “Role correlations were computed based on the future criticality of competencies to the roles” (McLagan, 1983, p. 17). “Roles with intercorrelations of >.5 were clustered” (McLagan, 1983, p. 17). For validation, McQuitty’s Elementary Linkage analysis was used, which corresponded to the correlations previously developed.

Step 7: Results. The Study Team did all clustering and validation calculations. From this step in the study, the competencies developed in previous steps in the study were clustered into one of four clusters: (a) Interface Cluster Competencies, (b) Concept Development Competencies, (c) Research Cluster Competencies, and (d) Leadership Cluster Competencies.

Once the study was completed, 15 specific outputs were identified and elaborated on. These outputs comprised the majority of the report. Further, many or almost all of these outputs represented the outputs for future reports. The outcomes of this report included: (a) the Human Resource Wheel, (b) a definition of Training and Development, (c) the future forces expected to affect T&D, (d) T&D Roles, (e) role profiles, (f) role clusters, (g) critical outputs for the T&D field, (h) a competency model for the T&D field, and (i) a role/competency matrix. The McLagan (1983) team identified six assumptions and numerous recommendations or “next” steps for future investigation to allow the “study to come alive for them” (p. 103).
1989 Models for HRD Practice Study

The 1989 study, the third major study commissioned by ASTD in 1987, was meant to advance and elaborate on the 1983 McLagan report. A more in-depth and useable reference guide, known as the Models for HRD Practice, was needed for professionals.

Significance of the Study

This study was the paramount competency study in the WLP field (Rothwell, 1999). This model was adopted by ASTD as a model (Figure A.1) used to position training and development into the human resource function. (See Appendix A, Figure A.1.)

Research Study Focus

The 1983 research on the HRD/T&D profession elaborated on research results that formulated a working language for professionals and others to understand, helped non-professionals to understand the field better, and lightly touched on applicable formats for the information. The 1989 research took the information a step further and elaborated on the applicable nature of the information, with up-to-date information and research.

Overall, the 1983 and 1989 research and publications laid the groundwork for the HRD and WLP competency models used today. The information presented is essential for understanding the present and future delineations of the WLP models.

Study Objectives

The objective of McLagan’s and Suhadolnik’s (1989) study was to provide a developed tool for HRD practitioners. This tool provided practitioners, as identified in the Models for Excellence, a guide for application to their existing roles and organizations.
Methodology

ASTD specified that a task force of HRD experts be used in McLagan’s and Suhadolnik’s (1989) study. “Selected HRD experts reviewed and expanded on the results from their 1983 study to produce a preliminary HRD model consisting of future forces, outputs, qualify requirements, competencies, and ethical issues for identified HRD roles” (McLagan & Suhadolnik, 1989, p. 7).

Sampling

ASTD directed the composition of the taskforce. The taskforce consisted of “individuals at the forefront of HRD: executive decision-makers and HRD authorities from private industry, government, and education” (McLagan & Suhadolnik, 1989, p. 7).

Results

Offering practitioners a guide or road map to their current roles in an organization was the intent of the 1989 report, Models for Excellence. The report was divided into nine sections. The first section (p. 1) contained a discussion of the future of HRD and some of the challenges facing the profession. Further, section one provided the background on the useful purpose of the report: to provide definitive information and a common language for HRD professionals. This provided a working definition of HRD and an explanation of HRD’s connection to the Human Resource genre. A new representation of the Human Resources Wheel, see Figure A.1. Appendix A.

Section three (p. 9) provided information on the connective nature of the models and described the relationships among several of the components included in them. The information in the models was somewhat complex, so the structural foundations of the models were discussed for ease of use.
Section four (p. 13) contained a discussion of the future forces impacting the HRD field. This section was an up-to-date version of the one included in the previous 1983 study, which described the forces impacting the field and what the future holds for HRD professionals.

Section five (p. 15) provided a brief description of why and how the researchers chose outputs as a representative value for the HRD model. Also included were the outputs found to be significant to the HRD profession. Each of these outputs was listed and the requirements or standards for completing each output were listed. A total of 74 outputs were listed and each had several requirement standards.

Section six (p. 43) listed the 35 competencies needed in the HRD profession. The competencies were divided into four areas: Technical, Business, Interpersonal, and Intellectual. A brief description/definition of each competency was also provided.

Section seven (p. 47) introduced a method for using the model presented in the report. By creating a job profile (reviewing and selecting the pertinent outputs and competencies essential for a particular job), the HRD professional could utilize the report’s information. Many purposes were discussed in section seven. The report went a step further and identified 11 major roles in the HRD field and listed the outputs, competencies, and ethical issues relevant to each role. The section contained a description of several role clusters and provided a Roles/Competencies Matrix.

Section eight (p. 63) provided a discussion and elaboration on the many uses of the information contained in the Models for Excellence for both the HRD professional and management. Section nine (p. 75) contained the concluding remarks for the report.
1996 ASTD Models for Human Performance Improvement

The 1995 study, published in 1996 and updated in 2000, was the fourth major ASTD-sponsored competency study. Its purpose was to “build upon the work of earlier foundational studies as well the work of Pinto and Walker (1978), McLagan (1983), and McLagan and Suhadolnik” (as cited in Wallick, 2001, p. 57).

Significance of the Study

The first groundbreaking research into the roles, competencies, and outputs that affect those who had a Human Performance Improvement role [now called Area of Expertise (AOE)] provides practitioners with a guide for performance improvement interventions in organizations. Rothwell’s (1996) research guided the competency movement into the identification of the external forces that guide organizational performance improvement.

Research Study Focus

Rothwell’s 1996 study was “to lay the foundation for future work on human performance improvement” (Rothwell, 1996, p. 2). In his book, Rothwell (1996) defined Human Performance Improvement (HPI) as “systematic process of discovering and analyzing important human performance gaps, planning for future improvements in human performance, designing and developing cost-effective and ethically justifiable interventions to close performance gaps, implementing the interventions, and evaluating the financial and non-financial results” (p. 3). This competency study was not limited to HRD professionals.
Study Objectives

Rothwell (1996) listed seven questions for this study: (a) what steps describe the Human Performance Improvement (HIP) process?, (b) what are the roles of those who perform HPI work?, (c) what competencies are tied to the roles?, (d) what work outputs are linked to the competencies?, (e) what future forces affect HPI work?, (f) what ethical issues should concern those performing HIP work?, and (g) what approach can be used to establish quality requirements for those performing HPI work within a unique corporate culture? (p. 1).

Methodology

Rothwell (1996) used a “Reverse Delphi Process” (p. 2) that included the use of a list of panel experts to verify their competencies by repetition. Ziglio (1996) stated, “The Delphi is an exercise in group communication among a panel of geographically dispersed experts” that “allows experts to deal systematically with a complex problem or task” (p. 67). A list of competencies was circulated to subject-matter-experts who selected the competencies they believed were most relevant to HPI. The goal was to determine the extent to which participants agreed on the inclusion of each competency, and to focus the list to include essential competencies needed by those who do HPI work.

Sampling

A panel of experts was assembled to review a HPI model and complete a final round to verify the list of competencies. The panel was composed of 20 subject matter experts “based on their experience and contribution to the HRD profession” (Rothwell, 1996, p. ix).
Results

Four Human Performance Improvement (HPI) roles were identified in this study: (a) Analyst—conducts troubleshooting and identified areas where human performance can be improved, (b) Intervention specialist—selects appropriate interventions performance gaps, (c) Change manager—makes certain interventions are implemented with desired results for individuals and groups, and (d) Evaluator—assesses interventions impact and results achieved (Rothwell, 1996, p. 17). Rothwell identified “38 competencies (15 core), 95 terminal and enabling outputs linked to HPI practitioners” (pp. 18–19). This study had significant implications for the trainer’s roles. This type of role suggested that the trainers did not have sole responsibility for improving performance in an organization. The construct led to the next major competency study, this time performed by Piskurich and Sanders (1998). Their study suggested that Information Systems (IS) staff could be a major contributor to the human performance improvement movement in an organization.

1998 ASTD Models for Learning Technologies

In 1998, ASTD published the next competency study. This fifth major study, called ASTD Models for Learning Technology, was led by Piskurich and Sanders in 1997. The narrow study focus was on how technology might affect or effect roles of HRD professionals.

Significance of the Study

As predicted in the prior McLagan 1989 competency study, technologies were listed as two of the top ten forces leading HRD work. As anticipated, the demand for knowledge with reference to competencies, outputs, and ethical issues emerged when
managing learning technologies. This research study provided a guide to the trends in technology advancement (Piskurich & Sanders, 1998).

**Research Study Focus**

The *ASTD Models for Learning Technology* study looked at how the environment for new and changing technology would influence current roles and competencies. As noted by Piskurich and Sanders (1998), the continuous evolution of learning technologies required new competencies and the further study of roles and competencies.

**Study Objectives**

Two objectives were listed for the 1998 study. They were to: (a) determine the competencies needed by HRD professionals to select and manage learning technologies in her work, and (b) determine the roles necessary for implementing and supporting the learning technologies.

**Methodology**

An advisory committee internal to ASTD selected 24 experts to participate in this panel study. The panel created a list that led to a survey of 8 roles, 31 competencies, and 45 outputs. This questionnaire, sent out to the 25 experts, ascertained the completeness of the competencies and rated their importance.

**Sample**

All 24 panel members and subject matter experts “specialized in areas such as multimedia development, electronic performance support systems, broadcast TV, CBT, virtual reality, and groupware” (Piskurich & Sanders, 1998, p. 2). Criteria used to select the panel were: (a) “demonstrated commitment and contribution to the file of HRD and reputation for specialty in learning technologies, (b) evidence of influence upon other
HRD professionals, and (c) evidence of national or international acclaim for work within the HRD field” (p. 2).

Results

Piskurich and Sanders (1998) developed key roles from the study: (a) “manager, (b) analyst, (c) designer, (d) develop, (e) implementor, (f) instructor, (g) evaluator, and (h) organizational change agent” (p. 27). Some of the proposed implementation and management competencies covered skills and knowledge related to: (a) change management, (b) leadership, (c) industry awareness, (d) business knowledge-project management, (e) communications, and (f) implementation and support. Specific competencies required to manage a distance education enterprise included: (a) understand the current and future climate of the distance education and distance learning industry, and formulate strategies to respond to that climate; (b) demonstrate awareness of distance education organization business functions and how business decisions affect financial and non-financial work results; (c) supervise the selection of learning technologies and assure that these selections meet organizational needs; (d) understand the relative costs of each distribution method, or combination of methods; and (e) assure that the organization is receiving a good value for the dollars spent on these technologies.

1999 ASTD Models for Workplace Learning and Performance

The 1999 ASTD Models for Workplace Learning and Performance: Roles, Competencies and Outputs (Rothwell, Sanders, & Soper, 1999) modernized the previous work on HRD models.
Significance of the Study

This 1997–1998 competency study transitioned the HRD professional, now identified as Workplace Learning and Performance (WLP), to an understanding of the new roles and competencies required for the future. This study identified potential strategic competencies that stemmed from technology, globalization, and corporate transformations. This study presented the WLP professional to a new working WLP Discipline Model Wheel. (see Appendix A, Figure A.2.)

Research Study Focus

The 1999 ASTD Models for Workplace Learning and Performance study was presented because of some major shifts from the training and development field of HRD to WLP. WLP as defined by Rothwell et al. (1999) is: “The integrated use of learning and other interventions for the purpose of improving individual and organizational performance. It uses a systematic process of analyzing and responding to individual, group, and organizational needs. WLP creates positive, progressive change within organizations by balancing human ethical, technological, and operational considerations” (p. xiii).

Rothwell et al. (1999) stated, “Today’s HRD practitioners are also shifting their energies toward analyzing the root causes for gaps in productivity and finding the best solutions that will close those gaps while increasing corporate profitability” (p. xiii). This is the charge of WLP (Workplace Learning and Performance) professionals. The study was engaged to describe the “emerging and dynamic field in a practical way” (Rothwell et al., 1999, p. xiii).
Study Objectives

Rothwell et al. (1999) sought to answer two questions in the ASTD Models for Workplace Learning and Performance study. First, the researchers wanted to determine “What competencies do WLP practitioners, senior WLP practitioners, and line managers perceive as currently required for success in WLP?” (Rothwell et al., 1999, p. 31).

Second, the researchers wanted to know “What competencies do WLP practitioners, senior WLP practitioners, and line managers perceive will be required for success in WLP in five years?” (Rothwell et al., 1999, p. 31).

Methodology

The methodology used in the 1999 Rothwell et al. study took place in eight distinct phases. First, the researchers conducted an extensive literature review on WLP-related competency studies. The second phase consisted of a questionnaire that listed the competencies from phase one. The questionnaire (paper and electronic) asked respondents to rate each competency on their current importance to the WLP field and future importance. Demographic information was also collected at this point. Phase three was a repeat of phase two, but the survey was sent only to senior WLP practitioners. Phase four was also a repeat of phases two and three with selected line managers as the respondent pool. Phase five asked the senior WLP practitioners included in the previous questionnaire to rate each competencies importance to the success in each of the WLP roles. Phase six compiled the data from the previous phases of the study, which produced a report on agreement and disagreement about the listed competencies. Phase seven involved submitting the report produced in phase six to the ASTD internal advisory review panel who proceeded to evaluate the report. Also included in the validation phase
was the submission to an external review panel for recommendations. In the last phase, phase eight, the researchers reviewed the recommendations of the review panels to ensure clarity and consistency in the report.

**Sampling**

The study elicited a wide range of respondent demographics. As stated previously, the study included senior WLP practitioners, line managers, external and internal review panels, expert WLP practitioners, and WLP practitioners. The WLP practitioners were the most diverse group. Workplace Learning and Performance practitioners, specifically 1,031 participants, resembling the demographics of the ASTD National Members, completed the survey. The majority of the respondents, from large organizations, were involved in the training discipline and were either at the managerial or entry level.

**Results**

There were three study results. First, the study redefined and updated the roles of WLP professionals (formerly known as HRD professionals). Rothwell et al. established new and updated Workplace Learning and Performance roles: (a) “manager, (b) analyst, (c) intervention selector, (d) intervention designer and developer, (e) intervention implementor, (f) change leader, and (g) evaluator” (pp. xv–xvi). Second, the study correlated the competencies perceived as necessary to line managers, experts, and WLP practitioners currently and in the future. Third, the study redefined and updated the competency and output groupings produced in previous research.

Due to the complexity of the research and development of a new WLP Model, some limitations needed to be addressed. The research study was limited to the opinions
of the participants, thereby limiting the generalizability of the information. The technology used in the study also limited levels of experience and expertise that were relevant to the study’s purposes. The researchers made efforts to confirm experience information, but validation was difficult. Because many of the respondents used the World Wide Web, participants who were not computer-literate or who did not have access to technology could not contribute to the study. The most important limitation was the skewed response level throughout the respondent disciplines and levels.

_2004 ASTD Mapping the Future_

The 2004 ASTD Competency study, the most recent ASTD-sponsored competency study, is a roadmap guiding the future of the profession. This study supported understanding of how Workplace Learning and Performance (WLP) must be aligned with the organization’s business strategy, thus leading to the success of the profession and business performance. This new and updated pyramid-shaped model (see Figure A.3. Appendix A) identified foundational competencies that are directly linked to successful performance and is the foundation of WLP performance. The second level of this model was called Areas of Expertise (AOEs)—“Think of AOEs as the knowledge and skills an individual must have above and beyond the foundational competencies” (ASTD Mapping the Future, 2004a, p. 23).

_Significance of the Study_

The ASTD 2004 Competency study revealed that, “95 percent of WLP professionals’ work responsibilities can be classified into one or more of the nine AOEs” (Mapping the Future, 2004a, p. 24). This overlap could extend to the top of the model where it addressed how a broad range of responsibilities are further compulsory in
aligning an organization to meet specific business strategies. This model commanded the charge in guiding and supporting the design and development of the first national WLP certification exam, entitled Certified Professional in Learning and Performance (CPLP), and a much-needed entry and exploratory study into defining measurable indicators, both quantitatively and qualitatively, by which the profession could begin to define levels of expertise. This expanded focus toward defining the expertise of an exemplary and typical performer is currently in progress and is described next.

Research Study Focus

Consistent with previous competency modeling research, the 2004 ASTD Mapping the Future competency study sought to realize an up-to-date, comprehensive model for WLP practitioners. Changing technology, business practices, legal trends, and business environments necessitated a new competency model. Building on previous research, ASTD set out to provide “a framework for the competencies that learning professionals need today and will need in the future” (2004, p. xvii). (Appendix A – Figure A.3, 2004 Competency Model)

Methodology

The research methodology used in this study was segregated into four distinct phases. Phase 1 included the data collection and needs assessment portions of the study; phase 2 included development of the new model; phase 3 validated the model; and phase 4 refined and completed the model.

The needs assessment and data collection phase consisted of a literature review, expert interviews, and data collected from the ASTD 2003 International Conference and Exposition Future of the Profession Session. The focus of this phase was the
identification of common competencies, themes, and future trends in the WLP field. The new model development phase (Phase 2) consisted of integrating data from the collection phase (draft 1) and conducting interviews with industry experts and practitioners to formulate a new draft of the WLP model (draft 2). The last part of phase 2 had experts review the content to create (draft 3) of the model. Phase 3 validated the model through the administered electronic survey which probed for the importance and frequency of roles and competencies in WLP. Phase 4 refined the model and submitted it for approval to the project team.

*Sampling*

During phase 1, expert interviews were conducted with 50 WLP experts and attendees at the ASTD International Conference – Future of the Profession. In Phase 2, 30 participants who were considered industry experts and practitioners were interviewed and reviewed.

*Results*

The products of the study were similar to those from past research performed on WLP (and HRD) competency models. A list of competencies was produced and deemed essential to WLP practitioners. Further, the study identified four roles (see Appendix A, Figure A.4, Roles, Competencies and Areas of Expertise) and nine Areas of Expertise (AOE) needed by WLP professionals. (See second level on the ASTD Competency Model, Appendix A, Figure A.3.) This study shifted the major roles as identified from prior competency research studies (see Figure 2.5., Evolution Chart of the Four ‘Roles’, in the Major ASTD Competency Studies) into newly defined Areas of Expertise (AOEs) (see Figure 2.6, Evolution Chart of the Migration of the Four ‘Roles’, into the AOE for
this study) and cast four new roles in terms of broad areas of responsibility. These roles now required a certain combination of competencies in an Area of Expertise (AOE) (no longer called roles) for effective performance. Most of the prior competency “roles” that migrated into what are now called the Areas of Expertise (AOE) listed future trends that would shape the WLP field. However, not only did the study team update and revise past studies, but the study provided a new avenue and format for the pursuit of further research. Model construction and development were very unique—a needed departure from previous work.
Figure 2.5. Evolution of the four “roles” in the major ASTD competency studies.
Figure 2.6. Evolution chart of “roles” in the major ASTD competency studies as migrated into the new Area of Expertise (AOE) for the four areas of the study.
Relevant Research on the Exemplary and Average Performer

The exemplary performer is, at best, ambiguous in nature throughout the literature. The researcher’s mission was to find out the competencies, behaviors, and characteristics that differentiate a typical performer (fully-successful) and an exemplary performer (superior) in the four Areas of Expertise (AOEs). These four AOEs as defined by the 2004 ASTD study *Mapping the Future* are: (a) Designing Learning, (b) Delivering Training, (c) Improving Human Performance, and (d) Measuring and Evaluating. This research sought to specifically identify the AOE Foundational competencies as stated in *Mapping the Future*, which correlated with exemplary (superior) performance only.

Rothwell (2001) stated, “Competency identification: [is] the process of discovering what competencies are necessary for exemplary or fully-successful performance” (p. 8). The goal was to identify these competencies—competencies that were above and beyond the threshold competencies, that were necessary to do the job, but were causally related to superior (exemplary) performance (Boyatzis, 1982). “Competencies are underlying characteristics of people and indicate ways of behaving or thinking, generalizing across situations, and enduring for a reasonably long period of time” (Spencer & Spencer, 1993, p. 9). The next section describes competencies, behaviors, and characteristics found by researchers to be correlated with exemplary performers. A review of the most extensive and accepted information that pertains to competencies held by exemplary performers, concluding with examples of relevant studies, is presented next.
A major hurdle for researchers was to differentiate between an individual’s contribution to performance and the satellite contributors such as the work environment. In other words, if a person is doing exceptionally well at a job, what part of the exceptional performance resides in the individual and what part belongs to the environment? Fletcher (1993) stated, “virtually every field of endeavor recognizes this simple fact: Outstanding people in any field have their own individually unique ways of working” (p. 28). Gilbert (1978) added to the methodological debate with the statement that behavior is largely covert and tough to observe. Further, similar high performance may be the manifestation of very different behavior on behalf of each performer.

To add to the confusion, an identified definition of what an average and exemplary performance is needed if the performance gap between typical performers and exemplary performers is to be discovered. Klemp (1982) described average [typical] performers as “people neither identified as outstanding nor identified as poor” (p. 58). This gap is what Spencer and Spencer (1993) labeled “differentiating competencies” (p. 15). Spencer and Spencer supplied a more definitive definition of competencies as “the underlying characteristics of an individual that is causally related to criterion-referenced superior performance in a job or situation” (p. 9).

A study completed by Levin, Ash, and Bennet (1980) found that in analyzing four job classes using several different analysis methods (job elements, task analysis, position analysis, and the Critical Incident Technique (CIT), the CIT was rated as producing the most adequate information for performance measures. In the most complex jobs (insurance, salespeople, account managers), a top performer is 127% more productive.
than an average performer (Hunter, Schmidt, & Judiesch, 1990). Top performers are 12 times more productive than those at the bottom and 85% more productive than an average performer (Hunter, Schmidt, & Judiesch, 1990).

The Differences

A description of the difference between exemplary performance and average performance necessitated descriptive terminology. The essence of this discussion was to discover the competencies and behaviors that are only present in exemplary performers.

Spencer and Spencer (1993) labeled these differentiating competencies through twenty years of research conducted through the McClelland/McBer Job Competence Assessment (JCA) methodology. They summarized the findings from 286 studies of entrepreneurial, technical and professional, sales, human service, and managerial jobs from industry, government, military, health care, education and religious organizations.

McClelland was credited with launching the competency movement when the researcher reviewed studies that indicated, “traditional academic aptitude and knowledge content test, as well as school grades and credential did not predict performance or success in life and were often biased…” (1973, p. 67). McClelland identified two important methods of research that would identify competency variables:

(a) Use of criterion samples, this method compares people who clearly had successful jobs or interesting lives with people who are less successful in order to identify those characteristics associated with success. (p. 3)

(b) Identification of operant thoughts and behaviors casually related to successful outcomes. Competency measures should involve open-ended
situations in which an individual has to generate behavior as distinguished from ‘respondent’ measures such as self-report and multiple-choice tests, which require choosing one of several well defined alternative responses to carefully structure situation. (p. 3)

_The 1970 McBer and Company Study_

One of the first tests in defining typical and exemplary competency identification process methods is illustrated in the 1970 McBer and Company study. The focus of the study was U.S. Department Foreign Service Information Officers and Massachusetts human services workers.

_Significance of the Study_

David McClelland, who is widely regarded as the founding father of the competency movement, developed an alternative type of test based on an analysis of what it takes to do certain jobs. This study pioneered research that compares people who are successful performers with people who are less successful. The study identified characteristics associated with success in predicting job performance beyond a traditional means of testing for performance through knowledge or aptitude exams. McBer and Company also developed the Behavioral Interview Methods for collecting critical incidences of superior performers.
Research Study Focus

McBer and Company was approached to help in the selection of junior Foreign Service Information Officers (FSIOs). Prior selection was based on an FSO placement exam through the State Department. The exam was based on knowledge of liberal arts and culture, American history, western civilization, English usage, economics, and government. McBer was commissioned to develop a method for hiring and assessing officers in this special branch of the Foreign Service. The state representative asked McBer to identify, through a variety of techniques, a group of FSO “stars” and for comparison, a group of average FSIOs.

Study Objectives

The lack of a relationship between prior exam scores and on-the-job success was the impetus for this study. McBer was challenged with the following question: “If traditional aptitude measures don’t predict job performance, what does?” (Spencer & Spencer, 1993, p. 4).

Sampling Approach

McBer and Company requested a criterion sample of some superior performers and a sample of average performers. The State Department used the nomination process for these FSIOs by their supervisors and peers. “The superior group was composed of superstars, the most brilliant and effective young diplomats” (Spencer & Spencer, 1993, p. 4). “The average groups were people who did their jobs just well enough not to get fired” (Spencer & Spencer, 1994, p. 4).
**Methods**

The Behavioral Event Interview (BEI) technique using the Critical Incident Technique (CIT) method was developed for the study. Observation of both the superior and average diplomats was the first method of choice. The observation approach was much too expensive and time-consuming for a worldwide study. McBer followed through with the BEI interviews; they obtained three major critical situations of peak performance and three major failures. This approach combined the critical incident technique (CIT) and the BEI technique. The research team used the Thematic Apperception Test (TAT) to analyze the transcripts from superior and less effective FSIOs in identifying the characteristics that differed between the two samples.

The BEI transcripts were then scored utilizing the Content Analysis of Verbal Expression method (CAVE). “CAVE coding enables investigators to count (measure empirically) and test statistically for significance of differences in the characteristics shown by superior and average performers in various job” (Spencer & Spencer, 1993, p. 5). This CAVE method was used extensively in subsequent studies in the Foreign Service. A validation process was employed by the researcher that identified a new sample of superstar and average FSIOs for interviews to see if the critical incident stories showed the same competencies.

**Results**

The three competency characteristics and other nonacademic skills appeared much more frequently in the thoughts of the superior FSO. The differentiating superior characteristics included:
a) Cross-Cultural Interpersonal Sensitivity. This is the ability to know what people from a foreign culture are saying or meaning.

b) Positive Expectations of Others. This is the strong belief in the underlying dignity and worth of others different from oneself, and the ability to maintain this positive outlook under stress.

c) Speed in Learning Political Networks. This is the ability to figure out very quickly who influences whom and what each person’s political interest are.

(Spencer & Spencer, 1993, pp. 5–6)

Intent is the motive or trait force that caused the action toward job performance and an outcome. Thus, behavior without intent, or personal characteristics, did not define a competency. Spencer and Spencer (1993) listed five types of underlying characteristics that demonstrate the way in which people behave, think or generalize across situations. They were:

(a) motive, the things a person consistently thinks about or wants that cause actions; (b) traits, physical characteristics and consistent responses to situations or information; (c) self-concept, a person’s belief that he or she can be effective in almost any situation is part of that person’s concept of self; (d) knowledge, information a person has in specific content areas; and (e) skills, the ability to perform a certain physical or mental task. (pp. 9–11)

Motowildo and Van Scotter (1994) called the differences contextual performance, “behavior that supports the broader organizational, social and psychological environment in which the technical core must function” (pp. 475–476). Such behavior included:
(a) volunteering to carry out task activities that are not formally part of the job; (b) persisting with extra enthusiasm when necessary to complete task activities successfully; (c) helping and cooperating with others; (d) following organizational rules and procedures even when it is personally inconvenient; endorsing, supporting; and (e) defending organizational objectives.

(Motowildo & Van Scotter, 1994, p. 476)

Spencer and Spencer (1993) cited six clusters of competencies and developed extensive research on the differentiating characteristics intertwined in these competencies. Since the State Department study, McBer refined the job competency assessment, but the process remained based on its original premise. This study identified specifications to determine outstanding job performance. A panel’s first task was to “define the performance standard of the job: the measures of individual effectiveness” (Klemp, 1982, p. 57). These measures can include sales, profits and other types of quality that reflect the most important results in a job. McBer suggested that when performance measures were unavailable in this step, “panel members and the job holders nominated, privately, those people they view as outstanding performers studies by Lewin and Zwany (1976) and Kane and Lawler (1978) indicate that nominations by peers have a particularly high validity” (as cited in Klemp, 1982, p. 58). Spencer and Spencer (1993) suggested that criteria or measures are needed to define superior or effective performance, “Ideal criteria are ‘hard’ outcome measures, such as sales or profit data for business managers, or patents and publications for research scientists” (p. 96). Spencer and Spencer also noted the following: “If hard criteria aren’t available, nominations or
ratings by bosses, peers, subordinates, and/or customers and clients can be used. Research indicates that peer ratings have high criterion validity, that is, they do predict hard job performance outcomes” (p. 96).

The 1981 Boyatzis Distinguished Manager Study

The focus of this study was to explain some of differences, in general qualitative terms, in the performance of poor, average, and superior managers. The objective was not to predict superior managerial performance but to identify similar characteristics across a variety of management jobs and in a variety of organizations. An analysis of the study is presented next.

Significance of the Study

Boyatzis’s research summarized the findings from the original data from behavioral event interviews and found a set of competencies that consistently distinguished superior managers across organizations. Boyatzis (1982) crafted one of the first overt definitions, which is, simply stated, “competencies are characteristics that are causally related to effective and/or superior performance in a job” (p. 23). His research suggested that not all jobs would require the same generic competencies for superior performance—other competencies that may be required for outstanding performance in any given job.

Research Study Focus

In 1981, Boyatzis reanalyzed the original Behavioral Event Interview from several competency studies of managers to find a set of distinguishing competencies. The research found those competencies that consistently distinguish superior managers, across 12 organizations (Boyatzis, 1982; Spencer & Spencer, 1993).
Study Objectives

The objective of the study was to find a set of competencies that distinguished superior managers from average and poor performers, thus expanding the fifth step of their methods and leading to the development of a generic model as well. Twenty-one characteristics were hypothesized to relate to managerial effectiveness.

Sampling Approach

The information reported in the study was from the analysis of raw data from 12 organizations. It involved more than 2,000 people—men and women in 41 management positions within the following organizations. Four organizations, 21 managers from various levels of management, involved in the study were from the public sector (federal government, a branch of the military, Foreign Relations, an international trade area, and a domestic trade industry). From the public sector, the study involved 20 managers from eight different organizations (Fortune 500 list, a major retail conglomerate, industrial products, high-technology, consumer-goods business, high-technology industry, consumer products business, communication business, medical health-care, drug business). Managers from the private sector were also at various levels and performed different functions in these organizations. The sample of managers and organizations was randomly selected.

Methods

The assessment survey developed by McBer and Company followed five steps to generate a validated model. The first step determined appropriate measures of job performance. The second step involved a job element analysis. “The result of a job element analysis is a weighted list of characteristics that managers perceive as important
in distinguishing superior from average performers, and those characteristics required by anyone in the job” (Boyatzis, 1982, p. 41). The third step involved a form of the Critical Incident Interview called the Behavioral Invent Interview (BEI) (McClelland, 1975), which resulted in reports of detailed incidents of interviewees’ behaviors, documenting their feelings and thoughts. The fourth step, the administration of a test, measured various competencies as identified in step three. Responses to the test were compared to the criteria from step one – a list of validated competencies. The last step, the development of the Competency Model, integrated the results from steps two through four.

Results

“The study resulted in a model of competence, not merely a laundry list of characteristics” (Boyatzis, 1982, p. 43) and was validated by performance measures. Performance measures were only available for 1,009 of the 2,000 managers interviewed. Of the 1,009 managers, only 756 participated in the test and measures component stated in the fourth and fifth steps. Interview and test data were not available on the same managers. The aggregate study involved a problem in determining organizational job-specific competencies across organizations because no common performance measurements could be compared. Of the twenty-one characteristics hypothesized to relate to managerial effectiveness, 12 were found to be competencies at all three levels. The related characteristics were:

(a) efficiency orientation; (b) proactively; (c) diagnostic use of concepts; (d) concern with impact; (e) self-confidence; (f) use of oral presentations; (g) conceptualization, for middle and executive level managers only; (h) use of social power; (i) managing group process, for middle and executive level
managers only; (j) perceptual objectivity; self-control, at the trait level; and
(k) stamina and adaptability, at the trait level only. (p. 229)

Boyatzis (1982) found significant differences between superior and average
performers in several clustered categories. The following clustered categories showed
significant deviations between a superior performer and the average performer in the
Boyatzis (1982) study:

(a) efficiency orientation represents a concern with doing something better
(pp. 64–65); (b) pro-activity represents a disposition toward taking action to
accomplish something (pp. 74–77); (c) diagnostic ability—a way of thinking in
which the person identifies or recognized patterns from an assortment of
information, by bringing a concept to the situation and attempting to
interpret events through that concept—that is, the person has a framework
or concept of how an event should transpire (pp. 82–83); (d) concern with
impact represents a concern with symbols of power that exert an impact on
others (pp. 88–92); (e) self-confidence competency, often called decisiveness
of presence, where people feel they know what they are doing (p. 103–
104); (f) oral presentation competency, in which people make effective
verbal presentations and see themselves as able to verbally communicate
effectively (pp. 107–108); (g) conceptualization thought process in which the
person identifies the recognized patterns in an assortment of information—
that is, the individual develops a concept that describes a pattern or
structure perceived in a set of facts (pp. 114–115); (h) socialization
competency, in which the person uses forms of influence to build
alliances, networks, coalitions, or teams (pp. 126–127); (i) skill level of managing process (pp. 132–133); (j) accurate self-assessment competency in which people have a realistic or grounded view of themselves (p. 136); (k) self control competency, where people inhibit personal needs or desires in the service of organizational needs (p. 163); and (l) perceptual objectivity competency, with which people can be relatively objective and not limited in view by excessive subjectivity or personal biases, prejudices or perspectives. (p. 168)

An important ingredient in the research design was the term competency with reference to the term exemplary and average. A few definitions of competency in identified exemplary and average performers have been formulated from the literature. Boam and Sparrow (1992) and Bowden and Masters (1993) described a competency as an observable performance. Rutherford (1995) called competency the standard or quality of the outcome of the person’s performance. Rothwell (1996) stated that “competency identification [is] the process of discovering what competencies are necessary for exemplary or fully-successful performance” (p. 8).

Most relevant to this subject is Boyatzis’s (1982) definition, “the underlying attributes of a person” (p. 21), and Spencer and Spencer’s (1993) addition of “is causally related to criterion-referenced superior performance in a job or situation” (p. 9). A few competencies have frequently appeared to distinguish between an average performer and an exemplary performer (again, many different synonyms were used for the word exemplary). Characteristic, Strategic, and Cognitive Differences are discussed next.
Characteristic Differences

A few characteristics seemed to be present in most exemplary performers, according to the literature reviewed. First, most high performers saw the big picture. That is, high performers had a more descriptive (Priest & Lindsay, 1992) and detailed representational memory framework than average performers (Schack, 2004). In fact, Schack (2004) discovered that high-level performers constructed their memory in a more highly organized hierarchal treelike manner than the average performer. Another way to look at this was to use regularly used words from the HR field. Most HR professionals know what WIIFM stands for (what’s in it for me). From a high performer’s standpoint, instead of WIIFM, the high performer tended to think on a grander scale, and thinks WIIFU (what’s in it for us) (Kushel, 1994). Further, Rothwell, Sanders, and Soper (1999) explained, “experts tend to see the profession from a 30,000 foot view” (p. 72). Rothwell et al. (1999) formulated a list of top competencies that expert WLP (Workplace Learning and Performance) professionals thought to be most important (pp. 73–77). These competencies include: (a) Analytical Thinking, (b) Leadership, (c) Interpersonal Relationship Building, (d) Facilitation, (e) Communication, (f) Performance Gap Analysis, (g) Buy/In Advocacy, (h) Visioning, (i) Identification of Critical Business Issues, and (j) Systems Thinking. Another study found that ‘Type A’ behavior is more prevalent in high performers than in average performers (Kunnanatt, 2003). The characteristics of a ‘Type A’ individual are (a) “achievement orientation, (b) physical alertness, and (c) eagerness to compete” (Kunnanatt, 2003, pp. 732–734).
Strategizing Differences

Over 1,000 engineers from Bell Laboratories, 3M, and Hewlett-Packard contributed to Kelly’s original 1985 study research. Both collaborators and subjects contributed to design that would help turn average performers into stars. Kelly’s Star Engineer Performer methods included paper-and-pencil tests, direct observation, work diaries, focus groups, and individual interviews with no other further information available. Kelly (1999b) created a model for engineer star performers using strategic work competencies, the strategies that defined the average from the star. Kelly (1999b) suggested that, “the average performer fail(s) to take initiatives or take initiatives of no importance to the organization” (p. 5). The nine identified strategies of star performers in order of importance were:

I. “Blazing trails” or Initiative in the organization’s white spaces. Star performers usually go above and beyond the accepted job description or everyday work routines to offer new, bold and value-adding ideas, while average performers usually think about ways to do their job better or to get noticed by upper management. (p. 5)

II. “Knowing who knows” or Networking: by plugging into the knowledge network.” Star performers usually develop a pathway to knowledge experts who can help them complete critical path tasks, and share their knowledge with others who need it. Average performers usually socialize with other people in order to help their career. (p. 7)

III. “Proactive and Self management—Managing your whole life at work.” Star performers usually create opportunities, choosing work that contributes to critical
path and ensures high job performance. Average performers, however, focus on how to better manage their time and projects. (p. 8)

IV. “Getting the Big Picture” or Perspective. Star performers see things in a larger context and through the various viewpoints of customers, competitors, colleagues, and bosses. Average performers see things only from their own perspectives and make sure their perspectives are valued. (p. 9)

V. “The Right Kind of Followership.” This has to do with checking your ego at the door to lead in assists. Star Performers help organizations succeed while exercising independent, critical thinking on goals, tasks, and methods; whereas average performers only follow the guidelines of the job description. (p. 9)

VI. “Teamwork as a Joint Ownership of a Project” or teams. Star performers share with team members the group goals, commitments, work activities, schedules, and accomplishments and are positive contributors to group dynamics. Average performers, however, just want to be a part of the team and work cooperatively with others. (p. 10)

VII. “Small “L” Leadership”. Star performers use their expertise and influence to get their colleagues together to accomplish important tasks. They help the group to create a clear vision, find the resources to accomplish the task and lead the project to successful completion. Average performers think it as an inborn trait that allows them to be in charge and have the power to make important decisions. (p. 12)

VIII. “Street Smarts” or Organizational savvy—Using street smarts in the corporate power zone. Star performers distinguish street smarts as knowing the competing
interest in an organization, promoting cooperation, addressing conflicts, and accomplishing tasks. Average performers think of street smarts is a talent of getting themselves noticed by the right people and playing office politics. (p. 13)

IX. “Show-and-tell—Persuading your audience with the right message.” Star performers communicate with others in the most effective and user-friendly format in order to reach and persuade their audience. Average performers focus on getting noticed by upper management through their own image and message, instead of focusing on their audience. (p. 14)

Through this research, Kelly developed a Star Performer Training program called **Breakthrough**. The program has been delivered to over 100 people since 1998 in the United States and in Europe. It is licensed to professional training companies and is being used in universities, both in the classroom and for staff development productivity improvement. Kelly noted that, “The most dramatic changes [in participants who attend this program] were in the ranks of women and minorities, according to their bosses’ pre-and post-evaluations…productivity improvement rates shot up 400 percent on average” (p. 17).

**Cognitive Differences**

Hong (1999) found significant cognitive differences in high-performing individuals compared to average performers. They were: (a) knowledge base and representations, (b) cognitive/perceptual efficiency, (c) cognitive strategies, and (d) metacognition/self-regulated learning. The four differences are discussed next.

Knowledge base and representations refers to an individual’s domain knowledge, that is, having better-organized, superior domain knowledge. The expert here was defined
as “someone who exhibits extremely competent performance or falls in the top 5% of performers in a domain; someone who performs at the level of an experienced professional” (Hong, 1999, p. 244). The knowledge base of experts included extensive representations that help with problem solving, the solution process, and other components (Richman, Gobert, Staszewski, & Simon, 1996). Chi, Feltovich and Glaser (1981) suggested that experts categorize problems based on basic representations and methods relevant to solving them, while novices sort problems based on surface features. Ericsson (1996b) suggested that experts could generate a complex representation of the problem and integrate it with their knowledge to select, evaluate, check, and reason about alternative actions.

*Cognitive/perceptual efficiency* refers to experts who could solve problems that novices cannot solve or that experts can solve them more rapidly and accurately (Hong, 1999). Richman et al. (1996) suggested that the thinking process has been automated so that problems may be not solved without conscious attention.

*Cognitive strategies* refer to experts and novices who use different rules and strategies in problem solving (Hong, 1999). This suggests that experts tend to work forward on problems that are easy for them and work backward on more difficult problems; novices tend to work backward from the problem or goal (Audet & Abegg, 1996; Priest & Lindsay, 1992; Simon & Simon, 1978).

Hong (1999) suggested that *Metacognition* is recognized as a key component in distinguishing experts from novices (Cheng, 1993; Schwanenflugel, Stevens & Carr, 1997). It is “The ability to monitor one’s current level of understanding and decide when it is not adequate” (Bransford et al., 2000, p. 23).
Ericsson (1996a) found the following distinctions: (a) physical maturity, (b) amount of domain knowledge, (c) cognitive representation, (d) retrieval patterns, and (e) amount of deliberate practice to be causally related to exemplary performance. Ericsson (1996a) formulated that high performers responded quicker and with more accuracy from environmental cues, than their novice counterparts.

Most recently, Herling (2000) proposed an operational definition of expertise in HRD. “The proposed operational definition of human expertise, reinforced with the analysis tools currently available to HRD, allows the actions of exemplary performers within an organization to be benchmarked in qualitative and quantitative terms” (Herling, 2000, p. 722). The acquisition of expertise, to be an exemplary performer, is within the grasp of the research study at hand. If the operational definition of what constitutes an exemplary performer is achieved, constructive benchmarking, like that of organizational benchmarking, and acquisition of expertise, can be pushed forward.

The overarching lack of clarity on the defining characteristics of WLP expertise (Kuchinke, 1997) or the exemplary performer is the focus of the study. One important facet of this exploration cannot be overlooked. Kuchinke (1997) and Herling (2000) indicated the importance of domain consideration. The expertise or characteristics of the exemplary performer are best viewed in a domain-specific environment. Discussing level of practice or cognitive aspects or expertise (Anderson, 1982) all adhere to the domain specific framework.

Section Summary

Foundational and major studies were discussed and found to be the most relevant research when seeking to identify distinguishing differences in exemplary and average
performers. Research suggested that identifying the ‘gap’ or ‘differentiating competencies’ of identified exemplary and typical performers was the first of two major hurdles that may influence performance. The second hurdle that may contribute to the individuals’ superior work is that of the environment. Characteristic Differences, Strategizing Differences, and Cognitive Differences were discussed and explored.

Chapter Summary

There remains a disappointing lack of systematic knowledge about the subtleties of Workplace Learning and Performance expertise. This review of literature allowed a more precise understanding of the distinguishing characteristics, behaviors, and competencies of an exemplary performer. Goal Setting Theory, Social Cognitive Theory, and Organizational Justice provided a basis for understanding the variables that contributed to exemplary performance. Knowledge of the WLP competencies and competency model designed set forth by ASTD was necessary in developing this exploratory model, which distinguished these sets of foundation competencies in the Workplace Learning and Performance performer. The integration of these concepts generated qualitative data in the form of verbal protocols with the Critical Incident Techniques method, using Behavioral Invent Interviews as described in several of the studies presented.
CHAPTER 3
Methodology

The purpose of this study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise described in the 2004 ASTD *Mapping the Future: New Workplace Learning and Performance Competencies.* This research looked at four of the nine Areas of Expertise (AOEs) identified in *Mapping the Future* (2004). Areas of Expertise (AOEs) are:

- The specific technical and professional skills and knowledge required for success in WLP specialty areas. AOE’s are the knowledge and skills an individual must have above and beyond the foundational competencies. In order to function effectively in a given AOE, a person must display a blend of the appropriate foundational competencies and unique technical/professional skills and knowledge. (ASTD, 2004b, ¶ 7)

The ASTD’s (2004b) four AOE’s of exploration for this study were:

(a) *Designing Learning*—Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact. (¶ 9)

(b) *Improving Human Performance*—Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results. (¶ 11)

(c) *Delivering Training*—Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner. (¶ 11)
(d) *Measuring and Evaluating*—Gathering data to answer specific questions regarding the value or impact of learning and performance solution; focusing on the impact of individual programs and creating overall measures of system effectiveness; leveraging finding to increase effectiveness and provide recommendations for change. (¶ 11)

This chapter contains a description of the process used in this qualitative study as depicted in Figure 3.1 an explanation of the Critical Incidents Techniques (CIT), and the researcher’s methodological approach to this study. This chapter begins with this exploratory research approach, followed by a description of the individual methods of data collection and analysis.

*Research Approach*

Development of appraisal systems, performance measures, competency studies and professional certification have been, and will continue to be, areas of great interest in the workplace. The Critical Incident Technique (CIT) methodology and the development of the tools for this study were determined by the ASTD and the certification team, to ensure that this project was appropriate to the conduct of the research. ASTD sought to gather specific in-depth examples of job behaviors and competencies (as identified as the foundational competencies in the 2004 ASTD *Mapping the Future* competency study) experienced by the exemplary practitioner, to guide the development of the core work product component of the ASTD Workplace Learning and Performance (WLP) certification exam.

This modified competency study identified the ‘gap’ in ‘distinguishing’ behaviors and characteristics exhibited by the exemplary and typical performer of the four identified roles. “The CIT, a qualitative approach, employs the interview method to
Introduction to the Study
Research Approach
Reason for Using a Qualitative Design
Critical Incident Technique and Behavioral Event Interview

Data Collection 5 Step CIT Method

Step 1: Specifications for Collecting Information
- Pilot Study
- Population Sample
- Sample Size
- Nomination Criteria
- Nomination Letter and Forms
- Interview Survey Instrument
- IRB, Human Subjects Approval

Pilot Study Analysis
Participant List Revisited
Nomination Letters Revisited/Updated
Data Collection Interview Survey Instrument

Step 2: Data Collection Activity
- The BEI Interview
- The Interview Guide
- Transcription Preparation

Step 3: Identify Themes in Critical Incident Analysis
- Categories/Themes/Clusters
- Coding Process and Procedures

Step 4: Sorting Incidents into Proposed Content
- Storing Data
- Content and Theme Analysis

Step 5: Interpreting and Reporting Results
- Gowin’s Vee
- Usability/ Credibility
- Limitations
- Trustworthiness and Verification

Figure 3.1. Process flow chart of the outline for the methodology chapter of the study.
obtain an in-depth analytical description of an intact cultural sense” (Borg & Gall, 1989, p. 387). Developed by McClelland and derived from the CI Technique, the researcher used the Behavioral Event Interview (BEI) style questions to gather “in-depth” critical incidents during question numbers III and IV in the interview guide (see Appendix C).

Behavior event interviews were used during use of the Critical Incident Method. The CIT interviews “ask people to identify and describe the most critical situations they have encountered on their jobs” (Spencer & Spencer, 1993, p. 98). Here the interviewer asked about the task or situation, the outcome, and the result. Addition of the BEI method goes beyond the CIT method and included questions that ‘probed’ for data about personality and cognitive style. This type of interviewing styling in collecting critical incidents of exemplary performers enabled the researcher to measure competencies such as achievement and motivation. “Superior and average performers are interviewed using in-depth Behavioral Event Interview (BEI) technique” (Spencer & Spencer, 1993, p. 97). The Behavioral Event Interview was utilized to identify KSAs and algorithms of the exemplary employee. “Analyst should also note algorithms of superior performers: rules of thumb, behaviors, or strategies for handling important job tasks or situations” (Spencer & Spencer, 1993, p. 145).

The following section includes the reason for using a qualitative design, background on the CI Technique, general characteristics of the Critical Incident Technique and use of the BEI method. The breadth of this section entailed a description of the method and its many uses as functionally maintained to this day. Further, some of the strengths and limitations of the method and its viability are listed and elaborated.
Qualitative vs. Quantitative

A topic of ongoing debate in the research community is the use of either quantitative or qualitative research. Quantitative research involves predictions and explanations that can be generalized from a sample and inferred to a population. Quantitative research takes great care to stay objective, ensure reliability and validity, and to extract correlations from experimental procedures (Redmann, Lambrecht, & Stitt-Gohdes, 2000, p. 132). “Quantitative research is effective when studying large groups or samples and making generalizations about relationships among variables to a broader group or population” (Redmann, Lambrecht & Stitt-Gohdes, 2000, p. 132).

Qualitative research “is interested in flushing out the anticipated and unanticipated relationships” (Preskill, 1996, p. 337). “Qualitative research tries to examine more in-depth an understanding about specific experiences, while not adhering to generalizability” (Redmann, Lambrecht, & Stitt-Gohdes, 2000, p. 132). “Qualitative research seeks to be detailed, rich and vivid in understanding and looks to include the social/environmental context and individual’s perspective in the inquiry” (Redmann, Lambrecht, & Stitt-Gohdes, 2000, p. 132). See a comparison of the concept as depicted in Table 3.1.

Table 3.1

<table>
<thead>
<tr>
<th>Differences between Qualitative and Quantitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
</tr>
<tr>
<td>Generalizability</td>
</tr>
<tr>
<td>Deductive</td>
</tr>
<tr>
<td>Numerical</td>
</tr>
<tr>
<td>Random sampling</td>
</tr>
<tr>
<td>Minimal interaction</td>
</tr>
</tbody>
</table>

As with the study designed by Steins (2003), this research study “used naturalistic inquiry and inductive methods in identifying the competencies that defined exceptional Business to Business (B2B) marketers using descriptive research to document characteristics of individuals” (p. 140). Patton (1990) defined the naturalistic inquiry approach as the study of “real-world situations as they unfold naturally; non-manipulative, unobtrusive, and non-controlling; openness to whatever emerges – lack of predetermined constraints on outcomes” (p. 80).

Based in the tradition of grounded theory approach, which is very similar to the inductive approach in which the investigator collects codes and analyzes data, was the basis of the researcher’s qualitative methodological approach called the Critical Incident Technique. Patton noted (as cited in Stein, 2003) that “qualitative inquiry designs cannot be completely specified in advance of fieldwork. While the design will specify an initial focus (...) and primary questions to be explored, the naturalistic and inductive nature of the inquiry makes it both impossible and inappropriate to specify operational variables, state hypotheses, and finalize either instrument or sampling schemes” (p. 81).

Due to the exploratory nature of identifying the distinguishing characteristics of exemplary performers, the research needed to be objective and structured in the design process but allow for creativity in the analysis. Patton (2002) noted that “grounded theory is best understood as fundamentally realist and objectivist and procedural way of getting the researchers bias out of the way but adding healthy dose of creatively to the analytical process” (p.128).

Grounded Theory’s prescribed intent was to “generate or discover a theory” (Creswell, 1998, p. 56 ). It was not the intent of the researcher to discover a theory of
exemplary performance. The intent was to explore a systematic process or design an ‘exemplary competency model’ that a researcher could use to distinguish these competencies using the basic induction principles of a constant comparative analysis approach within a cross case analysis design based in the tradition of grounded theory (Onwuegbuzie and Leech, 2005). Spencer and Spencer (1993) noted that “research to develop competency models is a discovery of grounded theory approach” (p. 135). Based in the tradition of Grounded Theory, using the inductive approach, the systematic process of this discovery and analysis was what the researcher used as the basis for using this theoretical approach. The systematic and structured processes used were: open coding, forming initial categories of information, use of axel coding to explore casual conditions, and specifying relations among categories (Creswell, 1998).

Researchers believe that qualitative differences are what most noticeably distinguish experts from novices (Chi, Glaser, & Rees, 1982). Based in the tradition of Grounded Theory, in its use of inductive methodological assumptions, guided the development design of this research study. The review of the literature on both the CIT (collecting identified aspects of exemplars in the job) and the BEI (collecting identified competencies needed to do the job well) helped to guide the research in this study.

Background on the CIT Approach

In 1940, the Critical Incident Technique (CIT), a method for collecting data, was devised based on the important (critical) points (incidents) essential for high performance. This method, which was developed by John Flanagan, is the method used in this study.
Flanagan (1954) first described the CIT method as a set of procedures that could be used to collect observations of human behavior. The CIT method owed its origins to research performed in the Aviation Psychology Program during World War II. The U.S. Air Force wanted to know why potential pilot candidates were failing the program and why pilots were becoming disoriented during flight. From this research, several branches of research sprouted, producing several procedures that could be used in collecting critical facts about performance. Following World War II, many researchers resumed their investigation into the critical requirements of particular jobs at the American Institute of Research (AIR). From this research, a specific set of procedures developed into what is now called the Critical Incident Technique (CIT).

Flanagan (1954) described five major steps in developing a critical incident report. The first step was to describe the general aim or goal of the activity/job. This involved reports on the job outcomes, materials used, operations performed, the situational instances, and the importance of the actions or results. This functional description must precisely describe the necessary job functions and the level of accomplishment that determined success or failure. “The best sources of information for the general aim statements are subject-matter-experts (SME’s)” (Whetzel & Wheaton, 1997, p. 93).

The second step in CIT was describing and detailing the plan and specifications for the report. This was an essential tool in ensuring accuracy and commonality between observers. Flanagan (1954) identified four main steps in identifying the specifications for a research project. These included: (a) “a description of the situations to be observed (people, place, activities, and conditions); (b) relevance of behavior being observed to the
identified general aim; (c) the effectual extent of the observed behavior on the general aim; and (d) the selection and training of the observers’” (pp. 338–339).

The third step in developing critical incidents was collecting the actual data. The major processes in this step included observing, evaluating, classifying, and recording the facts of the activity/job.

The fourth step was analyzing the data. The purpose of this step was “to summarize and describe the data in an effective manner so that it could be effectively used for many practical purposes” (Flanagan, 1954, p. 344).

The fifth and final step was interpreting and reporting the data. Reporting the factual findings, the limitations of the findings and methods, and the value of the results were essential parts of this step.

This is the CIT method at its basic level. Since its inception, CIT has been cultivated and has branched into many arenas. However, some research has taken the CIT method and modified it for further use, as noted in the 1970 McBer and Company research on superior and average performers. David McClelland developed Behavioral Event Interview (BEI) questions during the collection of these critical incidents. Inclusion of these BEI questions allowed the research team at McBer and Company to collect personality and cognitive data. This method enabled the identification of “competencies needed to do the job well” (Spencer & Spencer, 1993, p. 98).

Whetzel and Wheaton (1997) noted two important points essential to the CIT method. First, the information on critical incidents must be obtained from observers who are in a position to observe those performing the activity under investigation, and who, by
training and experience, are qualified to judge the outcome of the activity. Second, the behavior must play an important role in determining the outcome of the job performance.

Uses of the CI Technique

Since its inception, the CIT has been used in a variety of situations. Some of the major categories of functional usage included: (a) “creating performance measurement instruments such as behavior based rating scales, (b) developing predictor criterion for such instruments as structured interviews and situational judgment tests, (c) designing instructional objectives, (d) evaluating services, (e) designing curricula, (f) evaluating system performance, and (g) establishing performance requirements as a basis for certification and licensure tests” (Whetzel & Wheaton, 1997, p. 90).

Other uses for the method included identified competencies needed by children and adults in managing asthma (McNabb, Wilson, & Jacobs, 1986; Wilson, 1993; Wilson, Mitchell, Rolnick, & Fish, 1993; Wilson, Scamagas, Arsham, Chardon, Coss, German, & Hughes, 1987); to evaluate the impact of a medical information systems (Lindberg, Siegal, Rapp, Wallingford, & Wilson, 1993; Wilson, Star-Schneidkraut, & Cooper, 1989); and to help reduce the risk level in anesthesia by identifying corrective actions when mishaps occur (Newbower, Cooper, & Long, 1981). In addition, the method has been used to elicit doctors’ views on problematic aspects of their jobs (Dean, 2000), examine customer relationship management (Wong & Sohal, 2003), devised learning tools in the hospitality industry producing a customer retention analysis, (Lockshin & McDougall, 1998), extrapolated contributory factors and beliefs about nursing practices and benefits in aged and extended care nursing (Cheek, O’Brien, Ballantyne, &
Pincombe, 1997), investigated and improved educational methods (Preskill, 1996), and identified service satisfaction rates (Johnson, 2002).

Other uses included:

- “Widely used in nursing research” (Norman, Redfern, Tomalin, & Oliver, 1991, p. 591).
- “To study determinants of satisfaction and dissatisfaction from a motivational standpoint” (White & Locke, 1981, p. 376).
- “A vehicle for voice – doctors described ethical complications regularly dealt with” (Dean, 2000, p. 3).
- “Examining events considered to be examples of success or failure” (Redmann, Lambrecht, & Stitt-Gohdes, 2000, p. 132).
• “Examine successful instructional programs” (Redmann, Lambrecht, & Stitt-Gohdes, 2000, p. 132).
• “To facilitate adult learning” (Preskill, 1996, pp. 344–345).

Cheek, O’Brain, Ballantyne, and Pincombe (1997) formulated their own list of uses for CIT:

The literature consistently cites the use of CIT to develop, classify, or formulate themes, categories, or taxonomies useful for teaching, benchmarking, and quality assurance purposes. Flanagan originally cited the CIT’s potential applications as encompassing measures of typical performance and proficiency, training, selection and classification, job design, operating procedures, equipment design, motivation and leadership (attitudes assessment), and counseling and psychotherapy. Such wide potential applicability may explain at least in part why the method has increasingly found favor among researchers of nursing. (p. 671)

As Flanagan (1954, pp. 327–355) described in his original article, the CIT is a procedure for gathering data about behavior in defined situations. As with many tools for conducting research, the reason for using a particular tool is of interest. A researcher must address the purpose and direction of the research before using a tool like the CIT. The CIT has many attributes that are specifically useful. Fox (1981) found the “CIT to be legally defensible” (p. 72). Other attributes present in a CIT environment include “helping to foster analytical skills and increase participative learning” (George, 1989, pp. 59–60), “facilitates active engagement” (Preskill, 1996, p. 344), “increases students repertoire for real world situations” (George, 1989, p. 60), “connects students to what
they already know with what is new, and helps find meaning in the new information” (Preskill, 1996, p. 345), and “helps participants focus on the important facts” (Cheek, O’Brain, Ballantyne, & Pincombe, 1997, p. 680). However, the CIT’s greatest attribution factors revolve around the richness, depth, and quality of the tool’s breadth. Research has found that the “CIT method allowed for detailed descriptions” (Lockshin & McDougall, 1998, p. 430), “inclusion of social context and work setting” (Stitt-Gohdes, Lambrecht, & Redmann, 2000, pp. 80–82), “good for eliciting new data in arenas of unexplored research” (Cheek, O’Brain, Ballantyne, & Pincombe, 1997, p. 680), “creates responses with greater richness, depth and understanding of customer problems” (Lockshin, McDougall, 1998, p. 430), and “is more of a holistic tool – helping to develop strengths and weaknesses, solutions, process dimensions, and includes perceptive dimensions” (Wong & Sohal, 2003, pp. 249–251).

These are just a few of the cases surrounding the use of CIT. In fact, a true usefulness testimony on the tool is its tremendous usage in research. Flanagan’s 1954 article is the most cited article by industrial/organizational psychologists—more so than any other article in the last 40 years (Sackett, 1994).

Behavioral Event Interviews

The Behavioral Event Interview, based on the CIT created by Flanagan (1954), was developed by McClelland (1978) and colleagues at McBer and Company. The CIT technique as described in the prior section elicits behavioral descriptions of critical incidents experienced in a work setting. Incidents from the CIT tend not be detailed enough to determine what the job incumbents think, feel, and specifically do that would pose a problem in this study in identifying the characteristics of an exemplary performer,
if used alone. The BEI was developed so that a critical incident could be explored further, in an inquisitive style, until behaviors, thoughts, and feelings were adequately reported (McClelland, 1978). Using the CIT only (without BIE questions) would reflect respondents only discussing behaviors they believe are critical. Additional probing questions helped the participant to elaborate on other relevant behaviors that occurred in the critical event. Klemp (1979) maintained that through the use of extensive probing, the interviewer could elicit descriptions of behaviors that were actually performed in the event, rather than more selective recollections of behaviors. The interviewer acted like an investigative reporter (Spencer & Spencer, 1993) and asked the following BEI probing questions:

What led up to the situation?, Who was involved?, What did you think about, feel, and want to accomplish in dealing with the situation? What did you actually do? What happened? Who was involved? What did you actually do? What happened? What was the outcome of the incident?”

(p. 5)

Section Summary

In this section, the reason for using a qualitative design approach was discussed. The difference between a qualitative and quantitative design was presented. Background on the Critical Incident Technique (CIT) method, the use of the CIT method, and the BEI question method as related to this qualitative designed approach were discussed.

Data Collection

This section contains a description of the five-step process used in this CIT method study as described in the Stitt-Gohdes, Lambrecht, and Redmann, (2002) study,
using the critical incident method for job behavior research, followed by a detailed explanation of each step of this study. The steps in the researcher’s plan are presented next.

The researcher used the following 5 step CIT model to design this research study:
“(a) developing plans and specifications for collecting factual incidents (e.g., determining from whom the information is to be collected and methods of collection, instructions about the collection); (b) collecting episodes/critical incidents from knowledgeable individuals; (c) identifying themes in critical incidents; (d) sorting the incidents into proposed content categories; and (e) interpreting and reporting results” (Di Salvo et al., 1989 as cited in Stitt-Gohdes et al., 2002, p. 64).

Step 1: Developing Plans, Specifications for Collecting Factual Incidents

This step was described in the researcher’s summary of information as provided in chapter 1—statement of the problem and need, and chapter 2—the literature review on the current competency studies and past research on differences in exemplary and average performers (Stitt-Gohdes et al., 2002). Appendix A contains the list of the four AOE5s identified for the study, and a description of each Area of Expertise and the competencies associated with each AOE. Described next are the specifications for determining from whom the information was collected, and the collection procedures for this step (Step 1) of the methodology. The population, selection of the population, sample size, and nominator criteria are discussed next.

Population

ASTD honors individuals for their impact on the Workplace Learning and Performance profession and contributions to ASTD. The ASTD Awards of Excellence
and BEST awards recipient winners were identified based on their exemplary work and practices in workplace learning and performance. These awards emphasized the impact of the field and the competitive advantage the process of learning and performance brings to an organization. This affirms that organizational success was achieved when the best interests of employees and those of the organization are considered and lead to the wide dissemination of the practices and learning of award recipients.

The primary data source for the exemplary performer in this study was nominated by a number of the ASTD’s award winners. The nomination process was based on the McCelland study in identifying exemplary managers (McCelland, 1998). McCelland (1998) stated that “this approach was used because people agree more readily on who is outstanding than on what makes them outstanding, and because having judges rate characteristics supposedly related to success (rather than rating actually successful people) might result in a biased criterion” (p. 335). McCelland suggested that the Outstanding “O” (exemplary in this study) “is in the top 5% to 10%” and the Typical “T” performers (average in this study) “include the next 11% to 25%. “The comparison of ‘O’ and ‘T’ groups allows the development and definition of competencies that differentiate the two groups” (McCelland, 1998, p. 332).

Criteria for these awards winners, developed earlier by ASTD, thus created the population from which the nominations were drawn. Criteria for these awards are described in the next section. In selecting the exemplary performer in the job to be studied, measurable criteria for that selection would be given to the nomination group. Spencer and Spencer (1993) suggest using the following as performance criteria:
Ideal criteria are ‘hard’ outcome measures, such as sales or profit data for business, or patents and publications for research scientists. For military officers good criteria would be unit performance outcomes, such as combat inspection scores or reenlistment rates. For human service workers, the best criteria are client outcomes.... If hard criteria aren’t available nominations or ratings by bosses, peers subordinates, and/or customers and clients can be used. Research indicates that peer ratings have high criterion validly, that is they do predict hard job performance outcomes. (pp. 94–96)

Hard criteria were not available for this selection so it was expected that an ASTD Awards Winner would be knowledgeable about the exemplars in the WLP field as suggested by Spencer and Spencer (1993). The targeted population for this study included identified or nominated exemplary performers in the four Areas of Expertise (AOEs): (a) Designing Learning, (b) Delivering Training, (c) Improving Human Performance, and (d) Measuring and Evaluating. However, because this nomination required four individual performers to be selected on the nomination form, it was possible for the same person to be identified for more than one AOE area. Role analysis is most accurate when the sample providing the ratings is representative of the targeted population (ASTD, 2004a).

*Selection of Population*

Purposeful criterion based sampling was used in the selection of participants for this study. Merriam (1988) asserted that purposeful sampling is considered logical when the researchers plan to use data “not to answer questions like “how much” and “how
often” but to “solve qualitative problems, such as discovering what occurs, their implications of what occurs, and the relationships linking to the occurrence” (Hongmann, 1982 as cited in Merriam, 1988, p. 48).

The researcher and ASTD identified, through a nomination process, experts in the WLP field. This nomination technique was also used in the 1973 McCelland and Dailey study of Foreign Service Officers (FSO) who were nominated by their peers or supervisors to participant in a study where they compared ‘stars’ and a group or ‘average’ FSOs.

Letters and nomination forms were mailed to 23 recipients of the ASTD Excellence in Practice (EIP) award and to 17 participants in the ASTD BEST award. The letter introduced the study and its background to the reader and then asked them to nominate peers, colleagues, or co-workers in the four areas of exploration in this study. The nomination form described each AOE and provided information required for the nomination process. The nomination letter was mailed from ASTD’s headquarters thereafter with the signature of ASTD President and CEO Tony Bingham. (See Introductory Letter from ASTD and Nomination Form in Appendix B.) Twenty-three different people were nominated as exemplary performers in one of the four AOEs in this study.

According the Flanagan (1954), there is no simple way to support one’s sample size using the Critical Incident Technique. Klemp (1982) noted that “experience shows that the quality, not quantity of the person studied is the key to the validity…accordingly, to develop a competency model only eight to twelve outstanding job performers are needed, along with a similar number of average
performers (people neither identified as outstanding nor identified as poor)” (p. 58). Spencer and Spencer also noted that “ideally, each job study sample should include at least 20 subjects: 12 superior and eight average performers” (p. 97). Flanagan suggested that if an activity in the job being defined is relatively simple, the size may only require 50 or 100 incidents. Amodt (1983) examined 53 studies (dated from Flanagan [1949] to Machungwa & Schmitt [1983]) that used the critical incident method in their research. They found that the number of participants used to generate the incidents ranged from 17 to 3,767; and the number of individuals used to sort the incidents has ranged from 1 to 110. Spencer and Spencer (1994) noted that “small samples should include two superior performers for every 1.5 average performers” (p. 97).

A total of 23 exemplary WLP performers were identified and interviewed. From this population eight individuals were interviewed for the Designing Learning AOE, five for the Improving Human Performance AOE, six for the Delivering Training AOE and four for the Measuring & Evaluating AOE.

**BEST and EIP Nominator Criteria**

The ASTD BEST Awards recognized organizations that demonstrated enterprise-wide success or achievement as a result of employee learning and development. The organizations submitted quantitative and qualitative information to ASTD about their learning and development practices and programs. Members of the BEST Awards Advisory Committee, through a blind review process, assessed applications. The use of a blind review process means that the author of the manuscript is not made known to the reviewer. The winners were selected based on the following
criteria: (a) evidence that learning has value in the culture (35% of evaluation); (b) evidence of a link between learning and performance (35% of evaluation); (c) evidence that the organization has leveraged technology in learning (20% of evaluation); and (d) learning and performance investment (10% of evaluation) (ASTD BEST Criteria, 2004) (C. Chulew, personal communication, December 12, 2004).

The ASTD’s Excellence in Practice (EIP) Awards recognized participants’ results achieved through the use of practices, interventions, and tools from the entire scope of workplace learning and performance. Both new and proven practices were submitted in one or more of the following categories: career development, learning technologies, managing change, performance improvement, organizational learning, technical training, training management, valuing differences, and workplace learning and development.

The awards are presented to practitioners who have demonstrated clear and measurable results in achieving organizational goals, met a demonstrated need, have appropriate design values, and are clearly aligned with other performance improvement initiatives. The criteria for evaluating the Excellence in Practice recipients are: (a) needs identification (15% of evaluation) indication that the practice was an appropriate response to the problem or need; (b) design values (15%) evidence that the intervention was designed and implemented in a way that considered the best interests of the organization as well as those of employees; (c) alignment (15%) evidence of, and degree of alignment with, other training, learning, and performance improvement, practices, as well as organizational goals, to achieve desired outcomes, evidence of partnerships within and outside the organization (e.g., with senior management, frontline supervisors, unions, external resources, etc.); (d) evaluation strategy (20%) evidence of a clear,
measurable, and feasible evaluation plan; (e) results (25%) evidence of actual or anticipated individual/team impact, evidence of actual or anticipated organizational impact; and (f) shared learning (10%) indications that this practice can be transferred and replicated in other organizations; extent of the diffusion of this practice in the field; and opportunities for other professionals to learn from this practice (ASTD EIP Criteria, 2004) (C. Chulew, personal communication, December 12, 2004).

Section Summary

In this section, the first step—‘developing plans and specifications for collecting factual incidents’—in the five-step CIT process for collecting critical incidents was discussed. The population of the exemplary performer and the selection procedure used (purposeful sampling) were explored, concluding with the nominator criteria for the BEST and EIP awards. Described next is the process followed during the pilot study.

The Pilot Study

Because the study was exploratory in nature, the researcher and the ASTD personnel collaboratively recommended a pilot study as agreed upon during a peer review and debriefing meeting held in November 2004. (The peer review meetings are discussed later in this chapter.) The researcher utilized the data collected from the first two interviews in the pilot study. This pilot study allowed the development of the larger study. Pilot studies generate an understanding of the people to be studied by testing the researcher’s ideas and methods (Maxwell, 1996). Performing a pilot study allowed the researcher to make the necessary changes and updates to the interview guide and protocol.
During the two pilot interviews, the researcher asked the interviewees the following questions to aid in the development of the interview guide: “As part of the interview, what additional questions would you have liked to have been asked?” Pilot interviewees numbers 1 and 2 did not have any recommendations. In consultation with personnel at ASTD and Thomson Prometric, the researcher’s peer review team and with approval from the chair of the researcher’s doctoral committee, the researcher decided to include the following questions in further interviews in the study. In an effort to collect or identify measurable criteria by which the researcher could judge or calculate future exemplary performance (standard performance criteria that is currently not available that is major limitation to this study), the researcher used the question formed as, “What are the measurable outcomes (qualitatively and quantitatively) used by which your performance or productivity is judged?” In an effort to obtain the environmental factors that exemplars come up against in being exemplary, the researcher added, “Can you identify constraints that an exemplary would come up against in trying to be exemplary?” The researcher also added the questions, “Do you think time is “the” or “a” factor that separates exemplary performers?, How did you achieve such status?”, and Was this learned or was this something innate?” This information helped the researcher to hone in on and explore such beliefs about ‘time in the job’ and ‘other factors’ that may lead to exemplary status not being defined in the questions in this study but as an effort to explore and identify the variables that are the limitations in our exploratory study at hand.

It was also worthwhile to note that the reality was that the information gleaned from the two interviews in the pilot study was not substantively different from the 21 exemplars subsequently interviewed. Thus, after a discussion with the methodologist
member of the doctoral committee, it was decided to include, in the larger data set, the information from the two pilot interviews. The nomination letter and nomination form were developed in collaboration with personnel at ASTD and Thomas Prometric, Inc.

The Pennsylvania State University is committed to the protection of the rights of human subjects in all research projects, which includes the protection of rights to privacy, the need for informed consent, the protection of confidential data and protection against physical, psychological, spiritual social or legal risk. With permission from the Pennsylvania State University’s Office for Research Protection-Human Subjects Review Board, initial IRB # 20045 approval was provided on 30 November 2004 for the pilot study; 15 February 2005 for the modifications to the interview guide based on the pilot study; 7 July 2005 for a second modification to include interviews with two groups (exemplars and non-designated); and a final modification on 22 July 2005 to increase the number of participants from 10 to 50.

Nomination forms were sent back to the researcher via U. S. mail, fax, and e-mail. The researcher contacted each person who was nominated by phone or e-mail and asked them to participate in the study. If the participant agreed, a date and time for the phone interview were determined and an informed consent form was either faxed, e-mailed or both to the participant. After the informed consent forms were returned to the researcher, the participants were interviewed. (See interview guide and behavioral questions in Appendix C.)

The interview guide and form are discussed further in the data analysis section. The analysis of the pilot study revealed the need to revise one or more of the study’s data
collection instruments. The information obtained from this pilot study was used to update and amend the instrument, data collection methods and data analysis reports.

Section Summary

In this section, the first step in the design of the data collection process was discussed. The reasons for the use and implementation of a pilot study were presented.

This section covered population size and sample size, concluding with the nomination process design and letters and forms used in the nomination process and the design of the interview survey instrument. Next, an analysis of the data collection process is discussed.

Step 2: Collecting Episodes/Critical Incidents

Two data collection methods, observations and interviews, are often used with the CIT approach. According to Stitt-Gohdes et al. (2000), “Observations are useful when examining unambiguous overt behavior, but are not appropriate for covert behavior” (p. 65). Due to the time and expense that would have attended the observation of all 32 performers at their geographic locations, the researcher decided that face-to-face interviews would be an inefficient use of time. Spencer and Spencer (1993) stated, “Most people experience only a few critical incidents a year in their job. It would take a lot of observation time to have a chance of seeing something important” (p. 104). The researcher used semi-structured BEI phone interviews to collect the critical incidents. Each participant decided on the date and time convenient for the 60- to 90-minute interview. “Within the limits set by the standard procedure, interview length does not affect competency scores” (McClelland, 1998, p. 332). The participants were told that the interview would be digitally audio-taped for transcription; “in audio taping interviews, interviewer reliability can be monitored by examining the questions used by the
interviewers” (Stitt-Gohdes, 2000, p. 66). The Behavior Event Interview (BEI), a process of collecting incidents used with the CIT method, was the most feasible way to discover covert differences between two types of job incumbents. The two incumbent are “those who have been nominated by knowledgeable judges as outstanding (O) and those who have been nominated less often or not at all (referred to as typical, T)” (McClelland, 1998, p. 334).

Three basic approaches to interviewing differ mainly in the extent to which the interview questions are determined and standardized beforehand: the informal conversational interview; semi-structured interview; and the standardized open-ended interview (Marshall & Rossman, 1999). Each approach served a different purpose and has different preparation and instrumentation requirements.

In the informal conversational interview, questions emerge from the immediate interview conversation with the participant and no predetermined questions are used. The major weakness in the informal conversational interview is the collection of different information from participants, making data organization and analysis difficult (Patton, 2002). In standardized open-ended interviews, the exact wording and sequencing of all questions are predetermined and represented as all open-ended formats. This offers the researcher little flexibility and limits naturalistic inquiry and relevance (Patton, 2002). The semi-structured interview approach allowed for topics and issues to be discussed in an open framework. This provided a more focused, conversational, two-way communication. Both the interviewee and interviewer could diverge in order to pursue an idea in more detail. In order for the researcher to collect critical incidents (i.e., CIT
method use) and overt behavior from those incidents (i.e., BEI use), the semi-structured interview protocol was used because it allowed for the use of probing questions.

Qualitative methods in data collection play an important role in impact evaluation by providing information useful to understanding the processes behind observed results and assessing changes in people’s perceptions of their well-being (Marshall & Rossman, 1999). This study was labeled as semi-structured (Stewart & Cash, 2000) because the interview contained open-ended and probing questions that followed major questions.

During the second research step, the collection of critical incidents, the interviews were audio-taped using a Sony® IC Digital Recorder connected to the researcher’s office telephone. Audio-recoding the interview ensured that all words were recorded during the transcription and were “invaluable for capturing the exact nuances of interviewees’ motive and thought process” (Spencer & Spencer 1993, p. 118). The first transcription was reviewed and first transcribed using Dragon Naturally-Speaking Preferred® software 7.2 on the researcher’s office PC. The researcher, prior to the first transcription, had voice-trained the software for active recognition of the transcripts. The limitation in using the Dragon Naturally-Speaking was that the voice reconnection process helped, with approximately 85% accuracy in recognition, in transcribing the researcher’s voice but only about 10% in recognizing the interviewee’s voice. Due to this major limitation, which was not anticipated prior to the first interview, time spent in training the voice recognition software for use in 20 or more sessions and with 20–30 different individuals would adversely affect the project. The researcher employed a local transcriptionist, with ten years of experience who was employed by a local eastern private university in Pennsylvania, in the transcription of all 31 interviews.
Transcribed interviews were returned to the interviewee via e-mail attachment in Microsoft Word® to be checked for accuracy. Stitt-Gohdes et. al (2000) suggested that “cross checking interviewees helps ensure that inadvertent speaking errors are caught-interviewees also get confirmation of genuine concern for capturing an accurate representation of their views” (p. 66). The results of the analysis and interpretation of the study are presented in the next two chapters.

Section Summary

In step 2, the collection of critical incidents was discussed. The Behavioral Event Interview (BEI) was used in collecting the critical incidents using the CIT. Use of the BEI to complement the CIT method in obtaining motive and traits to expand the CIT was discussed. The interview guide design and use and the process for collecting the data using a transcriptionist were discussed. Next, step 3, the identification of clusters and themes in this study, is discussed.

Step 3: Identify Themes in Critical Incidents

With regard to themes and categories, Flanagan (1982) suggested that, “The preferred categories will be those believed to be most valuable in using the statements of requirements” (p. 22). The foundational competencies identified by the most current 2004 ASTD competency study was the most valuable source for the theme development process. Foundational competencies as stated in the 2004 ASTD Mapping the Future study were defined as follows:

- Competencies are clusters of skills, knowledge, abilities, and behaviors required for job success. Managers need to know about competencies to make appropriate personnel decisions and guide employees’ performance.
Employees need to know about competencies because they provide a road map of how to succeed on the job. (p. 51)

The 2004 ASTD Mapping the Future study identified the following set of competencies considered important and necessary for the majority of individuals in the Workplace Learning and Performance (WLP) profession (ASTD, 2004b)

They were:

(a) Analyzing Needs and Proposing Solutions, (b) Applying Business Acumen, (c) Building Trust, (d) Communicating Effectively, (e) Demonstrating Adaptability, (f) Driving Results, (g) Influencing Stakeholders, (h) Leveraging Diversity, (i) Modeling Personal Development, (j) Networking and Partnering, (k) Planning and Implementing Assignments, and (l) Thinking Strategically. (¶ 20)

ASTD grouped these competencies into clusters to facilitate understanding. The following three clusters were used as the basis for the final theme development analysis that included (a) Business/Management, (b) Interpersonal, and (c) Personal. The clusters were used to form final categories linked to the ASTD competencies for coding from the interviews, inclusive of the described exemplary incident and average performer incident. The researcher also noted algorithms, or “superior performers’ rules of thumb, behaviors or strategies for handing important tasks or situations.” Algorithms are not competencies, but are usually evidence of two or more competencies used together or in a sequence” (Spencer & Spencer, 1993, p. 145). The researcher planned to use a tentative code book list developed using the transcripts from the two interviews used in the pilot study, in an effort to have a planned open coding procedure. The original plan was to perform open
coding and let the information from the interviews drive the identification of the groupings and categories. In reality, after the researcher consulted (during one of the peer debriefing sessions for the validation process that will be discussed later) with ASTD personnel on this process, themes were identified by nine AOE Champions on 4 March 2005 and were used in the first part of the coding process. The data collected addressed four segments or themes as identified by ASTD for their Core Work Product development team. The themes used were as follows: Plan, Output, Outcomes, and Project Relationships. Flanagan suggested that “one rule is to submit the tentative categories to others for review” (Flanagan, 1982, p. 30). A theme worksheet or guide was used in coding and categorizing the information from the transcripts. This guide defined each theme as follows:

- **Plan** (documentation that supports the planning effort for the work product submitted)
  - Identify needs, requirements and or opportunities
  - Collect and analyze data
  - Design solutions
- **Output** (evidence of the work product itself)
  - Implement solutions
  - Manage resources
- **Outcomes** (documentation of results during and following the implementation)
  - Monitor progress
  - Evaluate results
  - Provide feedback
- **Project relationships**
  - Model or champion the function
  - Engage others (e.g., communicate, collaborate, and coordinate; build relationships, involvement, and support)

*Section Summary*

The section contained a report on the development and use of the themes and codes in collecting the data for step 3 in collecting critical incidents. This section also
contained a description of a change in the proposed methods for theme development. Next, sorting the CIT incidents into categories—step 4—and interpreting and reporting results—step 5—are discussed.

**Step 4: Sorting Incidents into Proposed Content Categories**

The researcher intended to use open coding, which involved naming the core category or central phenomenon of the study, in sorting the data. The researcher chose to analyze data based on preferred methods in consultation with ASTD and Thomas Prometric personnel. Wallick argued, “there was no one preferred set of strategies for analyzing data” (2001, p. 115).

In order to prevent or reduce potential bias and create reliability in the data analysis process, a second analyst was used in this study to conduct the double-coding process (Miles & Huberman, 1984). “Definitions get sharper when two researchers code the same data set and discuss their initial difficulties” (Miles & Huberman, 1984, p. 60). Beck, Gordon, and LeBailly (1984) (as cited in Miles and Huberman, 1984) stated, “multiple coding is actually useful in exploratory studies” (p. 63). The second analyst was a Ph.D candidate in the Workforce Education and Development (WFED) program at the Pennsylvania State University. The second analyst was chosen for two reasons: (1) familiarity with the domain of knowledge in WLP, and (2) current academic qualifications and personal experience in the coding process with two other projects. Each analyst used the same worksheet guide on categories and their definitions to separately evaluate each completed interview. After the coding was completed, the results were compared for reliability. Agreement was 97% between coders. The responses that caused the initial 3% disagreement were placed into mutually accepted
categories during a discussion between the coders in resolving differences in opinions.

An Excel spreadsheet was used in coding for this study. The researcher used the four
titles: Plan, Outputs, Outcomes, and Project Relationships—titles should convey
meanings in themselves without the necessity of detailed definition, explanation, or
differentiation” (Flanagan, 1982, p. 30).

In coding the transcribed interviews, a letter was assigned to each incident and
was written in on the transcribed text next to the incident, linking the incident to the four
titles listed prior (Stitt-Gohdes et al., 2000). For demographic questions in section I
(questions 1, 2, 3), section II (questions1, 2, 3, 5), and section V (questions 4a, 4b, 4c, 4d)
of the interview guide, information in the left row was used as the interviewee row and
the columns were used for the interview question. Upon completion of the coding
procedures, the percentage of agreement between the two coders indicated high reliability
in the coding procedure. Data analysis using an inductive process (Woolsey, 1986)
following Flanagan’s (1954) procedures for storing data was used in this study. Content
analysis was used to analyze the data (Ellinger, 1997), with the interview acting as the
unit of analysis. It was the researcher’s intent to “identify rather than quantify” (p. 70)
themes that emerged from the CIT interviews (Stitt-Gohdes et al., 2002).

The data collected addressed four segments or themes identified by ASTD for
their Core Work Product as described in step 3. Axial coding was used to link the
identified categories (Plan, Outputs, Outcomes, and Project Relationships) and then the
final competencies, grouped in the following three clusters: (a) Business/Management,
(b) Interpersonal and (c) Personal competency clusters as identified in the 2004 ASTD
Mapping the Future. Axial coding is generally used in the context of Grounded Theory
research. This type of coding process builds connections within categories and between categories and sub-categories. Much like the spokes on a bicycle wheel, this process serves as a connection in the theoretical framework of data analysis (Miles & Huberman, 1984). Patterns of recurring words and phrases gave rise to axial codes for both data sources, linking the themes to the 2004 *Mapping the Future* foundational competencies.

The researcher and the second coder [analyst] used the axial coding process to link the information from the transcript to the identified fundamental competencies for each AOE interviewed. Again, the results were compared for reliability. A 97% agreement between coders was found as a result of this comparison.

*Step 5: Interpreting and Reporting Results*

The researcher was able to interpret the findings while considering both the original research questions and the conceptual base for the study (Stitt-Gohdes et al., 2002). A visual aid called the Gowin’s Vee (Novack, 1998) was used to both help draw conclusions from the research project and during the interpretation (Stitt-Gohdes, Lambrecht, & Redman, 2000).

Gowin’s Vee, as depicted in Figure 3.2, started with the researcher’s questions at the top of the Vee. The researcher was able to “make knowledge claims based on the conceptual base described on the left side of the Vee” (Stitt-Gohdes et al., 2000, p. 73). “The critical incident interviews provided the objects to be studied. The theme codes and cross tabulations provide the foundation for the knowledge claims and subsequent value claims” (Stitt-Gohdes et al., 2000, p. 74). The researcher used the Gowin’s Vee as a basis for drawing themes and conclusions (see Figure 3.3).
The researcher reviewed the digitally transcribed interviews and made changes and updates to the transcription as needed. Following each interview, transcriptions were made; incidents were categorized into the four AOE segments or themes as identified by the ASTD. Each incident was labeled with an alphabetical (one or two letter) ending indicator to denote the location of the incident in the transcribed text interview to allow for further clarification as needed. The ASTD Core Work Project did not intend to have the researcher analyze the data but instead to have the report and identify the exemplary
Figure 3.2 Gowin’s Vee (Novak, 1998, p. 82) Copyright permission granted.
**Conceptual Theoretical**

(Thinking)

- **World View**: Empirical analysis of competency studies provides guidance when performance is the goal.

- **Philosophy/Epistemology**: HRD and WLP competency interpretation can ascertain key elements and provide insight for education and training.

- **Theory**: Professional WLP competency model

- **Principles**: Critical incidents, key job aspects within the four AOE settings.

- **Constructs**: Holistic competencies, employee interpretation of job expectations, exemplary and average performers

- **Concepts**: Job Category of "the four AOE" in WLP, critical incidents, concepts contained in the process of the CIT inquiry (Chapter 1).

---

**The Knowledge Vee**

- **Focus Questions**:
  - What are the competencies or characteristics that uniquely distinguish best-in-class practitioners ("superstar") and exemplary level performers in WLP from fully-successful (qualified) in the four Areas of Expertise (AOEs)?
  - What knowledge, skills, attitudes, and other attributes does a "superstar" WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the four Areas of Expertise (AOEs)?

---

**Methodological**

(Doing)

- **Value Claims**: Conclusions about the differences between exemplary and average WLP performers; implications for how ASID can use to for the knowledge part of the professional certification exam.

- **Knowledge Claims**: Answers to the main inquiry questions as outlined in Chapter

- **Transformations**: Themes, codes, frequency of occurrence, cross-tabulations of themes.

- **Records**: Transcripts of interviews.

---

**Events/or Objects**: Critical Incident Interviews and HRQ questions

---

*Figure 3.3: Gowan's Vee of Characteristics Differentiating an Average Performer or Typical (Fully-Successful) and a Superior Performer, Best-In-Class (Exemplar) in the four AOE in WLP.*

Each participant was asked to supply limited demographic data and report two separate Critical Incidents, framed first as ‘exemplary’ and then as ‘average’. Respondents were asked to identify the competencies (i.e., behaviors and characteristics) that uniquely distinguish someone in their Area of Expertise if he or she were to be considered exemplary or a superstar (best-in-class). After confirming completed responses, using the BEI probing interview questions, participants identified, through a critical incident, those competencies that uniquely distinguished someone in their area of expertise (i.e., areas of knowledge, skills and/or abilities) if he or she were to be considered qualified or fully successful (average). The researcher verified that the following information, obtained through the BEI probing questions, was covered during the CI story: (a) a description of the situation that led to the incident, (b) the actions or behaviors of the focal person in the incident, and (c) the results or outcomes of those actions (Whetzel & Wheaton, 1997). What led up to the situation?, Who was involved?, What did you think about, feel, and want to accomplish in dealing with the situation? What did you actually do? What happened? Who was involved? What did you actually do? What happened? What was the outcome of the incident?” (p. 5).

Given these pieces of information, an interpretation of the effectiveness of the actions could be made (Whetzel & Wheaton, 1997). The description of the situation was important because it helped the analyst to understand the circumstances, anticipate certain actions, and rationalize why certain actions were or were not taken. It included information such as the type of industry, type of job, specific tasks being performed,
environmental conditions, and relationships among others in the situation. Descriptions of the action are important because they reveal information on the behavior of the focal person (Whetzel & Wheaton, 1997). Descriptions of the outcome are important because they provide the basis for inferences on the effectiveness of the behavior and the skills needed to enact the behavior. “All three descriptions allowed for verification of the plausibility of the presumed relationship between the actions and the outcomes” (Whetzel & Wheaton, 1997, pp. 89–90).

Finally, at the close of the interview, the researcher asked for a “nomination” of an “average” or “typical” (McClelland, 1989, p. 332) WLP performer based on the area of expertise the exemplary performer was nominated in the nondesignated comparison group. This second-tier nomination process identified typical or average (i.e., fully successful) performers in their field. The researcher then compared both groups to contrast the differences. “The comparison of ‘O’ [outstanding] and ‘T’ [typical] groups allowed the development and definition of competencies that differentiated the two groups” (McCelland, 1998, p. 332). The researcher used this type of comparison or contrast to confirm conclusions and findings. Miles and Huberman (1984) suggested using “contrasts/comparisons” to check the quality of the data called the “Method of Difference” (p. 237). The method of deference, which dates back to Aristotle, is “the contrast between experimental and control groups” (p. 237).

Section Summary

This section contained a report on the process followed by the researcher to sort the critical incidents into identified categories—step 4. The researcher, and the second analyst chosen to code the study to reduce bias, used codes, a plan, outputs, outcomes and
projects relationship and then grouped the incidents into the 2004 foundational competency clusters: Business/Management, Interpersonal and Personal. The axial coding process linking the incidents into final categories and themes was discussed.

This section also contained a description of step 5—interpreting, and reporting results. The researcher discussed the process flow chart, Gowin’s Vee, used to draw conclusions during the data collection procedure. A review of the coding process using the transcribed transcript with labeling procedures was provided. The collection of demographic data, critical incidents using the BEI questioning procedure, and the second-tiered nomination process used for the typical performer were described. In the next section, the comparison group interview process is explored further.

The Comparison Group of Typical Performers

As identified in chapter 2, the researcher needed to interview a comparison group—a group neither identified as Exemplary nor Average (i.e., ‘typical’ in the 1998 McCelland study) by which the researcher could perform a compare-and-contrast analysis to identify similar and different practices for each performer. Spencer and Spencer (1993) noted that a “small sample should include two superior performers for every 1.5 average performers” (p. 97).

The selection of these typical performers came from the “exemplary” performers’ interviews. At the end of the interview the researcher asked each nominated exemplary performer the following question (see interview guide Section V: Closing Questions, Question number 4): Could you at this time recommend a performer in your area of expertise that I can interview to give us a critical incident (or story)? In a verbal preface it was stated that the researcher was not looking for specific types of performers for this
second group [the comparison group]. Nine performers were identified and interviewed. It should be noted here that many of the exemplary performers were very apprehensive about this nomination process. Based on the reactions received, the researcher concluded that the perceived implication of not being identified as exemplary would lead one to conclude that they were average. The researchers used the same contact procedures to secure interviews with the comparison group that had been used with the exemplary population.

Two major differences need to be mentioned regarding the interview. First, all references to the term “exemplary” were removed from the question part of the interview guide. The researcher did not refer to the performer with any qualified status other than working in one of the four AOEś in the study. The second modification was that because the researcher could not qualify them as either exemplary or average, only one critical incident required framing as follows: Based on the following AOE (researcher stated the AOE here) for which you were nominated, take a moment and think of a time or an event that would best describe for me your performance. Describe to me all the events from start to finish, bring it to life for me.

Section Summary

The section contained a review of the procedure used to identify the nine WLP performers in the comparison group for the study. Two major changes in the process were discussed. First, the word exemplary was removed from the interview process. Second, the reason for only collecting one critical incident for the comparison group was discussed. Qualitative constructs for the verification processes for confirmability,
dependability, credibility, trustworthiness, and transferability in this study are presented next.

Qualitative Constructs

The researcher must demonstrate, “Quality constructs of establishing trustworthiness, credibility, transferability, dependability, and confirmability” (Wallick, 2001, p. 123) as a final step in exhibiting acceptance of the study. Lincoln and Guba (1982) also used these terms as “the naturalist’s equivalents for internal and external validity, reliability, and objectivity” (p. 300). Rather than reliability, or validity, a qualitative researcher should seek confirmability, dependability, credibility, trustworthiness, and transferability (Creswell, 1998). Creswell (1998) suggested that researchers “use the term verification instead of validity because verification underscores qualitative research as a distinct approach, a legitimate mode of inquiry in its own right” (p. 201).

Procedures of Verification of Study

Some of the literature revealed that the reliability and validity of the CIT method had been called into question during the first decade of use (Bengt-Erik & Stig-Göran, 1964). However, if the method is constructed and distributed in a detailed and proper format, it has demonstrated reliability and validity (Andersson & Nilsson, 1964, pp. 398–403; Levine, Ash & Bennett, 1980, p. 532; Ronan & Latham, 1974, pp. 53–64; White & Locke, 1981, pp. 375–387).

“CIT has ratings from participants that suggest higher representational quality” (Levine, Ash, & Bennett, 1980, p. 532). This observation is based on actual reports of behavior – “not opinions or impressions” (Norman, Redfern, Tomalin, & Oliver, 1991, p.
“allows for perceptive differences to be categorically aligned” (Edvardsson & Roos, 2001, p. 254). CIT is inductive in nature (Edvardsson, 1992), based on a real-world setting (Edvardsson, 1992) and was most likely to capture a more holistic picture of the workplace in professional terms (Redmann, Lambrecht, & Gohdes, 2000, p. 138). Data collected from the CIT method were from the respondent’s perspective (Edvardsson, 1992), were “easier for respondents to understand” (Swan & Rao, 1975, p. 305) and did not limit observations to a specific set of variables (Walker & Truly, 1992). CIT is very useful when (a) the topic being investigated has limited previous research (Grove & Fisk, 1997), and (b) thorough exploration is needed (Bitner, Booms, & Tetreault, 1990). “The CIT method provides relevant, unequivocal, and very concrete information for managers” (Strauss, 1993) and could suggest practical areas for improvement (Odekerken-Schroder et al., 2000) (as cited in Gremler, 2004, p. 67).

Several researchers found the “CIT method to be both valid and reliable” (Andersson & Nilsson, 1964, pp. 398–403; Levine, Ash, & Bennett, 1980, p. 532; Ronan & Latham, 1974, pp. 53–64; White & Locke, 1981, pp. 375–387). Further, Wong and Sohal (2003) discussed the reliability and validity issue and concluded that the “reliability and validity problems are outweighed by depth of descriptions and the ability to extrapolate process descriptions” (pp. 249–251). In “comparing four methods of forming job analyses”, Levine, Ash, & Bennett (1980, p. 532) found that the “CIT method was rated higher on completeness and quality than the other three methods”. Byrne (2001) summed up her discussion with the following: “Critical incident technique can provide insight into nursing issues when used with rigor and when appropriate rationale is provided for data collection, interpretation, and analysis” (p. 539).
Reliability deals with questions of the replicability of the researcher’s findings; thus, “the given data collected, the results make sense - they are consistent and dependable” (Merriam, 1998, p. 170). In this study, the researcher employed the “audit trail” (Merriam, 1988, p. 172) to establish confirmability, transferability, and dependability (i.e., reliability). In using this method, the researcher fully disclosed and described the data collection methods, the themes and categories, and decision-making process used throughout the study so that other researchers could use information contained in this thesis to replicate the study (Merriam, 1998).

Ensuring construct validity (Yin, 1984) or internal validity as described by Merriam (1998) could include a variety of tactics to crosscheck data and conclusions. Collection of multiple incidents from each respondent was employed to increase the Credibility and Trustworthiness (i.e., validity) of the findings (Creswell, 1998). The extent of the validation depends upon the available resources and the purpose in developing the model (Dubois, 1993).

Creswell (1998) suggested eight verification (i.e., validity) procedures for qualitative studies and recommended that research employ at least two in any given study (Creswell, 1988). The eight procedures were:

1. “Prolonged Engagement… includes building trusts with participants, learning the culture, and checking for misinformation that stems from distortions” (p. 201).
2. “Triangulation… making use of multiple and different sources, methods, and theories to provide evidence” (p. 202).
3. “Peer Review or Debriefing…external check” where both “keep written accounts of the sessions” (p. 202).
4. “Negative Case Analysis”, the researcher refines working hypotheses as the inquiry advances” (p. 202).

5. “Clarifying Research Bias”, comments from the researcher “on past experiences, biases, prejudices that may have likely shaped the interpretation and approach of the study” (p. 202).

6. “Member Checks”, the researchers solicits informants’ views of the interpretations and findings (pp. 202-203).

7. “Rich, Thick Description, allows the reader to make decisions regarding transferability”… “Where the writer describes in detail the participants or setting under study” (p. 203).

8. “External Audits”… allows an external consultant, the auditor, to examine both the process and the product of the account assessing their accuracy” (p. 203).

The researcher employed both the Peer Review and Debriefing and the External Audit and a modified Member Check to verify the study.

In a member check, the researcher “solicits informants’ views of the credibility of the findings and interpretations” for the study (Creswell, 1998, p. 202). Here participants would play a major critical role in rough drafts and interpretations. Due to time constraints and the confidential nature of the data needed for ASTD’s exam development, only rough drafts were reviewed. Each interviewee was sent the transcribed interview to judge its accuracy and synthesis of the accounts in the BEI questions and Critical Incident. Due to the exploratory nature of this study, in identifying exemplary practices by which to justify a person’s inclusion in the “exemplary” category, verification, in this sense, would contribute to the methods employed and the conclusions drawn in this
study. It was the intent of this researcher to proceed with the ongoing process of verification at the conclusion of the study.

In the peer review and debriefing process, “much in the same spirit as interrater reliability in quantitative research” (Creswell, 1998, p. 202), the researcher utilized three peers. Collectively, the peer review process helped the researcher to define “hard questions about the methods, meanings, and interpretations” (p. 202). All debriefing sessions were held via conference call either individually or in a group conference call with 13 debriefing sessions. The first debriefing was held on 30 January 2004; a final debriefing was held on 28 November 2005. Each session was pragmatic and helped to define and guide the researcher’s methods and practices throughout the study.

Peer one is the manager for ASTD’s 2004 Competency Study and has more than 12 years’ experience in the human resources and training field and specializes in research and personal selection, large-scale data collection, job analysis, and competency modeling. Peer one holds Senior Professional in Human Resources (SPHR) certification and a master’s degree in human resources development.

Peer two is a director working in the area of job analysis and consulting at Thomson Prometric and has more than 25 years of relevant experience. Peer two has been directly or indirectly involved in the development and validation of more than 100 different business-related test titles, both for corporations and professional associations. She holds Senior Professional in Human Resources (SPHR) certification, a master’s of business administration and a second master’s degree in linguistics.

Peer three is the chair of the researcher’s dissertation committee and a tenured professor in Workforce Education and Development. Peer 3 specializes in succession
planning and competency modeling and has served more than 35 multinational corporations. He holds a M.A. in English and a Ph.D. in education with a specialty in human resource development. A Registered Organization Development Consultant (RODC) and a Senior Professional in Human Resources (SPHR), he has authored over 70 articles on human resource development and related fields.

Two major decisions were made during the debriefings. First, open coding was not going to prove beneficial to the ASTD Certification development team. The team needed to base the Core Work Product on measurable criteria for the submission of a work sample. It was agreed that categories used in the coding and sorting process would be (a) Plan, (b) Outputs, (c) Outcomes, and (d) Project Relationships. Axial coding would then link similar practices from the first set of themes to the foundational 2004 ASTD competencies. The second major decision was to interview “average” or “typical” performers of the same AOE s identified. This would help to solidify the differences in the “exemplary” and “average” performer while also employing an ongoing verification process in the nomination procedure used for future studies. “The comparison of ‘O’ and ‘T’ groups allows the development and definition of competencies that differentiate the two groups” (McCelland, 1998, p. 332).

In the external audit process, “the auditor should have no connection to the study… [They] examine whether or not the findings, interpretations, and conclusions are supported by the data” (Creswell, 1998, p. 203). One qualified auditor conducted the external audit for this research study. The auditor holds a Ph.D. in workforce education and development and is an associate professor of human resources. The auditor has taught undergraduate and graduate courses in human resources on a variety of topics such
as research methods, training methods, performance appraisal, selection methods, and HR ethics. The auditor has published based on qualitative research methodology, has 30 years of experience working in the HR and training field, and was chosen for his expertise in both of these areas. The audit took place during the week of 20 December 2005. The auditor reviewed the study in its entirety. The auditor had two suggestions. First, the auditor believed that some of the words chosen to highlight in bold, in supporting each category, did not accurately reflect the title of each category. The second suggestion was to limit the number of words highlighted in bold. He recommended that researcher be more “prudent” in selecting words that would help to engage the reader in consistent clarification and confirmability of each category. The researcher reviewed, with the auditor, the categories in question and agreed with the auditors’ suggestions. The researcher reviewed and modified each category until consensus was reached.

Section Summary

This section presented the qualitative constructs used to establish the trustworthiness, credibility, transferability, dependability, and confirmability of the study. The literature was cited to give support to the verification (i.e., reliability and validity) used in the CIT method. For confirmability, transferability, and dependability, (i.e., reliability), the researcher used the “Audit Trail”, giving detailed accounts of the research process for ease of study replication (Merriam, 1998). Creditability and trustworthiness (i.e., construct validity) were employed by collecting multiple critical incidents. The researcher also employed the Peer Review and Debriefing, External Audit, and a modified Member Check as additional verification (i.e., validity) procedures.
Limitations

A major limitation of the CIT method was time and cost. The “CIT method has been found to be more time consuming” (Swan & Rao, 1975, p. 305) and “more costly” (Levine, Ash, & Bennett, 1980, p. 531). Due to time constraints that would adversely affect the data and the confidentiality of the design of the core work product project, verification of the critical incidents themes cited by the nominated participants nominators needs to be completed further to substantiate the researcher’s conclusions. The researcher contacted the interviewees and the ASTD award winners who recommended the nominated participants for interviews, to obtain their willingness to participate in the ongoing process of validation through a second survey instrument. The goal of this second survey was to confirm that the incidents identified by each of the AOE exemplary participants were shared and clear. During this process, study participants (both nominator and nominee) would have been asked to perform the important role of verifying that all of the major distinguishing competencies found in this study were valid for use in identifying an exemplary performer in WLP.

Another limitation raised in the literature review was the CIT’s “reliance on the memory recall of respondents” (Swan & Rao, 1975, p. 305). However, if time and care are taken to coagulate, disseminate, and code the responses, recall of unsubstantiated responses can be virtually eliminated. In general, qualitative methods such as CIT are beginning to make a resurgence in research. Many researchers are looking for richer, more detailed information on workplace performance. The ability of CIT to provide this information within a social/cultural context is of great importance in disseminating information on workplace issues. The limitations of the CIT method seem to be
outweighed by its strengths. Specifically, “CIT was particularly adept at disseminating the events that lead to success or failure in a focused situation” (Redmann, Lambrecht & Gohdes, 2000, p. 149).

Section Summary

The section contained a description of two limitations in the study’s verification process. The first limitation was the inability to substantiate the conclusions drawn in this research due to time and confidentiality factors. The researcher plans to continue this verification process. The second limitation was the concern about memory recall of past critical incidents. The researcher and the peer debriefing review committee determined that the major strengths identified in the literature using this data collation method outweighed the limitations.

Chapter Summary

This chapter presented the methodology used in this study. The five-step process for conducting this qualitative study was presented. Detailed explanations of each of the five steps were provided, along with changes in the proposed methodology. The information presented in this chapter provided the logical link connecting the researcher’s questions and the study’s purpose as described in chapter 1, and the theoretical framework and review of the literature as outlined in chapter 2. The data results for this study are presented in the next chapter.
CHAPTER 4

Results

The purpose of this study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise as described in ASTD’s (2004) *Mapping the Future: New Workplace Learning and Performance Competencies.*

Rothwell, Sanders, and Soper (1999) stated it best when they wrote, “performance is the result of an effective interaction among the resources, the process, the people, and the environment” (p. 4). The first focus of the study concentrated on ‘the people’ aspect of this statement and furthermore identified the differentiating characteristics of performers who perform at higher levels (exemplary) than the average performer (fully-successful). The second focus of this study was to identify the competencies as measured by plans, outputs, outcomes, and project relationships (as determined through the 2004 *Mapping the Future Competency Study*) for the development of the core work product outcomes for the first Certified Professional in Learning and Performance (CPLP) exam to be delivered in the summer of 2005.

Profile of the Participants

The first set of participants for the study was 23 nominated exemplary performers in Workplace Learning and Performance. From this population eight individuals were interviewed for the Designing Learning AOE (Area of Expertise), five individuals for Improving Human Performance AOE, six individuals for Delivering Training AOE, and four individuals for Measuring & Evaluating AOE. (see Table 4.1)
The participants were contacted via e-mail to gain their agreement to participate in this study. The e-mail included, an attachment and the interview guide (see Appendix C) and the consent form (see Appendix C). All 23 participants (100%) agreed to participate, indicating a date and time for the anticipated interview. Each participant faxed to the researcher the consent to participate form prior to the scheduled interview. Exemplary interviews were conducted from December 2004 through May 2005. The individuals interviewed reflected diversity in such characteristics as gender, age, race, educational background, geography, and length of tenure in the position as depicted in the next section (see Table 4.2, p. 130).

**Exemplary Demographic and Employment Characteristic Information**

The following information was collected from the responses to questions in the interview guide: Section I. Job, questions 2, 3; Section II. Workplace, questions 1, 2, and 3; Section V. Closing questions, 5a, 5b, and 5c. Country demographic information indicated the place and location in which the interview call took place (country called). Country demographic information was not used as an indication to the possible global

Table 4.1

*Summary of Exemplar Participants in Each AOE (N=23)*

<table>
<thead>
<tr>
<th>Area of Expertise (AOE)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 23</td>
</tr>
<tr>
<td>Delivering Training</td>
<td>6</td>
</tr>
<tr>
<td>Improving Human Performance</td>
<td>5</td>
</tr>
<tr>
<td>Measuring and Evaluating</td>
<td>4</td>
</tr>
<tr>
<td>Designing Learning</td>
<td>8</td>
</tr>
</tbody>
</table>

The individuals interviewed reflected diversity in such characteristics as gender, age, race, educational background, geography, and length of tenure in the position as depicted in the next section (see Table 4.2, p. 130).
locations of the company. It was not the intent of the study to identify organizations but to select a diverse population with respect to country location.

The participants included 10 males (43%) and 13 females (57%). Seven participants were in the 25–34 age category; seven participants were in the 35–44 age category; seven participants were in the 45–54 age category; and two participants declined to answer this question. Eighteen participants identified themselves as Caucasian, four as Asian, and one as Indian. Participants’ highest educational background ranged from a Baccalaureate degree to a Master’s degree inclusive of at least one professional certification. Three participants held a Baccalaureate degree, two participants held a Baccalaureate degree plus at least one certification; eight participants held at Master’s Degree, 10 participants held a Master’s Degree and at least one professional certification. Participants identified the numbers of years they have been working in their current job title. Years in their current job title ranged from a high of 10 years to a less than one year. Four participants identified working in the area of Training and Development (T&D), Human Resource Development (HRD), or Workplace Learning and Performance (WLP); 2 participants work in the Consulting industry; one participant works in the Manufacturing industry; 14 participants work in the Professional or Financial Services industry; and 2 participants work in the Engineering or IT Services industry. The participants identified the approximant number of employees that are employed by their organization and ranged from a high of 70,000 or more to a low of 10,000 or less. One individual could not give an approximate number due to the many global locations hosted by the organization. Based on the country location the researcher called for the interview, 4 participants were located in China, 1 participant was contacted
in India, and 18 participants were located in the United States, representing the 
geographical regions. Table 4.2 (p.130) presents in a summary format the characteristics 
of participants.

*Non-designated Demographic and Employment Characteristic Information*

The comparison group population for the study was 9 nominated non-designated 
(*typical*) performers in Workplace Learning and Performance. From this population three 
individuals were interviewed for the Designing Learning AOE, two for Improving 
Human Performance AOE, three for Delivering Training AOE, and one for Measuring & 
Evaluating AOE. The individuals interviewed were diverse in gender, age, race, highest 
educational background, geography, and length of tenure in the position as depicted in 
the next section in Table 4.3., p.132.

The comparison group participants included 2 males (22%) and 7 females (78%). 
Two participants were in the 25–34 age category; 4 participants were in the 35–44 age 
category; and 3 participants were in the 45–54 age category. Six participants identified 
themselves as Caucasian, 1 as Asian, and 2 as African American. Participants’ highest 
educational background ranged from a Baccalaureate degree to a Master’s degree 
inclusive of at least one professional certification. One participant held a Baccalaureate 
degree, 1 participant held a Baccalaureate degree plus at least one professional 
certification, 2 participants held a Master’s Degree, 5 participants held a Master’s 
Degree and at least 1 professional certification. Participants identified the numbers of 
years they have been working in their *current* job title. Years in their current job title 
ranged from a high of 8 years to less than one year. Two participants identified working 
in the areas of Training and Development (T&D), Human Resource Development
(HRD), or Workplace Learning and Performance (WLP); 6 participants worked in the Professional or Financial Services industry; and 1 participant worked in the Engineering or IT Services industry. The participants identified the approximate number of employees who were employed by their organization, ranging from a high of 70,000 or more to a low of 10,000 or less. Based on the country location the researcher called for the interview; 1 participant was located in China, and 8 participants were located in the United States, representing all four geographic regions. Table 4.3 (p. 132) presents, in a summary format, the information for the comparison group study.
Table 4.2

*Summary of Demographic and Employment Characteristics of Exemplary Participants (N = 23)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>43</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>57</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>35-44</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>45-54</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>No disclosure</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>18</td>
<td>78</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Indian</td>
<td>1</td>
<td>04</td>
</tr>
<tr>
<td><strong>Highest Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Baccalaureate + Certification</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td>Master's degree</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>Master's degree + Certification</td>
<td>10</td>
<td>43</td>
</tr>
<tr>
<td>Certificates only</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td><strong>Years in Current Job Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 or less</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>2-3</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>4-5</td>
<td>10</td>
<td>43</td>
</tr>
<tr>
<td>6-7</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>7-8</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td>9-10</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T&amp;D/HRD/WLP</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Consulting</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
<td>04</td>
</tr>
<tr>
<td>Professional &amp; Financial Services</td>
<td>14</td>
<td>61</td>
</tr>
<tr>
<td>Engineer and IT Services</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td><strong>No. Employee's in the Organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000 or less</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>11,000 - 21,000</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>22,000 - 32,000</td>
<td>2</td>
<td>09</td>
</tr>
<tr>
<td>33,000 - 44,000</td>
<td>1</td>
<td>04</td>
</tr>
<tr>
<td>45,000 - 56,000</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>57,000 - 69,000</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>70,000 or more</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>04</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>India</td>
<td>1</td>
<td>04</td>
</tr>
<tr>
<td>USA</td>
<td>18</td>
<td>78</td>
</tr>
</tbody>
</table>
AOE Role Characteristics

Telephone interviews using Behavioral Event Interview-style questions were used to gather the critical incident (CIT) data for this study. The length of the interviews (N=32) ranged from a low of 27 minutes to a high of 82 minutes.

Exemplary Profile of AOE Role Characteristics

AOE role characteristic data collected from the exemplary population were collected from December 2004 through March 2005. All participants signed the required consent form and agreed to have the interview tape-recorded.

Prior to reporting the data results, it was imperative to provide further insight into the confidentiality and anonymity of the participants. The researcher has an obligation to provide anonymity and confidentiality to the participants. The researcher must assure participants that information collected will be stored and presented with both confidentiality and anonymity in mind. The distinctions between both terms were (a) “confidentiality means you [the researcher] know, but won’t tell” and (b) “anonymity means [the researcher] you don’t know, as in a survey instrument” (Patton, 2002, p. 408). In this study, the researcher had an ethical, moral, and professional obligation to protect
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>78</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>2</td>
<td>.22</td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>45-54</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>No disclosure</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>African American</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td><strong>Highest Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Baccalaureate + Certification</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Master's degree</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Master's degree + Certification</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Certificates only</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td><strong>Years in Current Job Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 or less</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>2-3</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>4-5</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>6-7</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>7-8</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>9-10</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T&amp;D/HRD/WLP</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Consulting</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>Professional &amp; Financial Services</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>Engineer and IT Services</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td><strong>No. Employee’s in the Organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000 or less</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>11,000 - 21,000</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>22,000 - 32,000</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>33,000 - 44,000</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>45,000 - 56,000</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>57,000 - 69,000</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>70,000 or more</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>USA</td>
<td>8</td>
<td>89</td>
</tr>
</tbody>
</table>
the participants (i.e., human subjects) who honored the researcher with their participation, providing the thick rich description needed. Unlike evaluation research, organizational research outside of scholarly work, “the researcher is interested in truth rather than action, it is easier to protect the identity of informants or study settings when doing scholarly research” (Patton, 2002, p. 273). Patton (2002) noted, “an interesting and readable report provides sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to allow the reader to appreciate the description” (p. 504). In this study, the welfare of the participants came first in reporting data. The principles of Professional Responsibility for the American Anthropological Association were used in reporting findings from the researcher’s data (1983, as cited in Seidman, 1998, p. 55) stated:

In research, anthropologists’ paramount responsibility is to those they study. When there is a conflict of interest, these individuals must come first. Anthropologists must do everything in their power to protect the physical, social, and psychological welfare and to honor the dignity and privacy of those studied.

Due to the distinguishing titles addressed in the following questions, the researcher concluded that to truly maintain the confidentiality of each participant it would not be prudent to report, in detail, these characteristics. The researcher gathered role characteristics from the following responses to the following questions from the interview guide: Section I. Job, questions 1, 4; and Section II. Workplace, questions 4, 5, 6, 7, and 8. These questions helped the participant develop rapport with the researcher in disclosing further information. Creswell (1998) stated,
“This group [grounded theory participants] needs to provide permission to be studied and needs to have rapport with the researcher to disclose detailed perspectives about responding to an action or process” (p. 117). Creswell (1998) suggested maintaining a composite picture (p. 132) of the participants rather than an individual picture by presenting general information, not specific information, thus protecting the anonymity of the informants. In reporting this information, the researcher reported in general terms based on the AOE as collected for both the exemplary group and non-designated comparison group. It is pertinent note that one participant in the sample size could significantly influence the mean (the reported average).

The following categories emerged in response to these questions due to the similarity of their content. The category of current job title in Section I, question 1 for Delivering Training AOE \((N = 6)\), 2 participants have the word “trainer” in their current job title, 2 participants had “learning” in the job title; and 1 participant had the phrase “HRD” in his or her job title. In question 4, job title held prior, 2 participants had the word “trainer” in their prior job title and only one participant had the word “learning” in his or her job title. In Workplace Section II, Question 4, name of department unit or division, two participants had the word “University” in their department’s name, and 2 participants had the word “Education” in their department’s name. In question 5, number of employees working in that department, the average was 22.2 with a low of 5 and a high of 53. In question 6, organizational reporting line, 3 of these departments report directly to HR. In question 7, supervision of staff, 3 participants supervised staff with an average number of 20, with a low of 10 to a high of 80 employees, and 3 participants reported no
to supervision of staff. In question 8, *title of the person they reported to directly*, no responses yielded any type of common names, titles, or themes.

The following categories emerged in response to these questions due to the similarity of their content. The category of current job title in Section I, question 1 for Designing Learning AOE (*N* = 8), 2 participants had the word “Designer” in their *current job title*, 3 participants had “Instructional” in the job title; 2 participants had the word “Senior” and 1 participant had the word “Learning” in the job title. In question 4, *job title held prior*, 2 participants had the word “Technology” in their prior job title and all other responses varied greatly. In Workplace Section II, question 4, *name of department unit or division*, 2 participants had the word “Learning” in their departments name; 2 participants had the word “University”; 2 had the word “Performance”; and 2 had “Education and Development” in their department’s name. In question 5, *number of employees working in that department* the average was 79 with a low of 18 and a high of 220. In question 6, *organization-reporting line*, 6 of these departments reported directly to HR. In question 7, *supervision of staff*, 3 participants supervised staff, with an average number of 13.3 with a low of 8 to a high of 85 employees, and 5 participants reported ‘no’ about supervising staff. In question 8, *title of the person they report to directly*, 3 participants report directly to a “program manager” and 5 participants reported to a person with the title of “Director” in their full title.

The following categories emerged in response to these questions due to the similarity in their content. The category of current job title in Section I, question 1 for Improving Human Performance AOE (*N*=5), 3 participants had the word “Manager or Management” in their *current job title and*, 2 participants had “Director” in their job title.
It is worthwhile to note here that none of the words in Improving Human Performance were listed in any of these titles except for one reference to the word “Human” as in title of “Human Resources”. In question 4, job title held prior, all 5 participants had the word “Manager or Management” and 3 participants had the word “Director” in their prior job title. In Workplace Section II, question 4, name of department unit or division, no responses yielded any type of common names, titles, or themes.

In question 5, number of employees working in that department, the average number was 131.60 with a low of 50 and a high of 500. One participant did not report the number of employees in his or her department because he or she was unsure of the number. In question 6, organization reporting line, 2 of these departments reported directly to HR and 2 departments reported to the “Chief Learning Officer (CLO)”. In question 7, supervision of staff, all 5 participants supervised staff with an average number of 8, with a low of 4 to a high of 6. In question 8, title of the person they reported to directly, 2 participants reported directly to a “Dean”, and 3 participants reported to a person with the word “HR or HRD” in their full title.

In Section I, question 1 for Measuring and Evaluating AOE (N=4) did not yield any type of common names, titles, or themes in their job title. It is worthwhile to note here that neither of the words Measuring or Evaluating was listed in any of the responses. In question 4, job title held prior, no responses yielded any type of common names, titles, or themes in their prior job title. The titles stated for the 4 participants for Measuring and Evaluating AOE were the lengthiest titles of the four AOE’s in this research, with each title having at least 4 words and with the lengthiest title having 8 words. In Workplace Section II, question 4, name of department unit or division, 3 participants worked in a
department with the word “Technology”, 2 participants responded with “Development” in their departments’ title, 2 responded with the word “Service”, and 2 responded with the word “Fulfillment”.

In question 5, *number of employees working in that department*, the average number was 116.2 with a low of 50 and a high of 300. In question 6, *organization reporting line*, 2 of these departments reported directly to HR. In question 7, *supervision of staff*, 2 participants supervised staff, with an average number of 3.2. In question 8, *title of the person they report to directly*, 4 participants reported directly to a person with “Manager” in their full title.

*Nondesignated Profile of AOE Role Characteristics*

AOE role characteristic data collected from the typical performer (i.e., nondesignated) were gathered from June 2005 to August 2005. All participants signed the required consent form and agreed to have the interview tape-recorded.

Due to the low sample count respective of each AOE from the comparison group (*N* = 9), similarities in their content could not be determined for each AOE for this group. The researcher realized this limitation prior to interviewing the comparison group and decided to continue to use the same questions in support of Creswell’s (1998) argument about the need to gain support and create a rapport with the participants in order to facilitate further discovery in collecting needed data.

*Summary of Results*

Semi-structured Behavioral Event Interview (BEI) questions were asked during the collection of the Critical Incident Technique (CIT) to gather data about distinguishing characteristics and behaviors of exemplary (best-in-class) and average (typical) WLP.
performers. The length of the interviews \((N=32)\) ranged from a low of 27 minutes to a high of 82 minutes. Data collected from the exemplary performer population were collected from December 2004 through March 2005. Data collected from the typical performer (i.e., non-designated) were gathered from June 2005 to August 2005. All participants signed the required consent form and agreed to have the interview tape-recorded. As noted earlier, the researcher assured the participants regarding their confidentiality and the protection of their anonymity. In this protection, the researcher identified the transcript with a numerical number only. Original names or department references, along with supervisors’ or incumbents’ names or distinguishing titles (titles that would overtly make a distinction), are not used in reporting the findings. The researcher could not include many of the complete quoted sentences since the participants refer to someone or something that could compromise the confidentiality. The researcher used [brackets] or ellipses points to “actively disguise the participants’ identity” in the noted verbal quotes that follow in chapters 4 and 5 (Seidman, 1998, p. 56). The researcher used brackets “when language not in the interview itself has been inserted” (p. 104) and ellipses points “when omitting material from a paragraph” [or sentence] (Seidman, 1998, p. 104). The researcher remained “respectful of the content and intended meaning of the participants’ words” (Fuderich, 1995; as cited in Seidman, 1998, p.105).

The researcher analyzed the data according to four segments or themes as identified by ASTD for its Core Work Product development team. The themes used as the primary coding system were as follows Plan, Outputs, Outcomes, and Project Relationships.
Plan (documentation that supports the planning effort for the work product submitted)
  o Identify needs, requirements, and/or opportunities
  o Collect and analyze data
  o Design solutions

Output (evidence of the work product itself)
  o Implement solutions
  o Manage resources

Outcomes (documentation of results during and following the implementation)
  o Monitor progress
  o Evaluate results
  o Provide feedback

Project Relationships
  o Model or champion the function
  o Engage others (e.g., communicate, collaborate, and coordinate; build relationships, involvement, and support)

When analyzed, these four segment themes helped to answer the two main research questions by linking each to the three foundational clusters: a) Business/Management, b) Interpersonal, and c) Personal. The research questions for the study are listed next.

1. What are the competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully-successful (typical/average) in the following four Areas of Expertise (AOE):

   1) Designing Learning
   2) Delivering Training
   3) Improving Human Performance
   4) Measuring and Evaluating
2. What knowledge, skills, abilities, and other attributes (characteristics) does a
   exemplary WLP performer need to possess in order to be considered outstanding (an
   expert practitioner) in the following four Areas of Expertise (AOE):

   1) Designing Learning
   2) Delivering Training
   3) Improving Human Performance
   4) Measuring and Evaluating

   Each nominated exemplary participant was asked to identify two Critical
   Incidents: one framed as exemplary and one framed as average or typical performer. In
   addition, they were asked an additional 11 BEI questions during a telephone interview. Each nominated typical performer from the comparison group was asked to identify one
   critical incident (not framed for a designated performance standard). Eleven additional
   BEI questions were asked during a telephone interview. What follows next are the
   interview findings for, first, the exemplary performer and then the typical performer (i.e.,
   the comparison group) for each of the research questions.

   **Exemplary Performer Interview Findings for RQ 1**

   Research Question 1: What are the competencies that uniquely distinguish exemplary
   (best-in-class) performers in WLP from fully successful (typical /average) in the
   following four Areas of Expertise (AOE): (1) Designing Learning, (2) Delivering
   Training, (3) Improving Human Performance, and (4) Measuring and Evaluating.

   In identifying the distinguishing competencies by which the researcher could
   determine the difference (Research Question 1), the participants were asked for two
   Critical Incidents (Section III, Critical Incident exemplary, and Section IV, Critical
Incident qualified) to “describe a time or event that would best describe for me your exemplary performance” then to “describe the same kind of event and how a minimally qualified performer would behave in that same role”. The participants were also asked, “Would you please describe your job and what you do on a daily basis as an exemplary performer? (Section II, Workplace Question 9). Based in the tradition of grounded theory many qualitative analytic strategies rely on the basic induction principles of a constant comparative analysis approach within a cross case analysis design (Onwuegbuzie & Leech, 2005). This approach was originally developed for use in the grounded theory methodology (Glaser & Strauss, 1967). This strategy involved taking one piece or chunk of data (one interview, one statement, one theme) and comparing it with all others that may be similar or different in order to develop conceptualizations of the possible relations between various pieces of data. The constant comparison system used was based on each interview and the four themes, as prescribed by ASTD personal, allowed for the development of differentiating (exemplar and typical) criteria for examination purposes. Though not pure grounded theory, and based in the tradition, constant comparative analysis approach allowed the researcher to generate knowledge about common patterns and themes within human experience until all were compared with each other (Thorne, 2000).

The responses and stories were coded using the four themes—Plan, Outputs, Outcomes, and Project Relationships—as the primary coding system and then linked to the following grouped clusters (1) Business/Management Competencies, (2) Interpersonal Competencies, and (3) Personal Competencies, as identified in the 2004 ASTD Mapping the Future competency study.
Delivering Training-AOE

In Delivering Training-AOE, three categories of information emerged under Business/Management Competencies: (1) a detailed plan of the intervention or event incorporating research, (2) documented business performance support, and (3) the implementation of a pilot session. Two categories of information emerged under Interpersonal Competencies: (1) networking for relationship building in support of buy-in across the organization, and (2) both the learner and the business partner need to be involved at all stages of the process. Two categories emerged under Personal Competencies: (1) knowing your strengths, weaknesses, and taking risks, and (2) self-directed learning (i.e., reading books). One category emerged under Personal Competencies in relationship to the performance of the typical performer: (1) not taking on challenges nor taking risks. The next section contains a description of the exemplary findings first grouped by the cluster it represents and then by each category as supported by the participants’ interviews. Important words or phases, from the participants’ quotes, were put in bold type for emphasis.

Business/Management Competencies-Cluster

Category 1—Detailed Plan of the Intervention/Event Incorporating Research

Participant 1: Some courses are just so detailed. I’m always looking to come up with a backup plan. Finding out what they are looking to get from the program to ensure that our objectives are meeting that, researching and planning additional information.

Participant 2: [name] and I sat down and kinda mapped out […], what can they do before they get on site. Let’s build a Web site for everybody so they feel part of a given class or group, and then maximize the, the use of those three days to do something that would really be job fulfilling and make them more job ready when they go back to their offices. I sat down and we knocked out a strategy for it and we built about fifteen hours of e-learning.
Participant 3: Say for instance you are required to design a whole new course which demands you to do a lot of research then maybe you’re expected output for that year would drop. Maintain continuous improvements and then, so my time is basically studying and then redefining planning [and] improving the program, sometimes designing new program[s] and then really going into the classroom to deliver the training and that’s almost daily for what I do.

Participant 4: It’s more the managing, the writing, the developing. In what we do is not entertainment but in development and planning.

Participant 5: Lots of planning new courses and designs are necessary in this field for delivery. I have undergone 25 days of training for how to do course field and curriculum, design course module, offer training, other facilities and job [development]. I have document [each training plan], which I give back to top management.

Participant 6: Its just really planning, observing and gathering this information and saying gosh that person does that well, let me do this and then a lot of reading and trial and error. So I think there are outside activities that we really should be able to attend […] after a while and I think that’s why I go out and do so much research because I got to get out. Dig down with questioning, get to the facts and feelings of a situation with a client

Category 2—Documented Business Performance Support: Evaluation

Participant 1: To be able really to support the business initiative as best we could. Which again feeds into a training database [evaluation], which then feeds into our dashboard which, is reported out and let’s us know how well we’re doing collectively. We are going to be using reports, as more of a coaching guide to see where our strengths and opportunities are.

Participant 2: I think the other thing is we do have a lot of metrics that we look at. I’m pretty analytical and both good in quantitative and qualitative [evaluation methods]. So it’s their [management and client written] evaluation of my performance and the extent at which learning, and keeping up with their overall business strategy is probably the biggest delineator of how good my performance is.

Participant 3: People would take the evaluation, so then by the end of the year they would be a whole year of statistics, so that would be one indicator of my performance. Course evaluation sheets. And another way we sometimes do the evaluation is we asked the participants supervisors directly and ask whether they have observed any change in the participants after attending the course.

Participant 4: The paper evaluations that are completed at the end of a live classroom session. You are going to get some, at least some form of feedback, probably a level I
written evaluation. [Knowing] where are they [business solutions] within the challenge of meeting the objectives and of learning the skills that they are there to learn.

Participant 5: This big field involves understanding the business, qualities, solutions, knowledge of work and documentation of the business, the way we need to do.

Category 3—Implementation of a Pilot Project

Participant 1: We are then involved in a participant session where we will sit in as participants to go through the course as a participant would [before rollout]

Participant 2: We rebuilt it, we rolled out, and we piloted it in December and its gotten rave reviews.

Participant 6: Then we typically run a pilot and I tend to, I either would like to train the pilot or would prefer to observe it one or the other.

Interpersonal Competencies-Cluster

Category 1—Networking for Relationship Building and in Support of Buy-In

Participant 1: Some people are very intimidated by that [hierarchal levels] its, I figure, the more people I know, the more people I need, the more connections I can make, the better able I am to utilize some of that information in the classroom. I have learned to network. I looked at who they were presenting to and I brought information from that area to lend to this class to help support you. I’ve built a lot of relationships with the designers, so that I can be incorporated within you know the needs analysis just to get some information as to what is going on with this course before its actually at the point where its going to be rolled out.

Participant 2: We talked with leadership. I had the endorsement from [the company]. So [management] and I sat down and we knocked out a strategy for it and we built [the programs]. What I kinda figured out was that you just can’t replace that camaraderie, and that networking that we get [name] give me this first session and let’s send your chief of staff down, let him observe and then make the decision. It is a lot of lobbying, campaigning, and politicing.

Participant 3: We continued to talk with them [the learners] and management during the training. By the end they accepts us, others [the learners] accepted us as well. I wanted to listen to their views...to make the course more useful. We are willing to listen to concerns. It’s not really what we talked [about] or how convinced [management was] or how knowledgeable that we are or how good the course is, it’s really having [management] some chance to air out.

Participant 6: [The process] it could be very collaborative and that to me is a much better design. I think when you get the trainer and the designer closely working
together […] you come up with a really good design that works for the appropriate audience […] you got a new system coming out in your area, or you’ve restructured, and nothing is better than talking to the CEO and saying, hey, I got the new [one]

Category 2-Both the Learner and the Business Partner Need to be Involved at all Stages of the Process

Participant 1: What we do is after each, we go from a three minute presentation to a seven minute presentation and after each of these brief presentations, we have like a cycle in, cycle out process where we will sit in, myself, somebody that is either a manager or principle within […] who also does a lot of presenting, with this person. It is finding out what they are looking for to get from the program to ensure that our objectives are meeting that. Really allows me to get a better understanding of what our clients are calling about. What’s going on in our business so I can bring that into the training.

Participant 2: We had a team of five or six, they are all levels from manager on down to experience [employees to work on the project]. They have a partner and a manager coach who actually acts like the project partner and project manager throughout.

Participant 3: [after being ask to do the training from a prior failing project] I observed the staff and management [prior to training] and talked about past and current issues regarding the training program. During the program [I] also invited [management] out to talk with them. There is a lot of groundwork to be laid in anything new that you do.

Participant 4: I really focused on what the two folks [did] prior and how they [the trainers] tried it. Never [think] you know more about the client than the client knows.

Participant 5: [name] project managers report to delivery [training] managers who are head person of the company. This feedback is at all levels of management who deliver training. All people learn in all stages at all levels continuously.

Participant 6: I touched base with all the learners prior to coming to class […] at least once, sometime twice. I had to get with the client, figure out what they were trying to get at, what were the skills that they were looking for […] I make them come up with alternatives, the solutions, the objectives, whatever and I get agreement, and I restate and say […].

Personal Competencies-Cluster  

Category 1—Knowing your strengths, weaknesses, and taking risks

Participant 1: I’m currently mentoring and coaching a business unit, doing whatever it takes to deliver the project on time. You know what are some of the strengths, you
know what are some of the opportunities, what would you do differently, what if this was your target audience, how would your present, what are the limitations?

Participant 2: I know what my strengths are and I know when I can make decisions. It’s knowing when you can lean on the people on top, because you can’t do it very often. You know if it had failed, I probably would have been fired. You know, it is a huge risk. I think you have to be willing to take that risk.

Participant 3: I don’t want to give up because that’s all the why were needed. So the next would be the subject knowledge on the thing that we are teaching, otherwise we won’t have that creditability.

Participant 4: I don’t know if I really want to do that [taking on a past fail project] but certainly, I accepted the challenge. I took a totally different approach and my approach worked, that was a strength of mine. It worked successfully. It was a gamble and it worked. I think I’m pretty close to perfecting the ability to know when to step in and when to step out.

Participant 5: I mentor junior faculties, that is one of my strengths. I know what I can give them and what I need back. You should be free to be aware and take a risk.

Participant 6: That’s really important [to take a step back] not only are you aware of your self and what makes hot buttons for you, but that you don’t make assumptions about things. I’m not too afraid to go anywhere […] I love a challenge and so let me change your mind about something. Let’s do it, you know let’s go there. I have a couple of ideas that I would like to get more information about this and that’s what I mean when I say the ability to take risks.

Category 2—Self-Directed Learning: Reading

Participant 3: I think that most distinguishing part, I guess, would be that I like to read a lot. I become addicted to reading, I like to read a lot of management books related topics for whatever that I will be delivering… and so I keep reading so I have a lot of interesting stories and interesting content to put into the training.

Participant 5: I have to study 10-12 books [to prepare] I have read so many books, I have a small lab. To deliver a course I have to read books, publish books, author a book, attend international conferences, and read journals.

Participant 6: I read a lot, so I have a lot of tools and techniques that I can pull from and I even pull from different programs. I have a library of books and resources.
Category 1—Not Taking on Challenges nor Taking Risks

Participant 1: [Not] getting to the heart of what the participants needed. [Not] give[ing] them a supportive environment [not] asking a lot of questions. Being afraid to deviate from the schedule for the structure.

Participant 2: A certain level of complacency, not realizing [...] you have to work for the overall worth of the firm, there were things we could do better. [Not] pushing the envelope in terms of stimulating capabilities. So, I think its risk taking, and I think it’s being willing to push the envelope. [Not using the same resources] you know use of staff, of service areas, of HR, to use those kinds of places.

Participant 3: I think doing differently as a [typical performer] would be just to give up. Continue to administer the activity [training] and don’t care about their responses [evaluation] You really [need] to make an extra effort and try when faced with difficulties. A typical performer may not even go for help...they just give up because it is easier. You won’t be asking for help except that you may approach your manager to warn them for the sake of protecting yourself...when looking back the more challenges we want to take up [...] we grow from that.

Participant 4: [Not] Try to overpower the client [not working with] trying to play the role of an expert. The next challenging level is, I’ve got to talk more, and do more, and teach more, when in essence it is the opposite. Take the jump.

Participant 6: Need to know what was the client’s intent? What are some challenges I think that I might see going forward. They [the typical performer] would struggle though the rest of the day and then go home. I am willing to take risks.

Designing Learning-AOE

In Designing Learning-AOE, two categories of information emerged under Business/Management Competencies: (1) conceptual know-how in designing the vehicle of the intervention, and (2) the ability to analyze data quickly, turn-around time, and reporting results. One category emerged under Interpersonal Competencies: (1) human relations and 2) political shrewdness. Two categories emerged under Personal Competencies: (1) current technical skills and soft skills, and (2) flexible and self-directed in managing their craft. One category emerged under Personal Competencies in relationship to the performance of the typical performer: (1) not taking on challenges,
risks or asking for help. The next section contains a description of the exemplary findings first grouped by the cluster they represent and by each category as supported by the participants’ interviews.

Business/Management Competencies-Cluster

Category 1—Conceptual Know-How in Designing the Vehicle of the Intervention

Participant 1: I am required to design and develop training programs which include giving needs assessments where necessary, interviewing focus groups, designing the training programs whether that is instructor lead, web-based, implementing the program to ensure that the target audience gets through that ensure that resourcing is completed, making sure that we have enough classes available, making sure that the trainers or whomever is training that course is up-to-date in terms of prepared for readiness action but also resource for running the session.

Participant 2: I’m constantly on the phone, on e-mail with other project members, subject matter experts or partners trying to get content, get information, trying to figure out what, what the learning solution needs to be.

Participant 3: I’m able to flex-up to the broader picture, so that gives me a sense of how a larger roll-out [new program development project] should go. And I do think my ability to flush out the design. To really again, see it at that broader picture and then get into the detail of it. I’m able to balance those two[concept and design].

Participant 4: I’m in charge of implementing the e-learning technology like streaming technology and the software use to create these presentations and the flash development for web-based training [inclusive of] of project management.

Participant 5: I develop learning for those areas [market learning, technology & performance, project management. This includes learning management systems, partnerships with vendors, all those things that we need to be able to do to enable learning [this] can be anything from helping them to find a scope of an initiative. […] budget responsibility, staffing [inclusive], does the initiative fit into the overall objective and vision of where we are we [to] be.

Participant 6: [the client was able to learn using my design] this verified that I had good vision and clear picture into the future and I have the ability to put an idea into a workable model. I went back to present [this] new model to our senior management and showed them [the] intervention and the benefits.

Participant 7: I am responsible for e-learning that is developed and delivered for all the […] employees across the country. I really wanted to find a way to help people
connect [to a new training initiatives] on an emotional level...yet still appropriate in a very conservative firm. I pull together an idea of what I thought we needed to do and got together with [our lead instructional designer] and came up with a strong model outline.

Participant 8: I design and develop training that will help solve business problems, I created an initial outline. When you have an end user audience with strong demands placed on their time, you don’t want to create something where they are likely to comment [negatively].

Category 2—The Ability to Analyze Data Quickly, Turn-Around Time, and Report Results

Participant 1: From there we gather all the data, we would have a scorecard which would measure a couple different quadrants about how many people it would impact. Each course, through this world-class score card, is to be score and then looked at. Once we got all that information[ in a report], we kind of put together a strategy to say all right, we can retire this many courses. We had overload of data….we had to get back and say all right, this is what we heard, is this true, and is this accurate?

Participant 2: One thing that is always consistent, no matter what phase of the project, is communicating [results] with project team members, subject matter experts, partners and project managers and this is usually through e-mail, phone and project meetings. It came up last minute and they said my role, when I went out, would be to get the content and bring it back. I went out on a Sunday and went there with another instructional designer. They [the client] had very high expectations and very tight deadlines. He wanted either three or four WBT [web-based training] sessions a coach based solution, quick reference cards and needed them all in three weeks. I took on a lot of coaching guides and it was definitely the biggest project I’ve ever worked on and the shortest deadlines.

Participant 3: [In] getting a sense from them, what they thought the need was and what they were looking for in training. I gathered that initial information and then they were agreeable to me to do a needs assessment. [The client’s] feedback was that [they] really found nothing lacking in my approach and was pleased with how I listen to them part of their comments were […] you really know us. I have to summarize my progress [reporting back]of that phase and then meet back with the sponsor.

Participant 4: One of our main gigs is the quarterly report. I basically tell [management] that I will get it done and deliver it on time. [Management] told me to find another system and get it up there ASAP and within a couple of weeks […]. We bought the software, we had it installed and working in about a week which was pretty outstanding [the project] should have taken […] three months to get up and running.
Participant 5: The stakeholders and I had to quickly do an assessment and identify what was the need. We had a lot of data; we had a lot of classes to look at that they had already done. We did the analysis, we came up with recommendations did some design, presented—got signed off, buy in, went back around and did this several, several times and then we went to pilot…missed the mark a little bit…made adjustments, deployed the second round [reporting results], the second pilot was much more successful.

Participant 6: First I talked [with] a couple of people who have some knowledge [with] using the internet equipment to see if we could provide remote internet access with real physical equipment for hand on practice. We put a model together based on utilizing what [the client] has with internet capability. We were getting all these stories, all this […] and we are collecting them and we are cataloging them and are relating these stories to different parts in the code so that that we make sure that there is a real ties there. We go over what we have done for the last quarter in regard to training,

Participant 7: I’m sticking to my milestones, I’m getting the project reviewed and approved by the stakeholders by the learning committee, showing them demos… We are doing a pilot testing and debugging and then released the program.

Participant 8: We started out with a strategy which was all about identifying some critical situations that we think people ought to be looking at. Two colleagues and I complied [the data] I was responsible for compiling the list and refining it and started sending them to different people in the organization to ask them what they thought. We captured all the feedback from the pilot test […] to make refinements to the materials and the program.

Interpersonal Competencies-Cluster

Category 1—Human Relation and Political Shrewdness

Participant 1: To really find out from them [client and learners] at an individual contributor level what do they need […] trying to really make sure that we are thinking outside the box and thinking about it from a more strategic level.

Participant 2: No matter what phase of the project, it is communicating with project team members, subject matter experts, partners, and project managers. We met up with the business partner we were going to be wondering with and had dinner with him that night […] and immediately we both knew we were not there just to get content. He wanted us to make promises of what we were going to be delivering when we were going to be deliver it along with [being] in close contact with the project manager and the performance improvement consultant. I knew right away that my manager needed to know exactly what was going on and the right people needed to be involved from the beginning.
Participant 3: I have to coordinate a lot of meetings with the sponsors and [the] team […] pulling everyone together. Knowing to including senior management and my management. So then, I set out to get a list from the sponsor of the people that I could contact and set those appointments over the course of 4 to 6 weeks and I sat and interviewed each. This is the first response so after each phase. I started to put a high level design together to get initial approval […] created more of a detailed design [meet again] that’s where the negotiations came in.

Participant 4: I had to interface a lot with our IT group because we needed things on the network, that I didn’t have access to those places. Those guys are very busy. I try to be pretty stern with them, bake cookies, get them on our good side. We all have power no matter what our position and you just have to figure out how to get people to do what you need them to do.

Participant 5: We met with the subject matter experts. I look at the longer term picture, where we needed to be […], looked at who was involved across the team, my team and additional players that we may have needed then figure out really what we need to do. I really have to build these relationships because these people don’t know me, they don’t trust me. It took a long time to build relationships and gain trust. I had to have very good relationships and build those relationships and it makes it tough. Once all those things fell into place things just cranked […] It is more about coming up with the solution.

Participant 6: Managing a team of subject matter experts to develop and deliver technology and product training to our [client]… I went to the customer and told them this is my intention to design something… I consulted with a couple of my key designers and made sure that this was achievable, we could do that, and then I took this idea to our customer, our audience and asked then to see if they saw that was feasible and I got them buy in and go more input.

Participant 7: We presented our model outline in front of the [key] Committee that was filled with about 30 of the top leaders and showed them what we wanted to do. We were going to be asking people in the field to generate examples […] I talked with the gentleman who was in charge of all the time and expense logs. We expanded that [the meetings] a little to encompass some of the bigger troublemakers that we thought might try to throw roadblocks in our way. We are working in conjunction with the marketing and communications people so that we are all in sync. So my job, around all that, was to basically to lead the design effort.

Participant 8: [Top Management] was also involved in providing input into the design […] as well. We had a very, very good [communication] in both horizontally and vertically in the organization. You need to pull in some of the people who you believe will provide the most challenges to what you are trying to do, and you involve them from the beginning of the project.
**Personal Competencies-Cluster**

**Category 1—Current Technical Skills and Soft Skills**

**Participant 1:** I take some of those **presentation skills**, some of those **interviewing skills**, some of the **influence skills**, some of just the **communication skills and interpersonal skills**, how do I **take all of those skills**, and be able to look at them all, **chunk them together into appropriate courses**, create all those performance **objectives** then **move forward with the [technical] design**.

**Participant 2:** Recently a lot of my days have also **include mentoring [teaching other new skills] of new tools [software support systems]**. We recently **brought in new tools** and I **was one of the first to learn that**. I am able to **serve as a mentor to others** on my direct team and also **[to] other teams**. Its not just all about designs, it about pulling in those **questioning skills** and **pulling in the consulting skills** I should say.

**Participant 3:** What happens is that I have to **go hunt and peck and try to figure out what this content should be able to put into a way [it would appeal] to the audience.** I did that through really **surfing the web**, and really researching [topic] sites and **constantly checking back in with the [client]**. [I] have to have more credibility because of **my skills to be able to talk directly** to the senior managers to recruit them.

**Participant 4:** [Management] told me to **find another system [technical] and get it up there ASAP** and within a couple of weeks […] **we bought the software, we had it installed and working in about a week, which was pretty outstanding.** I [need] to **figure out how to get them to do it themselves**. You can **find tutorials on how to do things online chat boards […]**.

**Participant 5:** We have internet and infrastructure and capability, we must push our training to tie with the internet because this is our future. I **called up the […] directors** in each of the [training] areas and I asked them to nominate someone from their team who could participants in this task force of this […] group and their responsibilities would be to review our course materials and to contribute examples. I understand the **technology, the trade**, you know the discipline of training. **I understand the people side** and I am able to manage people and work.

**Participant 6:** I am **very good with internet working protocols, technologies, and products**. I have a good **understanding of how to utilize what is available out there to make learning […]** become much more effective not just from a cost point of view, but also from the performance point of view.

**Participant 7:** I think I have **strong technology skills in terms of knowing how to leverage a computer, a system and what a program is capable of doing and how to take the best advantage of that**. [I have] **skills in vendor negotiation and skills that will allow me to design and develop a program** that apply concepts to real life situations.
Participant 8: One thing that we do with our design work is use MS office applications to build rapid prototypes and documents that we can send to vendors to help build e-learning programs faster. I have fairly strong technical capabilities. I have an awareness of how software design processes work and how programmers tend to operate to develop software.

Category 2—Flexible and Self-Directed in Managing Their Craft

Participant 2: I just was able to learn them quickly because I have a background in HTML and other programming. They just come easier. When I’m in development, I’m hands-on, getting the job done, working in tools, inputting content, creating interaction and things like that. I work out of the office and from home […] but I’m always reachable.

Participant 3: I was driving the project… I had to keep people on task with the contract and project dates and service agreements and almost create the design and hand it to them.

Participant 4: I try not to bother [management] with a problem that I run into. I will get it done and deliver it on time. If I’m getting an error from […] the system, I’ll throw that into Yahoo and sift through pages and find […] somewhere, someone who’s had the same problem. It takes a long time but you can find the answer which taught me to do my own research and get things done.

Participant 5: It’s not going up to senior management with the problem and [say] help me fix this. Its more about here’s the solution I’ve identified to fix this problem and I’m going to move forward with it, [and say] any objections?

Participant 6: The new way of training has to be Internet related and is continuing to evolve, that is what we are facing right now.

Participant 7: Even though we had a [large] stockholder group, tactically it was a very small group. It was me and [another person] neither of these groups had the information required to fish or cut bait. So I had to say, this is my recommendation.

Participant 8: I do go for help when I need it and I don’t think about being a subject matter expert. I realize where my limitations are and count very heavily on the subject matter expert to help me though any content related problems. I pay a lot of attention to external professional development resources including articles that come from the E-Learning Guild, from ASTD, VNU and other articles that I get from other learning professionals in terms of what people are doing to make learning better and more useful to the learner.

Qualified/Typical Performer Difference
Personal Competencies-Cluster

Category 1—Not Taking on Challenges, Risks or Asking for Help

Participant 1: I think timing would have taken longer, we were able to take it [the project] and run with it and run it ourselves. I think it would be a struggle in looking at it from a strategic point for someone minimally qualified. [A typical performer] would think that there is always a set way to do it and not always think outside the box to make it more, to think more, to think creatively. [Top performers] might say well here is my solution, [and not] let me hear your thoughts. They come with solutions and not just look for others to great that solution for them. Understanding and realizing the resources that are out there and the skills and abilities of others in your area can make a world of difference.

Participant 2: I think where someone could, really not fail, but not, not excel in that situation [is] if they[typical performer] lack being able to communicate or just making sure that everybody knows what was going on.

Participant 3: I always strive to get to the top of my game. I’m not sure an average person could field or lead a project meeting without heavier management support in terms of [...] negotiation and that client presentation. An average employee […] I don’t think would have had the go-gettiveness, they would just put together whatever little they could rather than continuing pushing the extra mile to gather content and to put it into a format that a learner could appreciate more. [They] shut down and therefore just compromise the quality of their design and development. [They don’t] push with the business [building] relationships and work through difficulties. [They] would give-up, just kind of throw up their hands and let management take the lead here. I try to struggle to get to the other side.

Participant 4: Maybe the person wouldn’t have been willing to stay after hours for a couple nights in a row to get it [the project] done. I see people […] who will go to the boss with every problem.

Participant 5: To be successful is the positive attitude around what they [management or clients] are trying to do. If you’re flexible and you’re positive you’ll accomplish a lot more. [Typical] people sit back and wait and are told what to do and what the next step should be instead of reacting. They [exemplars] are more proactive, looking for the next thing and trying to make things better.

Participant 6: Struggle[s] with finding what should [be done]. [Might not know that] need good data to support your ideas. [Typical performer cannot] see clearly [that the client wants] and I never hesitate to get the input from both sides [where an average performer may not do so].
Participant 7: Inexperienced in rolling out something of this size. Not knowledgeable in instructional design, or savvy in how the [organization] works. They may easily be swayed by the opinion of others rather than knowing the best route that should be followed. Not managing your stakeholders. Overlooking the importance of a subject matter expert. [They don’t] ask for help from the field [thus] not letting buy-in.

Participant 8: In terms of what I can see that makes a difference between a person who does a really rock solid job for the organization and a person who might be considered average are a couple of things. May not be as strong of an instructional designer, [and] they may not ask for help. They tend to try to figure it out themselves and that typically wastes a lot of time, if you don’t have the expertise; get help from someone who does. [Typical performers] who are not as concerned about the message design part of instructional design [...] there are slide design standards. Another problem I have seen [...] they have not bothered to pay attention in the needs analysis.

Improving Human Performance—AOE

In Improving Human Performance-AOE, one category of information emerged under Business/Management Competencies—going beyond understanding the organization’s business strategy to anticipating the business strategy. One category emerged under Interpersonal Competencies—knowing the role of the organization and stakeholders in influencing change solutions. No categories emerged under Personal Competencies. Two categories emerged under Interpersonal Competencies in relationship to the performance of the typical performer: (1) collecting needed information across all stakeholders, and (2) defending the value of the solution. The next section contains a description of the exemplary findings first grouped by the cluster represented and then by each category as supported by the participants’ interviews.

Business/Management Competencies-Cluster

Category 1—Going Beyond Understanding the Organizations’ Business Strategy to Anticipating the Business Strategy

Participant 1: I have to support my supervisor in the learning organization strategy. We have to prepare them [employees] for the next job. We need to improve the system. It took around two years to gather feedback from staff. We found […] it would
be very difficult to aligning the practices of different personnel and training development units. We had to also understand the nature of our target customers who are the staff of the organization, so we have to open ourselves up and try to understand what they do and try to think about what they need, and so we can design the appropriate programs for them. On the operational side, I have to understand the practices of the other units and consider how to align them and make sure they could run the system smoothly.

Participant 2: I have a very solid understanding of how an organization, and I’m not talking about just our department or our division, I’m talking about the company as a whole. My job is to manage these individuals so that they are able to be successful. [That they] are able to meet the needs of their internal clients, that they have the tools and structure, that they need to know to perform their work. At the time we didn’t share resources, now do that all the time.

Participant 3: You know there is always nine or ten layers that you need to dig underneath to get to what the true problem is. I like to gather all the data that I possibly can before making any kind of decisions or conclusions. It was really essential, was really extending the focus beyond what they requested. There was a business impact I wanted to accomplish. I guess is to really get to the root of the problem rather than just treating the symptoms. We uncovered a ton of issues unrelated to any kind of training. It gets back to partnership [within the] business and communication within departments. If you have no credibility and you have no influence, if you don’t understand the business or the problem, then you’ll never going to convince them to do anything differently.

Participant 4: I am responsible for every aspect of learning and organizational development […] helping our people understand and be proficient in the various industries in which they specialize. This is very consistent with where we want to be strategically […] if we try to truly build and enable a coaching and cultural feedback. The importance of consultation and needs assessment and being able to be very comfortable in your skin in terms of being viewed as a performance consultant and expert, so that when business problems occur, you can actually dig beneath the surface and get to the right solution. It is not necessarily just what someone is asking for.

Participant 5: Partnering with different business units within the firm [to develop] organization development strategies for them. From traditional training interventions and also culture, individual performance dimensions […] building company frameworks, working on retention rates.

Interpersonal Competencies-Cluster

Category 1—Knowing the Role of the Organization and Stakeholders in Influencing Change Solutions
Participant 1: I would have difficulties in convincing them [other units] to use the [new] workflow we made. I talked to my supervisor and suggested to talk to the heads of different T&D supervisor to make sure that they bought into the project and agreed to proceed. [We] spend a lot of time lobbying those heads. We gained the trust from them and after that, I had to plan the formal meeting [debriefing meeting] for all the units. I only invited comments from the heads [of the units]. I think our strategy at the time was very successful because we dealt with the people, [not the task] because the most difficult part in the project was the people who were not willing to change.

Participant 2: If you can, just figure out what that one thing is and if you take it off their plate. It is usually something very small and insignificant, and then they just totally turn around. All I did was [make] the first move; I was the catalyst that sort of cattle-prodded, and I was the safety net that’s all.

Participant 3: Obviously providing feedback on a daily basis. It is about asking questions and making sure that they [the team] saved on every search and they’ve done the leg work that they need to do to really determine, you know, what is the actually need. I mean is, that they need training or is it that they need something else. I am a very collaborative kind of person and getting them to buy in again using influencing skills. We convinced them to broaden the assessment to be more performance based. When we presented the results, they [the stakeholders] were thrilled with it. We were constantly keeping them in the loop about what we were finding so that nothing would be a surprise to them at the end.

Participant 4: I wanted to get people to understand the benefit of developmental feedback that it solicited. I got buy in of the senior HR leadership and that was the right direction.

Participant 5: What made this project successful was I was able to listen to all those things as they were discussing, listening to what their business needs were and really transfer that to a few other things they hadn’t considered. Like the fact that they needed people [and] satisfaction with the change that was coming.

Qualified/Typical Performer Difference

Interpersonal Competencies-Cluster

Category 1—Absence of Collecting Needed Information across All Stakeholders

Participant 3: It is in the questions I think that would be asked on the needs assessment. I don’t think they would be as broad and performance based. They don’t question well. So you go in with a protocol and they’d check exactly what’s on the protocol and not going beyond that which you have to. And really just come back with the same recommendation that was originally asked by the client in the first place so they
would say okay well we need to go training on conflict and here’s what we learned are the topics that need to be focused on for the conflict training.

*Participant 4*: [...] **Importance of consultation and needs assessment and being able to be very comfortable in your skin** in terms of being viewed as a performance consultant and expert, so that when business problems occur, you can actually dig beneath the surface and get to the right solution.

**Category 2—Not Defending the Value of the Solution**

*Participant 2*: I think the first thing would have been they wouldn’t have gone out on a limb and tried to stop this system which was the systems at the time for not sharing resources.

*Participant 4*: Instead of educating [the] clients on the alternative means of coming to a solution, [they] gave them exactly what they wanted. So they may have a high degree of satisfaction if they don’t know any different, but if in fact it was a waste of time and money in many regards. Part of it would be [...] not [being] completely familiar with alternative methods and saying so.

*Participant 5*: A non-exemplary performer might just consider that [knowledge of solution] least important than other factors that they have to deal with. Will probably not involve a wide [range] of a stakeholder group as they could.

**Measuring and Evaluating -AOE**

In Measuring and Evaluating-AOE, three categories of information emerged under Business/Management Competencies: (1) isolating both internal and external metrics for organizational growth, (2) proficiency in the first three levels of evaluation and level 4 or ROI metrics when necessary, and (3) knowing what data to collect, and what data were collected prior to determining analytical and organizational needs. One category emerged under Interpersonal Competencies: (1) presenting the information both vertically and horizontally for buy-in in promoting or measuring performance initiatives. One category emerged under Personal Competencies: (1) passion, confidence, and risk taking. One category emerged under Personal Competencies in relation to the performance of the typical performer: (1) risk aversion. The next section contains a
description of the exemplary findings, first grouped by the cluster represented and then by each category as supported by the participants’ interviews.

Business/Management Competencies-Cluster

Category 1—Isolating both Internal and External Metrics for Organizational Growth

Participant 1: Collecting, analyzing, and reporting all data. We do not have the specific number that we have to benchmark at the end of the year. The edict was to come up with a process to collect, analyze and report all evaluation data, levels 1 through 4 across three different lines of business [or a] learning solution being defined a single incident. Sometimes we have to measure against the time span and the complexity of the project.

Participant 2: I treat myself as internal consultant of the organization to try how to change and to have the organization achieve results and success. In pursuit of the mission to provide [.....service] for our customers, our department works very closely with [name] and looks forward for all and every opportunity for continued improvements. And this benchmarking I would say is very important for me to set up the practical, the service standard and eventually transfer to measurement what they measure. So most of my projects one of the measurement indicator is about customer satisfaction and this is our mean external customer measure.

Participant 3: I wear many hats and one of them is overseeing the evaluation component of the ADDIE model if you will, which just for purposes of refreshment, ADDIE is [...]. We do all those things within the context of the [external measures] at [name]. In the [location area] and then worked with leadership and this is the key part; we worked with leadership to isolate the metrics that they felt were important to isolate. So, in other words, what could we say was a control group who hadn’t gone through learning, who had gone through it and what were the metrics that we would track, whether they be number of qualified [external indicator], number of [internal indicator] whatever it happened to be.

Participant 4: [A person’s] lack of understanding of what value, evaluation, and measurement can bring to the business and that comes from a lack of competencies and knowledge by learning practitioners as well as a fear by learning practitioners. You have to have organizational performance measures programmed and performance measures, so you have at least three different measures that I can pick off of from the top of my head. Learning professionals need to be able to talk in the language of business and then take their knowledge of learning, training, whatever you want to call it and then convert that into business measures.
Participant 1: I wrote criteria for creating level 1 and 2 evaluations and based on the theory; which I guess maybe something that separates exemplary from everyone else is we know the theory and we actually use it. We have evaluations of evaluations. It’s a meta evaluation. We would take you know the Kirkpatrick theory for example and say okay you know, if we’re actually going to do a level III, what in the world is that going to look like. That everything that is produced within several groups that I line up with, will have both a level I and level II evaluation as a bare minimum. When we get into level III and IV we […]. [The team] has actually completed a successful ROI study.

Participant 2: I have designed a form at the end of the project [level 1]. I will send out a customer satisfaction form to [client]. Because what I deliver, what you want them to deliver, you have to measure it. And eventually the last step was the most important step was measurement [level 3 and 4]. I have to measure the post results. After the training intervention, I conducted 69 face to face interviews with […]. The outcome [ROI] was that first from the pre and post evaluation there was remarkable improvement on certain behaviors of [name] of [numbers]. They [the organization] found this very amazing because I implement such [level 4 and ROI] kind of measurement activity for the department in a mass scale and the outcome helped them.

Participant 3: The most important thing is understanding of the business and what is meaningful to the business[metrics], so in other words, why bothering measuring and being able to recommend to the business or think through with them you know, what do they need to know and want to know about that is attributable to learning. In fact in some cases they may want measurements [level 1 and 2] that you’ll never be able to attribute cleanly to learning and that is an important skill to, so it goes back to internal consultation. [Name] class we did a level III and level IV evaluation and it showed tremendous ROI but it was, the knowledge that I gained was, that wasn’t meaningful to the business because it was an opportunity cost of not having it vs. showing a real hard savings. Should have criteria items attached to them and behavioral anchors that you should be able to, if you want to measure at levels 1, 2, 3 and 4, very easily build kind of testing mechanisms on the back end that link to those objectives. We have been very selective about what we do at levels III and IV and for example, we will conduct focus groups, in particular after certain programs to see what behavior change. We’ve also done some a level IV, which I guess you could call that ROI, or at least cost/benefit analysis and that has been very successful recently with […].

Participant 4: From the program performance measures you want to look at things where you’re evaluated on simple did you create, let’s say a Kirkpatrick level I, II, III, IV instrument. If those instruments were created were they briefs back to the business partner and from that briefing what action was taken. So if you develop some type of evaluation instrument that is relating to program or solution. Those are key factors to determine whether you’re you know doing anything with measurement and
evaluation. Would have level 4, level 3, level 2, and level 1 evaluation because that information was [...]。

Category 3—Knowing What Data to Collect, What Data Were Collected Prior

Participant 1: We’ve got this gigantic data set but it’s not quite as accurate or valid as we might like. Planning is very important [...] and nobody ever does enough of that.

Participant 2: [...] understanding databases and how to actually gather information? How to sort that information and most importantly I think its interpretive skills. So, once you’ve gathered information how do you actually go about sifting what is meaningful vs. what isn’t which goes to statistics. I sent out mock scale questioners to get feedback on service, behavior and performance of the workers [I also] conducted a pre-customer satisfaction survey through 159 face-to-face interviews. I always attend our [...] meetings to get qualitative [data and] to get the training analysis [data].

Participant 3: In a metrics driven [company] one would think they would want to have this kinda of data for all the courses but in fact antidotal seems to carry a lot more weight here. [in building the curriculum] we wanted to see right out of the starting gate, including when we did the pilot testing, whether the people behavior changed by having these pre and post test it was very easy to isolate the difference. We then conducted focus groups where we talked to both participants and managers to say what behavior changes have you seen and it kind of bridge into level 4, what outcomes have you seen as a result of this. [This] showed some very good evidence of better [...] skills. [If] I’m imposing meaningless statistics on you and if they don’t want or need those statistics then you shouldn’t bother capturing them.

Participant 4: They wanted a learning solution to support this new process or technology that they were implementing throughout their business unit. By being involved in that early phase, I was able to ascertain [information]. Can we get the data that supported what your business goals? What did you expect to save?

Interpersonal Competencies-Cluster

Category 1—Presenting the Information both Vertically and Horizontally for Buy-In for Promoting or Measuring Performance Initiatives

Participant 1: I presented those standards [for the company evaluation system] to the team. I [made] sure that everybody was at the same level, creation wise, on those evaluations. I presented information to them both [colleagues and management] the theory and the application, which is something the organization is big on. There was a lot of [...] semantic or procedural debate. Life is about dealing with people and if you, just walk in and ruin somebody’s world and say you know, we’re here to change everything and this is the way the training is going to be done now and this is the way the evaluation
is going to be done now, and you don’t at least give them an opportunity to agree or buy in or adopt or even reject the idea, then you’re going to have a lot harder day.

Participant 2: I persuaded my [VP]s and [colleagues] to start with some project team pilot for the three teams in […]. I involved more stakeholders. I met with them three [...] to secure commitment. I also arranged meetings with senior management and also did that [again] later once we started the project. I use a very simple [...] process to secure the commitment. It was also amazing because they were very skeptical at that time, skeptical in the sense that they always doubt the survey tools and the tools of measurement.

Participant 4: Prioritize key tasks and relationships, utilize technology and tools to help me communicate priorities to others and influence others to take action. We engaged with the business partner on a regular basis with a project-planning tool, an MS project. If they do, if I’ve done a good job up front of saying the expectations and managing the risk along the way, keeping the business partner informed of what’s going on, what the process is in an educational and consultative way, then when something comes up that we both recognize was a potential risk I have found that and this is kind of new the bank here.

Personal Competencies-Cluster

Category 1—Passion, Confidence, Risk Taker

Participant 1: [Measuring and Evaluation/data collection is] also something I do for fun. You are going to hear two things one hopefully their discomfort with the term [exemplary] and second the word passion. Evaluation is passion. It is interesting to me and I thought I could answer questions that I had or that everybody else had. I’m not afraid to tell my boss things that […] doesn’t, know. Of course there a gentle way to do it and there the wrong way to do it.

Participant 2: I did not retreat nor did I surrender. When I encounter the problem, I solved it because I believe […] in effectiveness. People tried to persuade me not to measure the project, but it is what I believe. I stick to my principle. My first principle is that I have my belief. To me, I am a risk taker. Of course doing the process, I have to analyze the risk. Can I bear it? What will be the consequence […]? Will I be fired from [my job]? I have to calculate the risk.

Participant 4: If I’ve done a good job up front of saying the expectations and managing the risk along the way, […] then when something comes up that we both recognize was a potential risk.

Qualified/Typical Performer (perceived) Difference

Personal Competencies-Cluster
Category 1—Risk Aversion

Participant 1: Most things [for evaluation] I think that I decided on considering the other way before hand and decode I didn’t want to go that way and decided that this was the way we were going. So if and when I did come up against resistance I was prepared to explain. [Typical performers] would just go another way. [Not] being able to explain the other path. They are therefore more willing to accept suggestions or ideas from person who simply out rank them […].

Participant 2: The differences, I think, first [of the typical performer] they do not have vision. I thought [on my incident] it was a big chance to do better, maybe 1% better, therefore I have vision. They do not have vision to do better for each project [and] they are not willing to take risk[s]. They are not risk taker[s] but I guess if they do less [not taking a risk] then the chance you have [to make] a mistake is less. They are not risk taker. To me I am a risk taker.

Participant 3: Might be inclined to be less diligent about […] building the pre-and posttest for each course. They might have [only] done just a random sample, because it was difficult. So it might be the path of less resistance for someone who’ve be an average performer. They might have been less strategic about which courses were the courses that [they] were looking to measure [the] behavior change around.

Summary of Research Question 1—Exemplary Performer

The participants articulated incidents and competencies about a critical incident regarding a personal exemplary performance in delivering training and identified how a typical performer may perform differently in that same incident. Two incidents and one question were asked of each participant. These responses were designed to have the participants describe competencies that uniquely distinguish exemplary performers in WLP from typical performers in each of the four areas of Expertise: (1) Designing Learning, (2) Delivering Training, (3) Improving Human Performance, and (4) Measuring and Evaluating. A summary of emergent categories is presented next for each AOE.

In Delivering Training-AOE, three categories of information emerged under Business/Management Competencies: (1) a detailed plan of the intervention or event
incorporating research, (2) documented business performance support and evaluation, and (3) the implementation of a pilot project. Two categories of information emerged under Interpersonal Competencies: (1) networking for relationship-building in support of buy-in, and (2) both the learner and the business partner need to be involved in all stages of the process. Two categories emerged under Personal Competencies: (1) knowing your strengths, weaknesses, and taking risks, and (2) self-directed learning (i.e., reading books searching on the Internet). One category emerged under Personal Competencies in relationship to the performance of the typical performer: not taking on challenges nor taking risks.

In Designing Learning-AOE, two categories of information emerged under Business/Management Competencies: (1) conceptual know-how in designing the vehicle of the intervention, and (2) the ability to analyze data quickly, turn-around time, and report results. One category emerged under Interpersonal Competencies: human relations and political shrewdness. Two categories emerged under Personal Competencies: (1) current technical skills and soft skills, and (2) flexible and self-directed in managing their craft. One category emerged under Personal Competencies in relationship to the performance of the typical performer: not taking on challenges, risks, or asking for help.

In Improving Human Performance-AOE, one category of information emerged under Business/Management Competencies: going beyond understanding the organizations’ business strategy to anticipating the business strategy. One category emerged under Interpersonal Competencies: knowing the role of the organization and stakeholders in influencing change solutions. No categories emerged under Personal Competencies. Two categories emerged under Interpersonal Competencies in relationship
to the performance of the *typical performer*: (1) absence of collecting needed information across all stakeholders, and (2) not defending the value of the solution.

In the Measuring and Evaluating-AOE, three categories of information emerged under Business/Management Competencies: (1) isolating both internal and external metrics for organizational growth, (2) proficiency in the first three levels of evaluation and level 4 or ROI metrics when necessary, and (3) knowing what data to collect and what data were collected prior. One category emerged under Interpersonal Competencies: presenting the information both vertically and horizontally for buy-in, promoting or measuring performance initiatives. One category emerged under Personal Competencies: passion, confidence, and risk taking. One category emerged under Personal Competencies emerged in relationship to the performance of the *typical performer*: risk aversion. The Typical Performer findings related to research question 1 are presented next.

*Typical Performer Interview Findings RQ-1*

*Research Question 1: What are the competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully successful (typical/average) in the following four Areas of Expertise (AOE): (1) Designing Learning, (2) Delivering Training, (3) Improving Human Performance, and (4) Measuring and Evaluating.*

In identifying the distinguishing competencies by which the researcher could determine the difference (Research Question 1); the participants were asked for one Critical Incident (Section III Critical Incident) to “describe a time or event that would best describe for me your performance”. The participants were also asked, “Would you please describe your job and what you do on a daily basis? (Section II-Workplace
Question 9). The responses and stories were coded using the four themes—Plan, Outputs, Outcomes, and Project Relationships—as the primary coding system and then linked to the following grouped clusters as identified in the ASTD 2004 competency study: (1) Business/Management Competencies, (2) Interpersonal Competencies, and (3) Personal Competencies as identified in the 2004 Mapping the Future competency study.

Three categories emerged under Business/Management Competencies: (1) managing multiple business projects, (2) assessment and identifying gaps, and (3) establishing business relationships. No information categories emerged under Interpersonal Competencies. One category emerged under Personal Competencies—gaining confidence and personal buy-in. Presented next are the findings from the comparison group identifying competencies of the typical performer.

Business/Management Competencies-Cluster

Category 1 — Managing Multiple Business Projects

Participant 1: A lot of multi tasking. I keep my hand on enrollment and measuring the success of the program.

Participant 2: A lot of communication and a lot of project management. I initiated some communication with different parties involved and especially my boss and senior management. The senior level [management] will do things to advocate, promote and operationally what we have to do [as] project managers on the job.

Participant 3: A program manager for a variety of training projects.

Participant 4: My job is to train on […] almost anything and everything. My role would be training and project management.

Participant 5: I manage projects as a […]. Depending upon the project, which could be anything from rolling out a new product at […] to a system conversion.

Participant 6: I am a project manager for multiple […] projects.

Participant 9: There are different cycles of activities.
Category 2—Assessment and Identifying Gaps

Participant 1: First, I suggested that we actually do an assessment using behavioral interviewing techniques. I talked to my manager and [they] were not in favor of this approach.

Participant 3: I immediately identified gaps in quality and gaps in terms of the content as related to project management industry and industry standards.

Participant 5: I took the [assessment done prior] and attempted to make a course map, I did it on my own without the team because of time constraints. We promised a pilot.

Participant 8: Even after the course has been designed and rolled out we continuously monitor the content.

Participant 9: Were planning on budgeting and getting input.

Category 3—Establishing Business Relationship

Participant 1: I work with different businesses with the company. I establish client relationships.

Participant 2: Working as a business partner or internal consultant to our company. To support organization changes and also to research development.

Participant 3: So I began socializing this on my own just to see if I was on track to see if what I had been thinking was really what […] managers out in the field were really looking for.

Participant 4: So I would have to spend sometime with the department. Pull in their job related examples into [the project] that is effective.

Participant 6: I would work with them [management] to determine what is the best method of delivery, how soon they needed it, the audience and all those analysis types of activities.

Participant 8: I always go to somebody that I trust who has better skills or better knowledge than I do.

Participant 9: Reaching out to various stakeholders to set expectations. Having knowledge of evaluation approaches and strategies. I work with various champions and other practioner to deliver […] initiatives.

Interpersonal Competencies-Cluster
Category 1—None

Personal Competencies-Cluster

Category 1—Gaining Confidence and Personal Buy-in

Participant 1: I was afraid to stand-up and shout like [...] let’s just pick them because they are so good. So, I was really restrained and said, oh, you know, they then saw the light themselves. We got commitment and buy-in. It was more as just that whole assessment and analysis process. I had great relationships from the two sponsors and [management, they] really convinced them so that they in turn really convinced my manager.

Participant 2: It is good that our [management] are very supportive in this project and a so stand-up to explain to the [other stakeholders] what were the reasons behind why the company want to do that.

Participant 3: [Management] was willing to sponsor this activity and champion a voice to the firm about the need for us to move towards [project name].

Participant 4: I thought the project was too big for me to handle by myself. I thought I really needed to have someone else.

Participant 7: You have to cautiously navigate.

Participant 8: It gave me more confidence going forward to be able to handle those situations on my own.

Summary of Research Question 1—Typical Performer

The participants articulated behaviors and competencies about a critical incident regarding WLP performance. Once incident and one question were asked of each participant. These responses were designed to have the participants describe the competencies of a typical performer. A summary of emergent categories is presented next.

Three categories emerged under Business/Management Competencies: (1) managing multiple business projects, (2) assessment and identifying gaps, and (3)
establishing business relationships. No categories of information emerged under Interpersonal Competencies. One category emerged under Personal Competencies: gaining confidence and personal buy-in. Presented next are the findings from the comparison group relating to the identification of the competencies of the exemplary performer for research question 2.

Exemplary Performer Interview Findings RQ-2

Research Question 2: What knowledge, skills, abilities, and other attributes (characteristics) does an exemplary WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the following four Areas of Expertise (AOE): (1) Designing Learning, (2) Delivering Training, (3) Improving Human Performance, and (4) Measuring and Evaluating.

In identifying the knowledge, skills, abilities, and other attributes (characteristics) needed by an “exemplary” WLP performer (Research Question 2); the participants were asked three questions (Section II: Workplace): “What skills do you have that make you an exemplary performer?”, “What knowledge do you have that makes you an exemplary performer?” and What abilities do you have that make you an exemplary performer?” and “Anything other”. The responses and stories were coded using the four themes—Plan, Outputs, Outcomes, and Project Relationships—as our primary coding system and then linked to the following grouped clusters as identified in the ASTD 2004 competency study: (1) Business/Management Competencies, (2) Interpersonal Competencies, and (3) Personal Competencies as identified in the 2004 Mapping the Future competency study.
Delivering Training-AOE

In Delivering Training-AOE, one category of information emerged under Business/Management Competencies: diagnostic and analytical knowledge base. One category of information emerged under Interpersonal Competencies: mentoring, coaching, and listening. One category emerged under Personal Competencies: taking risks, passion, and desire. The next section contains a description of the exemplary findings first by the grouped cluster it represents and then by each category as supported by the participants’ interviews.

Business/Management Competencies-Cluster

Category 1—Diagnostic and Analytical Knowledge Base

Participant 1: Preparation skill, facilitation skills to take that further questioning skills, transition skills and managing and debriefing skills, communication skills coaching and feedback. Honing in on how the participants are feeling. Managing my priorities, and myself adapt to any situation. I am always able to come up with a back-up plan.

Participant 2: Recognizing people skills for what they are and for what their not [during training]. I’m pretty analytical and both good in qualitative and quantitative [measures]. Really good at keeping within my budget. Knowledge of what the consulting [training] population looks like. Seeing the longer term and the bigger picture in trying to make all those pieces fit together.

Participant 3: The knowledge of adult learning, the design process.

Participant 4: The ability to be perceptive enough to reach your audience. The ability to read people. I have tremendous vision.

Participant 5: I have experience in this field for 20 years. I have scientific knowledge in our business.

Participant 6: I have a lot of tools and techniques that I can pull from. How can I leverage knowledge across the board?
Interpersonal Competencies-Cluster

Category 1—Mentoring, Coaching, Listening

Participant 1: I’m currently mentoring and coaching a business unit trainer, to help he incorporate more of the business [into the trainers position]. Listening, drawing out information from the participants experiences. Strong sense of credibility. I’m always looking for resolution, always demonstrating professional presence.

Participant 2: Relationship building. Keeping those relationships current. Knowing when you know someone is not happy. Knowing when someone needs something new. Being able to connect with people who are developing. Relationship building is key. Knowing what people want, providing choices and understanding the culture. Pulling all the pieces together and doing it well.

Participant 3: Listening skills. The ability to sense how the participants are reacting

Participant 4: I’m a good listener. I think I’m pretty close to perfecting the ability to know when to step in and when to step out. It’s the ability to know when to take control of the situation and when to let go for the benefit of all.

Participant 5: I mentored many people. I have taught more than 40,000 students from law to politics. I have knowledge of all fundamentals.

Participant 6: Coaching and feedback. When I get pushback, I look at that as a coaching opportunity. I am an excellent listener.

Personal Competencies-Cluster

Category 1—Taking Risks, Passion, and Desire

Participant 1: I learned a lot about teaching learning more about adult principles and how to incorporate that. I think positively, always think positively.

Participant 2: I thrive on doing a hundred things at a time. The desire and willingness to kind of go beyond. It [my job] rewards me in a lot of ways, a lot of intrinsic ways. It’s just that extra level of being available and being accessible that make me so different.

Participant 3: Attitude is very important...like passionate attitude and the feeling you are contributing and doing something. I always deliver with a passion. The desire to learn and apply. We need the desire or want to learn even more than others.

Participant 4: Certainly desire. A passion and desire.
Participant 5: I have authored a book on research for today’s hot topics. I love to teach and learn about new things. I learn everyday. What ever I learn I apply in day to day life.

Participant 6: I love a challenge. So, let me change your mind about something. Lets do it lets go there. I love doing that. I read a lot. I am able to adapt quickly. I started to do a lot of reading [when in WLP to find out] what are the skills that I have, that I can hone and then what are those that I need to make some changes. I understand myself and yet able to develop a critical eye. I know my hot buttons. I am willing to take risks. I am more than willing to try anything.

Designing Learning-AOE

In Designing Learning-AOE, one category of information emerged under

Business/Management Competencies: entrepreneurial and visionary in planning the business project. One category of information emerged under Interpersonal Competencies: relationship-building and leadership savvy. One category emerged under Personal Competencies: taking risks, drive, and desire to leverage knowledge. The next section contains a description of the exemplary findings first grouped by the cluster it represents and then by each category as supported by the participants’ interviews.

Business/Management Competencies-Cluster

Category 1 — Entrepreneurial and Visionary in Planning the Business Project

Participant 1: Questioning while listening to the needs of the client and being able to consult well with clients to identify the most appropriate course of action. Knowing what makes for a good design and business knowledge of the organization. Move forward with that rather than really consulting with your client to help them see other options.

Participant 2: Being able to set milestone dates from the project plan. Making sure that those milestones are communicated ahead of time with the business partner and other project team members.

Participant 3: The ability to see the broader picture but also in detail. Being able to drill down and question and really find out what the needs is. Seeing things from the learner perspective. And just in terms of like I can see the vision through the learner.
Participant 4: I know how to research, how to do things that my [company] sends my way I can do. I understand the technology, the trade you know the discipline of training.

Participant 5: I understand the discipline of project management. I understand how to design and do a needs assessments, how to build a project plan, how to get resources, how to look at all those components that you need to really move a project forward. Helping them to find a scope of an initiative, you know, budget responsibility, staffing, from does those initiatives fit into the overall objective and vision of where we are suppose to be or are our annual objectives. Or being able to see the end game and get the right people aligned to do it and being able to see a solid end game and then knowing how to pull the pieces together to get there.

Participant 6: I have a great vision. I can see clearly what I should do to lead the team. In using my [...] background to analysis the situation to see how I can bring this project or this program to a different level for future. I always focus on what our customers want. I understand what they want from the business point of view to the training point of view. I been [...], with all this vision, with some of the skills that I have, with the knowledge that I have. The thing I do is using my [...] background to analyze the situation and to see how I can bring this program or this project to a different level for the future.

Participant 7: I have strong knowledge of instructional design products, and the ADDIE model of analysis. [I know] How to select the right format for a program and to determine if the price is really worth what people will be getting out of it. The ability to break down concepts to task levels so that I can start with a big concept that people need to learn about and then break it down to make it very operational. I am highly creative in terms of coming up with clever designs and solutions that can educate as well as delight. Are you seeing an opportunity and recognizing it and grabbing on to it and letting it pull you forward, are you being too closed off, and too close-minded and you don’t want to take a chance?

Participant 8: I pride myself the most on being very focused on the learner’s experiences. I’m concerned about making sure that the learners will come to know that information or content in a way that is going to be similar to what they are going to experience in the real world versus just dumping a bunch of stuff on the learners. I care a lot about organizing and overall structure. I also pay attention to Macro and Micro-level processes. For me it is not about just doing the instructional design.... it is also seeing how it helps people to advance in their careers

Interpersonal Competencies-Cluster

Category 1—Relationship Building and Leadership Savvy
**Participant 1:** Ability to build and maintain relationships. Being able to move from just being an individual who’s doing a job for them to being a partner. It’s a lot about being able to build those relationship.

**Participant 2:** Being able to go to business partners or project managers with certain issues and knowing exactly where everything is [Communicating]. I work with a lot of different types of people, whether it’s a business partner who is a senior VP or something like that and I think that I have the ability to […] change my dialogue in conversation so they feel comfortable. I work well with teammates. I have my job as an instructional designer but whenever anybody needs something on any part of a project, I’m not afraid to go do that.

**Participant 3:** It’s about the ability to present information in a consistent way to influence people or at least to get them thinking for a negotiation discussion on what we’re going to do.

**Participant 4:** I know how to communicate with people. I seem to get along with the group and other people.

**Participant 5:** I am able to manage people and work effectively with teams. I am able to manage up and down. So I think that being well rounded and being able to implement against a plan. Knowing how to work with people and knowing how to navigate the politic waters. Able to find good advocates within an organization. Able to navigate the corporate culture is invaluable. Certain people […] are just absolutely book smart […] but cannot play the game.

**Participant 6:** I’m a good leader. I have skills to motivate and utilize the people so they will share my vision and are excited to contribute to the project, knowledge of the business and our customers. I know how to work with people and our customers. I have been using career planning, awards, coaching mentoring to motivate the people to rally behind the project. I communicate well to our customers with requirements-data and information in order to obtain string buy-in and support.

**Participant 7:** I have a strong skill of being a team member…as management and leadership skills; you have to have a certain professional polish both in grooming and presentation. You have to be articulate, polite and yet friendly. You have to be gracious and a strong in expressing opinions without being argumentative. Ability to convene your ideas and opinions whether they agree with people or not in a way acceptable and appropriate for the audience at hand.

**Participant 8:** Being a good consultant. Being able to talk to anybody. To be able to ask good questions and explain things in terms that a subject matter expert or a non subject matter expert would be able to understand.

**Personal Competencies-Cluster**
Category 1 — Taking Risks, Drive, and Desire to Leverage Knowledge

Participant 1: The drive. The drive to make sure that everything that you do is done in the best manner possible. That you have exhausted all the options. You know you’re running into problems making sure that you are researching and doing everything that you can to ensure that you are putting the best product out there.

Participant 2: I keep a positive attitude. People [say] I don’t think she does get stressed. Stepping up where resources are needed.

Participant 3: I am really willing to always try to […] extend my horizons. I’m not just satisfied to just sit back […]. I’m going to go there and grab it. I’m going to go research, it’s a thirst or hunger to always improve upon my last deliverable. I’m always looking for what’s the next way that I can push this further. I try to bring what I call a real passion to what I do.

Participant 4: I typically don’t give up until it works.

Participant 5: Know who the resources are and where they are and how to get them and leverage in case I don’t have […] support.

Participant 6: I trust the people working for me no matter how good I am. If I empower the people working for me […] and willing to contribute their best, then the project is always successful. I have the desire to achieve and be successful.

Participant 7: Have to learn from your mistakes. Need to use critical thinking skills and say Okay, I’ve never been in the situation before, what can I leverage from other situations that I have been in that might help me out here. You have to have an innate curiosity in your soul to look at situations and challenges.

Participant 8: I have received a lot of joy watching learners use something that I have been involved in […] which helps them obtain the baseline knowledge and skills so they can do their jobs well. I really celebrate those kind of successes. It is not just about doing instructional design. It is also seeing how my work helps people to advance in their career. I care a lot about that. I design instruction to add value to the organization.

Improving Human Performance - AOE

In Improving Human Performance - AOE, one category of information emerged under Business/Management Competencies: knowing the organization and strategy for performance improvement. One category of information emerged under Interpersonal
Competencies: influencing the organization and key stakeholders in creating buy-in. No similar categories emerged under Personal Competencies. The next section contains a description of the exemplary findings first grouped by the cluster it represents and next by each category as supported by the participants’ interviews.

**Business/Management Competencies-Cluster**

*Category 1—Knowing the Organization and Strategy for Performance Improvement*

*Participant 1:* Organizational Knowledge [and] knowledge of the field. Understand the nature of our […] customers who are the staff of the organization. So we have to open ourselves up and try to understand what they do and try to think about what they need so we can design appropriate programs for them.

*Participant 2:* I have a solid understanding of the organization […]. I’m talking about the company as a whole.

*Participant 3:* Knowing the organization, knowing my audience and each department is different. If you don’t understand the business or the problem, then you’ll never going to convince them to do anything differently […]. I really know this business. The ability to go in with my knowledge of this business is probably more important than anything else.

*Participant 4:* Is that of collaboration and consultation and so in order to be really [an] expert at meeting the strategic needs of the organization and helping to enable the firms strategy, [one] needs to be particularly savvy about what is the firms strategy. What are the barriers? What are the enablers and what are the components of that, that can truly be enables to classic learning intervention? What are the pieces that we should look at from a more organizational development perspective and what are the things that learning and OD can’t address at all? Deep knowledge of the craft of education and organizational development. Viewing the work we do as integral to the business.

*Participant 5:* Going in doing a diagnostic connection and translate that into what kind of OD strategy is required to get it [performance problem] fixed for them. Knowledge about [behavior] and performance structures and actually being able to know about performance models that you can present to a client.

**Interpersonal Competencies-Cluster**
Category 1—Influencing the Organization and Key Stakeholders in Creating Buy-In

Participant 2: On introduction to influence and persuasion, so one of the things that I do is I use those skills to help influence clients to buying into recommendations that my team makes. I do very well in figuring out root cause and then matching a solution up to that so the ability to get people sort of excited and on broad with an idea. I’m very diplomatic in meetings [and] at consensus building.

Participant 3: Being able to listen, really, really listen to what a client is saying. [Not] offering some type of situation without really hearing what the client has to say. Asking really good opened ended questions so that you really get to the root of a problem rather than just hearing about the symptom. Good with influencing people to get them to sort of understand [...] for instance that its not just training that going to solve this particular problem.

Participant 4: Educating [...] leaders and our practitioners in how we can help them and in some cases how we can’t and where else they might look for those solutions. Move the organization to consensus. You have to be very good at influencing skills so that [I] can get to consensus and agree that they actually had input to a decision and own it so then they non-defensive, to be very happy to share the credit—so in other words be very good at teaming. Being able to build a business case for cultural change or behavior change and being able to do that with facts and data so that people will buy in. Getting leaders thinking on one similar path [and] stakeholder enrollment so all those affected are brought into whatever process you are trying to change or achieve or implement for sustained change is that it actually is in the hands of the people who own it, the manager and partners.

Participant 5: There are some business and project planning and project management skills and capabilities that I think I have that enable me to display to the client what the overall project looks like from a scope point of view and from an outcome and enrichment point of view. What will it look like long term and then how long it might take. A deep down discipline and ability to listen to a client but being able to direct the client to different solutions, if they’ve already chosen a solution.

Measuring and Evaluating -AOE

In Measuring and Evaluating-AOE, one category of information emerged under Business/Management Competencies: command of organizational and business needs. One category of information emerged under Interpersonal Competencies: negotiation and relationship-building. One category emerged under Personal Competencies: taking risks,
passion, and desire. The next section contains a description of the exemplary findings grouped first by the cluster it represents and then by each category as supported by the participants’ interviews.

**Business/Management Competencies-Cluster**

**Category 1—Command of Organizational and Business Needs**

*Participant 1:* The stuff that **is qualitative is a whole lot harder to sell** because […] people are really fond with numbers.

*Participant 2:* **Organizational knowledge** because I have to know [where] the organization is going. What is our business, what are they doing? Professional knowledge. **Critical and analytical thinking ability.**

*Participant 3:* **Understanding databases** and how to actually gather information that is meaningful […] is statistics. What is statistically significant…understanding of the business and what is meaningful to the business. Knowledge, what’s meaningful to the business to measure.

*Participant 4:* Determining what the business needs are, the performance factors that influence or will achieve what the business goal. [What] will achieve the business goal? **Support the behavioral change and linking back to the business goal.**

**Interpersonal Competencies-Cluster**

**Category 1—Negotiation and Relationship Building**

*Participant 1:* It becomes a process of going back to some of the skills [like] **negotiation and change management** and adopt them. You have to convince these people that yes in fact this is probably a pretty good idea.

*Participant 2:* **Influencing skills and communication sills,** as I have to persuade my boss, my sponsor and my subordinates. The skills to **negotiate** to [have] very good negotiation skills.

*Participant 3:* I think the main thing is [negotiation tactic] using the data. **Having the ability to use data to meaningfully influence leadership. Show the organization** that it is worth their investment.

*Participant 4:* So if you can **make those connections** and **make that relationship** with the business partners and know what their needs are, you can determine what its
going to take to achieve those goals. [Determining] whether [it is] competency performance or what the skill gap is?

**Personal Competencies-Cluster**

*Category 1—Taking Risks, Adapting to Change*

*Participant 1:* I have a hard time getting some of this stuff off the brain. If you can’t stop thinking about [the issues] then eventually you’ll come up with the answers.

*Participant 2:* Must be very positive especially when the organization is full of uncertainty. Should always demonstrate to be very positive.

*Participant 4:* Vicarious desire to learn and an acceptance of change as a way of life. It’s an educated sense of I can’t go there now. You know how to pick your battles and you make what happens.

**Summary of Research Question 2-Exemplary Performer**

The participants identified the knowledge, skills, abilities, and other attributes (characteristics) an “exemplary” WLP performer needs to possess. The participants were asked three additional questions to guide their responses in identifying the SKAs of an exemplary performer in WLP in each of these four Areas of Expertise: (1) Designing Learning, (2) Delivering Training, (3) Improving Human Performance, and (4) Measuring and Evaluating. A summary of emergent categories is presented next for each AOE.

In *Delivering Training*-AOE, one category of information emerged under Business/Management Competencies: diagnostic and analytical knowledge base. One category of information emerged under Interpersonal Competencies: mentoring, coaching, and listening. One category emerged under Personal Competencies: taking risks, passion, and desire.
In *Designing Learning*-AOE, one category of information emerged under Business/Management Competencies: entrepreneurial and visionary in planning the business project. One category of information emerged under Interpersonal Competencies: relationship building and leadership savvy. One category emerged under Personal Competencies: taking risks, drive, and desire to leverage knowledge.

In *Improving Human Performance*-AOE, one category of information emerged under Business/Management Competencies: knowing the organization and strategy for performance improvement. One category of information emerged under Interpersonal Competencies: influencing the organization and key stakeholders in creating buy-in. No similar categories emerged under Personal Competencies.

In *Measuring and Evaluating*-AOE, one category of information emerged under Business/Management Competencies: command of organizational and business needs. One category of information emerged under Interpersonal Competencies, negotiation and relationship building. One category emerged under Personal Competencies: taking risks, passion, and desire. Presented next are the findings from the comparison group (i.e., typical performer) in identifying the competencies of the typical performer for research question 2 in this study.

**Typical Performer Interview Findings RQ-2**

*Research Question 2:* What knowledge, skills, abilities, and other attributes (characteristics) does a “exemplary” WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the *following four Areas of Expertise* (AOE): (1) *Designing Learning*, (2) *Delivering Training*, (3) *Improving Human Performance*, and (4) *Measuring and Evaluating*.
In identifying the knowledge, skills, abilities, and other attributes (characteristics) a “exemplary” WLP performer needs to possess (Research Question 2), the participants were asked three questions (Section II: Workplace): “What skills do you have?”, “What knowledge do you have?” and What abilities do you have?” and “Anything other”. The responses and stories were coded using the four themes—Plan, Outputs, Outcomes, and Project Relationships—as our primary coding system and then linked to the following grouped clusters as identified in the ASTD 2004 competency study: (1) Business/Management Competencies, (2) Interpersonal Competencies, and (3) Personal Competencies as identified in the 2004 Mapping the Future competency study.

Three categories emerged under Business/Management Competencies: (1) organizational knowledge and project management, (2) networking and relationship building, and (3) problem-solving and decision-making skills. Two categories of information emerged under Interpersonal Competencies: (1) treats people fairly, and (2) communication. One category emerged under Personal Competencies: (1) adaptability.

**Business/Management Competencies-Cluster**

*Category 1—Organizational Knowledge and Project Management*

*Participant 1*: Strategist has to know when and to whom you can drill down and get more detail. Important to see the big picture. I have to plan all the logistics for the program.

*Participant 2*: Have to meet with a lot of internal parties and external parties […] to bridge the gap between management as well a staff. Organizational knowledge. We have to know thoroughly what our organization is and also internal structure. Organizational knowledge and human resources knowledge is complimentary to each other.

*Participant 3*: Project management, HR management, financial management, and Instructional Systems design. Experience in developing, designing and implementing […] training for researching learning gaps and have creative solutions. To align
appropriate resources to fill the gap. What’s not going to fit and what’s solutions could we consider otherwise.

*Participant 4:* Time management, project management. Product knowledge.

*Participant 5:* Organizational skills. I see things like a puzzle because you get a lot of information from different people. Industry knowledge.

*Participant 6:* Time management, I have pretty good organizational skills, management skills.

*Participant 8:* Organization, time management skills.

*Participant 9:* Knowledge of evaluation approaches and strategies and methods and measurement mechanisms. Management [of] multiple projects. Show how learning is part of the overall HR strategy. It helps them set a business case for why they can go there and show how it impacted their performance. I work to create an approval process in using our learning champion infrastructure to get the approvals needed from the appropriate leaders. So then we get together collaborate on everybody’s findings. Consolidate the findings.

**Category 2—Networking and Relationship Building**

*Participant 1:* Build relationship with all levels of personnel. You know the go-to person because of all the experience I have had. I kind of have an idea of what works. Kind of asking the right questions.

*Participant 5:* Build repertoire with others. When you build relationships, people are more apt to help you and get you the information that you need a lot of the time without having to go through hoops. Ability to partner build relationships.

*Participant 6:* I’m a collaborator. I can get people together and can get them to work with each other and be successful as a team.

*Participant 7:* The ability to navigate politically.

*Participant 9:* Education and practical experience. Project management, influencing, skills, team building. A lot of stakeholder management. Getting them involved and keeping them up to date and then reporting on results and asking for further input.

**Category 3—Problem-solving and Decision-making Skills**
Participant 5: It may not always be the solution but at least a good recommendation. Decision making abilities. I can make a decision and I can stand behind that decisions.

Participant 6: Problem solving, decision making. Motivated. I keep looking for ways to educate myself and become more proficient or more educated.

Interpersonal Competencies-Cluster

Category 1—Treats People Fairly

Participant 2: Sensibility and understand cultures and norms as it relates […] that will fit that culture.

Participant 6: I work well with others.

Category 2—Communication

Participant 1: Excellent communicator. Communication skills.

Participant 5: Communication skills. Communicate the same information in a lot of different ways.

Participant 7: Good storyteller. I think I have strong questioning skills one of the most important ingredients in a trainer is how you connect with your group. I have to ability to connect with people.

Participant 8: Public speaking. Ability to connect with people.

Participant 9: Communication skills. Gaining support for initiatives. Communication skills, writing, verbal.

Personal Competencies-Cluster

Category 1—Adaptability

Participant 1: [need to] change your style of communication

Participant 4: Flexibility, scheduling.

Participant 5: I can be flexible when necessary.

Participant 8: Willingness to adapt, flexibility. Lots of flexibility.

Participant 9: Willingness to learn fast and handle multiple projects at the same time. Being able to do almost anything.
Summary of Research Question 2—Typical Performer

The participants identified the knowledge, skills, abilities, and other attributes (characteristics) a WLP performer needed to possess. The participants were asked three additional questions to guide their response in identifying the SKAs of the exemplary performer in WLP in each of the four Areas of Expertise. A summary of emergent categories is presented next.

Three categories emerged under Business/Management Competencies: (1) organizational knowledge and project management, (2) networking and relationship building, and (3) problem-solving and decision-making skills. Two categories of information emerged under Interpersonal Competencies: (1) treats people fairly, and (2) communication. One category emerged under Personal Competencies: (1) adaptability. The contrasting differences between the Exemplary Performer and the typical performer are presented next.

Summary of Results for RQ 1 and 2

Research question 1 was designed to examine distinguishing competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully successful (typical /average) in the following four Areas of Expertise (AOE): (1) Designing Learning, (2) Delivering Training, (3) Improving Human Performance, and (4) Measuring and Evaluating. Research question 2 was designed to examine knowledge, skills, abilities, and other attributes (characteristics) an exemplary performer needed to possess in order to be considered outstanding.

In Delivering Training AOE, 10 categories were identified in total and one category was identified with respect to the typical performer as summarized in Table 4.4.
In Designing Learning AOE, 8 categories were identified in total and one category was identified with respect to the typical performer as summarized in Table 4.5. In Improving Human Performance AOE, 4 categories were identified in total and two categories were identified with respect to the typical performer as summarized in Table 4.6. In Measuring and Evaluating AOE, 8 categories were identified in total and one category was identified with respect to the typical performer as summarized in Table 4.7. Ten competencies were identified by the typical performer (the comparison group) as summarized in Table 4.8.

The researcher collapsed similar or like categories gleaned from research question 1 and research question 2. During the last part of the analysis, the researcher chose this systematic way of analyzing, by assimilation, the results found for both groups, looking to see “What things are like each other? Which things go together and which do not?” (Miles & Huberman, 1984, p. 218). Here, the researcher was presenting to the reader a logical trail to the analysis of the findings.
### Table 4.4

**Delivering Training Exemplar: Competencies Identified from Research Question 1 and 2 (N = 6)**

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster: Business/Management Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Detailed Plan of the Intervention/Event Incorporating Research</td>
<td>6</td>
</tr>
<tr>
<td>Category 2- Documented Business Performance Support: Evaluation</td>
<td>5</td>
</tr>
<tr>
<td>Category 3- Implementation of a Pilot Project</td>
<td>3</td>
</tr>
<tr>
<td>Category 4(RQ-2)*- Diagnostic and Analytical and Knowledge Base</td>
<td>6</td>
</tr>
<tr>
<td><strong>Cluster: Interpersonal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Networking for Relationship Building And In Support Of Buy-In</td>
<td>4</td>
</tr>
<tr>
<td>Category 2- Learner And Business Partner Need To Be Involved At All Stages</td>
<td>6</td>
</tr>
<tr>
<td>Category 3(RQ-2)*- Mentoring, Coaching, Listening</td>
<td>6</td>
</tr>
<tr>
<td><strong>Cluster: Personal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Knowing your Strengths, Weaknesses, and Taking Risks</td>
<td>6</td>
</tr>
<tr>
<td>Category 2- Self-Directed Learning: Reading</td>
<td>3</td>
</tr>
<tr>
<td>Category 3(RQ-2)*- Taking Risks, Passion, and Desire</td>
<td>6</td>
</tr>
</tbody>
</table>

* Key: (RQ-2) = The Category Identified from Research Question 2

### Table 4.5

**Designing Learning Exemplar: Competencies Identified from Research Question 1 and 2 (N = 8)**

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster: Business/Management Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Conceptual Know-How In Designing The Intervention</td>
<td>8</td>
</tr>
<tr>
<td>Category 2- Analyze Data Quickly, Turn-Around Time, And Report Results</td>
<td>8</td>
</tr>
<tr>
<td>Category 3(RQ-2)*- Entrepreneurial and Visionary in Planning the Business Project</td>
<td>8</td>
</tr>
<tr>
<td><strong>Cluster: Interpersonal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Human Relation and Political Shrewdness</td>
<td>8</td>
</tr>
<tr>
<td>Category 2(RQ-2)*- Relationship Building and Leadership Savvy</td>
<td>8</td>
</tr>
<tr>
<td><strong>Cluster: Personal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1- Current Technical Skills and Soft Skills</td>
<td>8</td>
</tr>
<tr>
<td>Category 2- Flexible and Self-Directed In Managing Their Craft</td>
<td>7</td>
</tr>
<tr>
<td>Category 3(RQ-2)*- Taking Risks, Drive, and Desire to Leverage Knowledge</td>
<td>8</td>
</tr>
</tbody>
</table>

* Key: (RQ-2) = The Category Identified from Research Question 2
Table 4.6

*Improving Human Performance Exemplar: Competencies Identified from Research Question 1 and 2 (N = 5)*

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improving Human Performance Exemplars</strong></td>
<td></td>
</tr>
<tr>
<td>Cluster: Business/Management Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Going Beyond Understanding the Organization's Business Strategy to Anticipating the Business Strategy</td>
<td>5</td>
</tr>
<tr>
<td>Category 2(RQ-2)* - Knowing the Organization and Strategy for Performance Improvement</td>
<td>5</td>
</tr>
<tr>
<td>Cluster: Interpersonal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Knowing the role of the Organization and Stakeholders in Influencing Change Solutions</td>
<td>5</td>
</tr>
<tr>
<td>Category 2(RQ-2)* - Influencing the Organization and Key Stakeholders in Creating Buy-In</td>
<td>4</td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>None Identified</td>
<td>5</td>
</tr>
</tbody>
</table>

* Key: (RQ-2) = The Category Identified from Research Question 2

Table 4.7

*Measuring and Evaluating Exemplar - Competencies Identified from Research Question 1 and 2 (N = 4)*

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measuring and Evaluating Exemplar</strong></td>
<td></td>
</tr>
<tr>
<td>Cluster: Business/Management Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Isolating Both Internal and External Metrics for Organizational Growth</td>
<td>4</td>
</tr>
<tr>
<td>Category 2 - Proficiency in the First Three Levels of Evaluation and Level 4 or ROI Metrics When Necessary</td>
<td>4</td>
</tr>
<tr>
<td>Category 3 - Analytical - Knowing What Data to Collect, What Data Were Collected Prior</td>
<td>4</td>
</tr>
<tr>
<td>Category 4(RQ-2)* - Command of Organizational And Business Needs</td>
<td>4</td>
</tr>
<tr>
<td>Cluster: Interpersonal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Presenting Information Both Vertically and Horizontally for Buy-in for Promoting or Measuring Performance Initiatives</td>
<td>3</td>
</tr>
<tr>
<td>Category 2(RQ-2)* - Negotiation and Relationship Building</td>
<td>4</td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Passion, Confidence, Risk Taker</td>
<td>3</td>
</tr>
<tr>
<td>Category 2(RQ-2)* - Taking Risks, Adapting to Change</td>
<td>3</td>
</tr>
<tr>
<td><strong>Measuring and Evaluating Typical</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1 - Risk Aversion</td>
<td>3</td>
</tr>
</tbody>
</table>

* Key: (RQ-2) = The Category Identified from Research Question 2
In the Delivering Training-Business/Management cluster, category 4 Diagnostic and Analytical and Knowledge Base was collapsed into category 1, Detailed Plan of the Intervention/Event Incorporating Research, fitting the similarities in information presented by each participant in both research questions, identified now as Diagnostic, Analytical, Intervention Planning. In category 3 from the Interpersonal Cluster, Mentoring, Coaching, Listening was left as a final third category and category 3 under the Personal Cluster was also left as a third category. In category 1, Knowing Your Strengths and Weaknesses and Taking Risks, Taking Risks was collapsed into the third category due to the similarities in responses. The information for Delivering Training is presented in Table 4.9.

Table 4.8
Common Categories by Cluster

<table>
<thead>
<tr>
<th>Cluster: Business/Management Competencies</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1-Managing Multiple Projects</td>
<td>7</td>
</tr>
<tr>
<td>Category 2-Assessment and Identifying Gaps</td>
<td>5</td>
</tr>
<tr>
<td>Category 3-Establishing Business Relationship</td>
<td>7</td>
</tr>
<tr>
<td>Category 4(RQ-2)-organizational Knowledge and Project Management</td>
<td>8</td>
</tr>
<tr>
<td>Category 5(RQ-2)-Networking and Relationship Building</td>
<td>5</td>
</tr>
<tr>
<td>Category 6(RQ-2)-Problem Solving and Decision Making Skills</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Interpersonal Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1(RQ-2)-Treats People Fairly</td>
</tr>
<tr>
<td>Category 2(RQ-2)-Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Personal Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1-Gaining Confidence and Personal Buy-in</td>
</tr>
<tr>
<td>Category 2(RQ-2)-Adaptability</td>
</tr>
</tbody>
</table>

* Key: (RQ-2) = The Category Identified from Research Question 2

In the Delivering Training-Business/Management cluster, category 4 Diagnostic and Analytical and Knowledge Base was collapsed into category 1, Detailed Plan of the Intervention/Event Incorporating Research, fitting the similarities in information presented by each participant in both research questions, identified now as Diagnostic, Analytical, Intervention Planning. In category 3 from the Interpersonal Cluster, Mentoring, Coaching, Listening was left as a final third category and category 3 under the Personal Cluster was also left as a third category. In category 1, Knowing Your Strengths and Weaknesses and Taking Risks, Taking Risks was collapsed into the third category due to the similarities in responses. The information for Delivering Training is presented in Table 4.9.
In the Designing Learning-Business/Management cluster, category 3, *Entrepreneurial and Visionary in Planning the Business Project* was left as category 3. Under the Interpersonal Cluster, category 2 *Relationship Building and Leadership Savvy* was collapsed into category 1, *Human Relations and Political Shrewdness*, fit to similar information presented by each participant for both research questions. The category was identified now as *Relationship Building, Political Prudence and Leadership Savvy*. In category 3 under the Personal Cluster, *Taking Risks, Drive and Desire to Leverage Knowledge* was left as a third category. A summary of this information for Designing Learning is presented in Table 4.10.

---

**Table 4.9**

*Delivering Training Exemplar: Identified Final Competencies, Skills, Knowledge, and Abilities (N = 6)*

<table>
<thead>
<tr>
<th>Cluster: Business/Management Competencies</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1- <em>Diagnostic, Analytical, Intervention Planning</em></td>
<td>6</td>
</tr>
<tr>
<td>Category 2- <em>Documented Business Performance Support: Evaluation</em></td>
<td>5</td>
</tr>
<tr>
<td>Category 3- <em>Implementation of a Pilot Project</em></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Interpersonal Competencies</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1- <em>Networking for Relationship Building and in Support Of Buy-In</em></td>
<td>4</td>
</tr>
<tr>
<td>Category 2- <em>Learner and Business Partner Need to be Involved at all Stages</em></td>
<td>6</td>
</tr>
<tr>
<td>Category 3- <em>Mentoring, Coaching, Listening</em></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Personal Competencies</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1- <em>Knowing your Strengths and Weaknesses</em></td>
<td>6</td>
</tr>
<tr>
<td>Category 2- <em>Self-Directed Learning: Reading</em></td>
<td>3</td>
</tr>
<tr>
<td>Category 3- <em>Taking Risks, Passion, and Desire</em></td>
<td>6</td>
</tr>
</tbody>
</table>

* Key: Category Title Change
In the Improving Human Performance-Business/Management Competency cluster, category 2, *Knowing the Organization and Strategy for Performance Improvement* was left as category 2. Under the Interpersonal Cluster, category 2, *Influencing the Organization and Key Stakeholders in Creating Buy-in*, and category 1, *Knowing the Role of The Organization and Stakeholders in Influencing Change Solutions*, were collapsed into one category now called *Influencing the Organization and Key Stakeholders to Influencing Change*, fit to similar information presented by each participant in both research questions. In category 3 under the Personal Cluster, *Taking Risks, Drive and Desire to leverage knowledge* was a third category. A summary of this information for Improving Human Performance is presented in Table 4.11.

Table 4.10

*Designing Learning Exemplar: Identified Final Competencies, Skills, Knowledge, and Abilities (N = 8)*

<table>
<thead>
<tr>
<th>Cluster: Business/Management Competencies</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 - Conceptual Know-How in Designing the Intervention</td>
<td>8</td>
</tr>
<tr>
<td>Category 2 - Analyze Data Quickly, Turn-Around Time, and Report Results</td>
<td>8</td>
</tr>
<tr>
<td>Category 3 - Entrepreneurial and Visionary in Planning the Business Project</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Interpersonal Competencies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 - Relationship Building, Political Prudence and Leadership Savvy</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cluster: Personal Competencies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 - Current Technical Skills and Soft Skills</td>
<td>8</td>
</tr>
<tr>
<td>Category 2 - Flexible and Self-Directed an Managing their Craft</td>
<td>7</td>
</tr>
<tr>
<td>Category 3 - Taking Risks, Drive, and Desire to Leverage Knowledge</td>
<td>8</td>
</tr>
</tbody>
</table>

* Designing Learning Typical

<table>
<thead>
<tr>
<th>Cluster: Personal Competencies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 - Not Taking on Challenges, Risks or Asking for Help</td>
<td>8</td>
</tr>
</tbody>
</table>

* Key: Category Title Change
In the Measuring and Evaluating - Business/Management Competency cluster, category 4, *Command of Organizational and Business Needs*, was left as category 4.

Under the Interpersonal Cluster, category 2, *Negotiation and Relationship Building*, was left as category 2. In category 2 under the Personal Cluster, *Taking Risks, Adapting to Change* were collapsed into category 1, *Passion, Confidence, Risk Taker*, due to similar information presented by the participates in both research questions. A summary of this information for Measuring and Evaluating is presented in Table 4.12.

Table 4.11

*Improving Human Performance Exemplar: Identified Final Competencies, Skills, Knowledge, and Abilities (N = 5)*

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster: Business/Management Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Going Beyond Understanding the Organization's Business Strategy to Anticipating the Business Strategy</td>
<td>5</td>
</tr>
<tr>
<td>Category 2 - Knowing the Organization and Strategy for Performance Improvement</td>
<td>5</td>
</tr>
<tr>
<td>Cluster: Interpersonal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1 - Influencing the Organization and Key Stakeholders to Influencing Change</td>
<td>5</td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>None Identified</td>
<td>0</td>
</tr>
</tbody>
</table>

* Key: Category Title Change

* Improving Human Performance Typical

Cluster: Interpersonal Competencies

Category 1 - Collecting Needed Information Across all Stakeholders and Defending the Value of the Solution  2

Category 2 - Defending the Value of the Solution  3
Table 4.12

*Measuring & Evaluating Exemplar - Identified Final Competencies, Skills, Knowledge, and Abilities (N = 4)*

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measuring and Evaluating Exemplar</strong></td>
<td></td>
</tr>
<tr>
<td>Cluster: Business/Management Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1-Isolating Both Internal and External Metrics for Organizational Growth</td>
<td>4</td>
</tr>
<tr>
<td>Category 2-Proficiency in the First Three Levels of Evaluation and Level 4 or ROI Metrics When Necessary</td>
<td>4</td>
</tr>
<tr>
<td>Category 3-Analytical-Knowing What Data to Collect, What Datum Were Collected Prior</td>
<td>4</td>
</tr>
<tr>
<td>Category 4-Command of Organizational And Business Needs</td>
<td>4</td>
</tr>
<tr>
<td>Cluster: Interpersonal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1-Presenting Information Both Vertically and Horizontally for Buy-in for Promoting or Measuring Performance Initiatives</td>
<td>3</td>
</tr>
<tr>
<td>Category 2-Negotiation and Relationship Building</td>
<td>4</td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1-Passion, Confidence, Risk Taker</td>
<td>3</td>
</tr>
<tr>
<td>Category 2-*Adapting to Change</td>
<td>3</td>
</tr>
<tr>
<td><strong>Measuring and Evaluating Typical</strong></td>
<td></td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1- Risk Aversion</td>
<td>3</td>
</tr>
</tbody>
</table>

* Key: Category Title Change

In the Comparison Group or Typical Performer - Business/Management Competency cluster, part of category 4, *Organizational Knowledge, and all of category 5, Networking and Relationships Building*, were collapsed into Category 3, *Establishing Business Relationships*, fitting with similar information presented by each participant to both research questions now identified as *Organizational Networking and Relationships Building*. Due to the same similarity of information reason, part of category 4, *Project Management*, category 6, *Problem Solving and Decision Making Skills*, were collapsed into category 1, *Managing Multiple Projects*, now called *Project Management and Decision Making Skills*. Under the Interpersonal Cluster, category 1, *Treats People*
Fairly, and category 2, Communication, were collapsed into one category now identified as Effective Communication. Category 2, under the Personal Cluster, Adaptability, was now the second category. A summary of this information for the Comparison Group or Typical Performer is presented in Table 4.13.

Table 4.13

<table>
<thead>
<tr>
<th>Common Categories by Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster: Business/Management Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1 - Project Management Decision Making Skills</td>
<td>8</td>
</tr>
<tr>
<td>Category 2 - Assessment and Identifying Gaps</td>
<td>5</td>
</tr>
<tr>
<td>Category 3 - Organizational Networking and Relationship Building</td>
<td>8</td>
</tr>
<tr>
<td><strong>Cluster: Interpersonal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1 - Effective Communication</td>
<td>7</td>
</tr>
<tr>
<td><strong>Cluster: Personal Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1 - Gaining Confidence and Personal Buy-in</td>
<td>6</td>
</tr>
<tr>
<td>Category 2 - Adaptability</td>
<td>5</td>
</tr>
</tbody>
</table>

* Key: Category Title Change

Common Categories

In identifying the distinguishing themes, common categories of competencies in each of the four Areas of Expertise—Delivering Training, Designing Learning, Improving Human Performance and Measuring and Evaluating—the researcher made a distinction between two types of competencies. The types of competencies described are Practices and Attributes. Following Klemp’s model in identifying outstanding leadership competencies, conceptualizing and making a distinction between two types of competencies are most important. Klemp (2004) identified Practices as “what people do
on the job to get results” (p. 2). These practices are found in the Business/Management Cluster and the Interpersonal Cluster of the foundational competencies identified in ASTD’s *Mapping the Future Competency Study*. Klemp also identified *Attributes* as “knowledge, skills, and other characteristics that people bring to the job that enable them to carry out leadership tasks” (p. 2). These attributes are found in the Personal Cluster of the foundational competencies. The *Practice* category was used to represent the findings for research question 1 and the *Attributes* category was used to represent the findings for research question 2.

The common competencies or practices, in order of agreement, as identified by exemplary performers ($N = 6$) in Delivering Training were: (a) Diagnostic, analytical, and intervention planning with all six participants (100%) describing this practice; (b) Having the learner and business partner involved at all stages of development, with all six participants (100%) describing this practice; (c) Mentoring, coaching and listening business partners with six participants (100%) describing this practice; (d) Documenting the business performance support through evaluation tools with five participants (83%) describing this practice; and (e) Implementing a pilot session with 3 participants (50%) describing this practice. The identified common knowledge, skills, abilities, and other attributes (characteristics) in order of agreement were: (a) Knowing your strengths and weakness with six participants describing this attribute (100%); (b) Taking risks, passion and desire with six participants (100%) describing this attribute; and (c) Being a self-directed learner, with 3 participants (50%) describing this attribute. Table 4.14 represents this summary.
The common competencies or practices, in order of agreement, as identified by exemplary performers \((N = 8)\) in Designing Learning were: (a) Conceptual know-how in designing the intervention, with all eight participants \((100\%)\) describing this practice; (b) Analyze data quickly, turn-around time, and report results, with all eight participants \((100\%)\) describing this practice; (c) Entrepreneurial and visionary in planning the business project with eight participants \((100\%)\) describing this practice; and (d) Relationship building, political prudence and leadership savvy, with eight participants \((100\%)\) describing this practice. The identified common knowledge, skills, abilities, and other attributes (characteristics) in order of agreement were: (a) Current technical and soft skills, with eight participants describing this attribute \((100\%)\); (b) Taking risks, drive, and desire to leverage knowledge, with eight participants \((100\%)\) describing this attribute;
and (c) Being flexible and self-directed in managing their craft, with 7 participants (88%) describing this attribute. Table 4.15 represents this summary.

Table 4.15

*Designing Learning: Identified Exemplar Practice and Attribute Competencies (N = 8)*

<table>
<thead>
<tr>
<th>Common Categories by Type of Competencies</th>
<th>Percentage of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Conceptual Know-How in Designing the Intervention</td>
<td>100</td>
</tr>
<tr>
<td>Analyze Data Quickly, Turn-Around Time, and Report Results</td>
<td>100</td>
</tr>
<tr>
<td>Entrepreneurial and Visionary in Planning the Business Project</td>
<td>100</td>
</tr>
<tr>
<td>Relationship Building, Political Prudence and Leadership Savvy</td>
<td>100</td>
</tr>
<tr>
<td><strong>Attribute Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Current Technical Skills and Soft Skills</td>
<td>100</td>
</tr>
<tr>
<td>Taking Risks, Drive, and Desire to Leverage Knowledge</td>
<td>100</td>
</tr>
<tr>
<td>Flexible and Self-Directed in Managing their Craft</td>
<td>88</td>
</tr>
</tbody>
</table>

The common competencies or practices, in order of agreement, as identified by exemplary performers (N = 5) in Improving Human Performance were: (a) Going beyond understanding the organization’s business strategy to anticipating the business strategy, with all five participants (100%) describing this practice; (b) Knowing the organization and strategy for performance Improvement, with all five participants (100%) describing this practice; and (c) Influencing the organization and key stakeholders to influence change, with five participants (100%) describing this practice. There were no common identified knowledge, skills, abilities, and other attributes (characteristics) for this Area of Expertise. Table 4.16 represents this summary.

The common competencies or practices, in order of agreement, as identified by exemplary performers (N = 4) in Measuring and Evaluating were: (a) Isolating both
internal and external metrics for organizational growth, with all four participants (100%)

Table 4.16

*Improving Human Performance: Identified Exemplar Practice Competencies (N = 5)*

<table>
<thead>
<tr>
<th>Practice Competencies</th>
<th>Percentage of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going Beyond Understanding the Organization's Business Strategy to Anticipating the Business Strategy</td>
<td>100</td>
</tr>
<tr>
<td>Knowing the Organization and Strategy for Performance Improvement</td>
<td>100</td>
</tr>
<tr>
<td>Influencing the Organization and Key Stakeholders to Influencing Change</td>
<td>100</td>
</tr>
</tbody>
</table>

describing this practice; (b) Proficiency in the first three levels of evaluation and level 4 or ROI metrics when necessary, with all four participants (100%) describing this practice; (c) Analytical-knowing what data to collect, what data were collected prior, with all four participants (100%) describing this practice; (d) Command of organizational and business needs, with all four participants (100%) describing this practice; (e) Negotiation and relationship building, with all four participants (100%) describing this practice; and (f) presenting information both vertically and horizontally for buy-in for promoting or measuring performance initiatives, with three participants (75%) describing this practice.

The identified common knowledge, skills, abilities, and other attributes (characteristics) in order of agreement were: (a) Passion, confidence, risk taker, with three participants (75%) describing this attribute; and (b) Adapting to change, with three participants (75%) describing this attribute. Table 4.17 presents this summary.
The overall common competencies or practices, in order of agreement, as identified by the Typical Performer ($N = 9$) were: (a) Project Management decision-making skills, with all eight participants (89%) describing this practice; (b) Organizational networking and relationship building, with all eight participants (89%) describing this practice; (c) Effective communication, with all seven participants (78%) describing this practice; and (d) Assessment and identifying gaps, with all five participants (56%) describing this practice. The identified common knowledge, skills, abilities, and other attributes (characteristics) in order of agreement were: (a) Gaining confidence and personal buy-in, with six participants (78%), describing this attribute; and (b) Adaptability, with five participants (56%) describing this attribute. Table 4.18 presents this summary.

<table>
<thead>
<tr>
<th>Common Categories by Type of Competencies</th>
<th>Percentage of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Isolating Both Internal and External Metrics for Organizational Growth</td>
<td>100</td>
</tr>
<tr>
<td>Proficiency in the First Three Levels of Evaluation and Level 4 or ROI Metrics When Necessary</td>
<td>100</td>
</tr>
<tr>
<td>Analytical-Knowing What Data to Collect, What Data Were Collected Prior</td>
<td>100</td>
</tr>
<tr>
<td>Command of Organizational and Business Needs</td>
<td>100</td>
</tr>
<tr>
<td>Negotiation and Relationship Building</td>
<td>100</td>
</tr>
<tr>
<td>Presenting Information Both Vertically and Horizontally for Buy-in for Promoting or Measuring Performance Initiatives</td>
<td>75</td>
</tr>
<tr>
<td><strong>Attribute Competencies</strong></td>
<td></td>
</tr>
<tr>
<td>Passion, Confidence, Risk Taker</td>
<td>100</td>
</tr>
<tr>
<td>Adapting to Change</td>
<td>100</td>
</tr>
</tbody>
</table>
Section Summary

The section contained a description of the common competency themes that emerged from the four Areas of Expertise for the exemplary performer and the comparison group for the typical performer. These competencies were described in reference to practices and attributes. The next section contains a description of the model used by the researcher in identifying the contrasting differences in exemplary and typical Workplace Learning and Performance performers.

Contrasting Differences

This section involves the contrasting or distinguishing differences obtained from the exemplary population ($N = 23$) and the typical performer population ($N = 9$). In view of the fact that a small sample was drawn for the Improving Human Performance and Measuring and Evaluating AOE and that of the typical performer group (the Comparison Group) for each of the AOE's, contrasting differences are defined with regard to the Workplace Learning and Performance performer as a whole and not for each Area of Expertise.
Figure 4.1 Workplace Learning and Performance Job Competency Model adapted from Klemp's Model: Job Competence Assessment: Defining the Attributes of the Top Performer
The researcher used the Workplace Learning and Performance Job Competency Model, Figure 4.1, (see Appendix A in formulating the comparison themes found. An approach used in the comparisons discovery was pattern finding. “Pattern finding can be very productive as an analysis strategy when the number of sites and or the data overload is severe” (Miles & Huberman, 1984, p. 217). The data collected from all 32 interviews generated approximately 512 pages of text interviews and produced approximately 217,657,000 words for analysis. Plausibility during analysis is what “makes good sense” and “fits” (Miles & Huberman, 1981, p. 217). The researcher used the model in Figure 4.1 in drawing plausible differences. Miles and Huberman (1984) stated, “Plausibility and intuition as the underlying bases for it [a finding] is not to be sneered at” (p. 217).

In total, for the Exemplary Performer in all four Areas of Expertise (AOEs), 19 practice competencies and 8 attribute competencies emerged. In total, for the typical performer, 4 practice competencies and 2 attribute competencies emerged for a total of 23 practice and 10 attribute competencies. The summary of these categories is presented in Table 4.19.

Five common categories or practice competencies emerged from the 23 categories identified in Table 4.19. They are: (a) Diagnostic, analytical, intervention planning; (b) Entrepreneurial and visionary in planning the business project; (c) Networking for relationship building support to influence change; (d) Documented business performance support; and (e) political prudence, and leadership savvy. Three common categories or attribute competencies emerged from the 10 categories identified in Table 4.20. They are: (a) Leveraging strengths and weaknesses; (b) Taking risks, passion, and desire; and (c) Self-directed learning to leverage knowledge.
Table 4.19
Summary of Practice and Attribute Competency Categories Found in Each of the Four Exemplar Areas of Expertise and Also Found in the Typical Performer (N = 32)

<table>
<thead>
<tr>
<th>Competency Categories</th>
<th>*Exemplar</th>
<th>Typical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice Competencies</strong></td>
<td>DT</td>
<td>DL</td>
</tr>
<tr>
<td>Diagnostic, Analytical, Intervention Planning                                         X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner and Business Partner Need to be Involved at all Stages                         X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentoring, Coaching, Listening                                                         X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented Business Performance Support: Evaluation                                    X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Networking for Relationship Building and in Support of Buy-in                          X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of a Pilot Project                                                      X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Know-How in Designing the Intervention                                     X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyze Data Quickly, Turn-Around Time, and Report Results                             X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial and Visionary in Planning the Business Project                         X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Building, Political Prudence and Leadership Savvy                         X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going Beyond Understanding the Organization's Business Strategy to Anticipating the Business Strategy X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowing the Organization and Strategy for Performance Improvement                      X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influencing the Organization and Key Stakeholders to Influencing Change                X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolating Both Internal and External Metrics for Organizational Growth                 X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proficiency in the First Three Levels of Evaluation and Level 4 or ROI Metrics When Necessary X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analytical-Knowing What Data to Collect, What Data Were Collected Prior                 X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Command of Organizational and Business Needs                                           X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiation and Relationship Building                                                  X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenting Information Both Vertically and Horizontally for Buy-in for Promoting or Measuring Performance Initiatives X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Decision Making Skills                                             X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Networking and Relationship Building                                    X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective Communication                                                               X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment and Identifying Gaps                                                       X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attribute Competencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowing your Strengths and Weaknesses                                                 X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking Risks, Passion, and Desire                                                     X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Directed Learning                                                                 X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Technical Skills and Soft Skills                                               X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking Risks, Drive, and Desire to Leverage Knowledge                                  X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexible and Self-Directed in Managing their Craft                                    X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passion, Confidence, Risk Taker                                                       X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapting to Change                                                                    X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaining Confidence and Personal Buy-in                                                X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability                                                                          X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Key: DT = Delivering Training; DL = Designing Learning; IHP = Improving Human Performance; ME = Measuring & Evaluating; TP = Typical Performer

The results of the new categorization of the emerged categories and contrast of like behaviors as competencies most often represented by the exemplary and not the typical performer suggested three distinguishing practice competency categories. They are: (1) Entrepreneurial and Visionary in Planning the Business Project, (2) Documented
Business Performance Support to Influence Change, and (3) Political Prudence and Leadership Savvy as represented in Table 4.20.

Table 4.20

Distinguishing Practice Competencies Categories Found in Each of the Four Exemplar Areas of Expertise and Also Found in the Typical Performer

<table>
<thead>
<tr>
<th>Final Competency Categories</th>
<th>*Exemplar Performer</th>
<th>Typical Performer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial and Visionary in Planning the Business Project</td>
<td>DT: X</td>
<td>DL: X</td>
</tr>
<tr>
<td>Documented Business Performance Support to Influence Change</td>
<td>DT: X</td>
<td>DL: X</td>
</tr>
</tbody>
</table>

*Key: DT = Delivering Training; DL = Designing Learning; IHP = Improving Human Performance; ME = Measuring & Evaluating; TP = Typical Performer

The results of the new categorization of the emerged categories and contrast of like behaviors as competencies most often represented by the exemplary and not the typical performer, indicating one distinguishing attribute competency category. The one attribute competence found in three of the four exemplary AOEs was Taking Risks, Passion, and Desire as represented in Table 4.21. The final 4 themes that emerged from the 33 categories are (1) Taking Risks, Passion, and Desire, (2) Political Prudence and Leadership Savvy, (3) Documented Business Performance Support to Influence Change, and (4) Entrepreneurial and Visionary in Planning the Business Project.

Table 4.21

Distinguishing Attribute Competencies Categories Found in Each of the Four Exemplar Areas of Expertise and Also Found in the Typical Performer

<table>
<thead>
<tr>
<th>Final Competency Categories</th>
<th>*Exemplar Performer</th>
<th>Typical Performer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Competencies</td>
<td>DT</td>
<td>DL</td>
</tr>
<tr>
<td>Leveraging Strengths and Weaknesses</td>
<td>DT: X</td>
<td>DL: X</td>
</tr>
<tr>
<td>Taking Risks, Passion, and Desire</td>
<td>DT: X</td>
<td>DL: X</td>
</tr>
<tr>
<td>Self-Directed Learning to Leverage Knowledge</td>
<td>DT: X</td>
<td>DL: X</td>
</tr>
</tbody>
</table>

*Key: DT = Delivering Training; DL = Designing Learning; IHP = Improving Human Performance; ME = Measuring & Evaluating; TP = Typical Performer
Validating Themes

Part of the researcher’s tactic in confirming these distinguishing findings as drawn from the exemplary performer in WLP were to look for the contrasting differences that were represented less often in the typical performer. In validating the four categories found as distinguishing differences the researcher used the categories identified through the second Critical Incident gleaned from the exemplary performers \((N = 23)\) in confirming the views held by the exemplar in describing the typical performer. Each exemplary performer was asked to identify how a typical performer may behave using the same exemplary critical incident described. Five categories were identified from the exemplary participants as behaviors of typical performers. Most of the incidents described were framed as behaviors that were most likely to be missing or absent based on experience, instead of competencies held by the typical performer. Those five categories or competencies absent from the typical performer are listed first by AOE, and then by competency cluster in Table 4.22.

The typical performer categories, as expressed by the exemplary performer, were collapsed into similar and common categories in creating the final categories for the typical performer as expressed through the exemplary performer’s critical incidents. The categories that emerged were placed into common and like categories for analysis.

Category 1—*Not taking on challenges nor taking risks* under personal competencies for Delivering Training, Category 1—*Not taking on challenges, risks or asking for help* under personal competencies for Designing Learning, and Category 1—*Risk aversion* under personal competencies were collapsed into one category due to similar information being described by each participant. The final category is now called *Not taking on*
challenges, risk aversion.

Table 4.22

*Identified Typical Competencies Missing from the Exemplar Performer in Delivering Training, Designing Learning, Improving Human Performance, and Measuring and Evaluating (N= 23)*

<table>
<thead>
<tr>
<th>Common Categories by AOE and Cluster</th>
<th>Number of Participants Mentioning Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivering Training Typical (N = 6)</td>
<td></td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1-Not Taking on Challenges nor Taking Risks</td>
<td>6</td>
</tr>
<tr>
<td>Designing Learning Typical (N = 8)</td>
<td></td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1-Not Taking on Challenges, Risks or Asking for Help</td>
<td>8</td>
</tr>
<tr>
<td>Improving Human Performance Typical (N = 5)</td>
<td></td>
</tr>
<tr>
<td>Cluster: Interpersonal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1- Absence of Collecting Needed Information to Influence Stakeholders</td>
<td>2</td>
</tr>
<tr>
<td>Category 2- Not Defending the Value of the Solution</td>
<td>3</td>
</tr>
<tr>
<td>Measuring and Evaluating Typical (N = 4)</td>
<td></td>
</tr>
<tr>
<td>Cluster: Personal Competencies</td>
<td></td>
</tr>
<tr>
<td>Category 1- Risk Aversion</td>
<td>3</td>
</tr>
</tbody>
</table>

Category 1, *Absence of Collecting Needed Information to Influence Stakeholders* and Category 2, *Defending the Value of the Solution* under interpersonal competencies for Improving Human Performance were collapsed into one final theme due to similar information having been provided by the participants. The final category is now called *Not Defending the Value of the Solution*. The final two categories were identified first by *practice competencies* and then by *attribute competencies* and are summarized in Table 4.23.

Table 4.23

*Identified Typical Final Missing Competencies, Skills, Knowledge, and Abilities from the Exemplar Performer in Delivering Training, Designing Learning, Improving Human Performance and Measuring and Evaluating (N= 23)*

<table>
<thead>
<tr>
<th>Final Themes by Type of Competencies</th>
<th>Percentage of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Competencies</td>
<td></td>
</tr>
<tr>
<td>Not Taking on Challenges/Risk Aversion</td>
<td>79</td>
</tr>
<tr>
<td>Attribute Competencies</td>
<td></td>
</tr>
<tr>
<td>Not Defending the Value of the Solution</td>
<td>21</td>
</tr>
</tbody>
</table>
The information gleaned from the typical performer competency summation, as expressed by the exemplary performer, helped to validate two of the four distinguishing Competency themes. The exemplar identified *Not taking risks* and *Risk Aversion* as a practice missing from a typical performer, giving support to the personal competency theme of *Taking Risks, Passion, and Desire*. The exemplars also identified *Not Defending the Value of the Situation* as an attribute missing from the typical performer, giving support to the *Documented Business Performance Support to Influence Change* competency.

**Chapter Summary**

The findings for the research study were presented in this chapter. Demographic and profile information were presented for both the Exemplary and Nondesignated (typical) WLP Performer. A summary of the procedures used to collect that data were presented along with the two research questions for the study. Interview findings were presented for research question 1 and research question 2 from the 23 exemplar interviews. Findings from the 9 typical performers were presented for both research questions 1 and 2. The Critical Incident Technique (CIT) and the Behavioral Event Interviews (BEI) data provided by the participants gave rise to 23 practice competency categories and 10 attribute competency categories. Four distinguishing competency themes emerged in response to the researchers’ two questions. Excerpts from the interview were used to support the categories and themes that emerged from the 32 interviews. A summary of the study conclusions as drawn from the findings, and recommendations for future research, are presented in chapter 5.
CHAPTER 5
Overview, Conclusions, and Recommendations

The purpose of this chapter is to provide an overview of the study, discuss the report findings from chapter 4, and offer conclusions and implications and further research recommendations. Chapter 5 is arranged into five sections: study overview, discussion of the research questions, conclusions drawn from the study, implications, and recommendations for further research.

Study Overview

This section serves as an overview of the research presented in this study. The purpose of this study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) areas of expertise as described in ASTD’s 2004 Mapping the Future: New Workplace Learning and Performance Competencies.

Rothwell, Sanders, and Soper (1999) stated it best when they wrote, “performance is the result of an effective interaction among the resources, the process, the people, and the environment” (p. 4). The study concentrated on ‘the people’ aspect of this statement and labeled the differentiating characteristics of performers who perform at higher levels (exemplary) than the average performer (fully-successful). The four areas included in this study were: Designing Learning, Delivering Training, Improving Human Performance, and Measuring and Evaluating.

Much of the research in Workplace Learning and Performance (WLP) focused on competency studies that examined the foundational competencies and the migrating roles of the profession known as Training and Development, HRD and the most current ASTD
competency study commissioned in 2003, called *Mapping the Future: Shaping New Workplace Learning and Performance Competencies* and published in 2004. This 2004 competency study provided a roadmap to guide the future direction of the WLP profession. The new competency study provided a new model (see Appendix A, Figure A.3) to support understanding of how WLP must be aligned with the organization’s business strategy. This alignment will lead to success in the WLP profession and business performance. This new model identified foundational competencies directly linked to successful performance, as seen on the first level of the model. The second level is the Areas of Expertise (AOEs): “Think of AOEs as the knowledge and skills an individual must have above and beyond the foundational competencies” (*Mapping the Future*, 2004a, p. 23). Although all of the AOEs are highly specialized, one should understand that as the profession evolves and job duties enlarge and change, practitioners in the field will often find themselves employing the competencies of multiple AOEs. The ASTD 2004 competency study revealed that, “95 percent of WLP professionals’ work responsibilities can be classified into one or more of the nine AOEs” (*Mapping the Future*, 2004a, p. 24). This overlap extends to the top of the model where it addressed a broad range of responsibilities that are further compulsory in aligning an organization to meet specific business strategies. In supporting the new model this research was the first attempt to explore and define measurable indicators by which the profession could start to define levels of expertise for professional certification and to guide further research into defining the competencies of the exemplary performer. This expanded focus, defining the expertise of an exemplary and typical performer, provided concrete critical incident examples that guided the design and development of Core Work Product
submission requirements for the Certified Professional in Learning and Performance (CPLP) exam.

A review of the literature was conducted in order to cite pertinent foundational ASTD competency studies to date for the profession known as the Training and Development (T&D), Human Resource Development (HRD), and Workplace Learning and Performance (WLP) field. Seven major competency studies and two major studies that guided the research on exemplary performers were reviewed. The theoretical foundation that included Goal Setting Theory, Social Cognitive Theory, and Organization Justice were presented to help the reader understand the connection to each theory and to provide insights into defining the behavior of exemplary performance.

Ten key terms were presented and defined. The key terms were (a) Certified Professional in Learning and Performance (CPLP), (b) Area of Expertise (AOE), (c) ASTD, (d) Average, (e) Competencies, (f) Exemplary Performance, (g) Star, (h) Performance, (i) Senior Profession in Human Resources (SPHR), and (j) Workplace Learning and Performance.

The study was conducted using a qualitative methodology that was based in the tradition of Grounded Theory. This exploratory research study used naturalistic and inductive inquiry methods in identifying the competencies that defined exemplary Workplace Learning and Performance performers. The researcher collected, coded, and analyzed data using the qualitative methodology approach called the Critical Incident Technique (CIT), utilizing Behavioral Event Interviews (BEI).

Semi-structured tape-recorded telephone interviews were conducted to capture definitions of competencies that distinguished exemplary performers from typical
performers in WLP. Twenty-three exemplary performers were interviewed over a period of time from the end of December 2003 to May 2005. Eight individuals were interviewed from May 2005 to August 2005 for the Designing Learning AOE, five were interviewed for Improving Human Performance AOE, six were interviewed for the Delivering Training AOE, and four were interviewed for the Measuring & Evaluating AOE. Nine typical performers, the comparison group population, were interviewed for the study. Participants included three individuals interviewed for the Designing Learning AOE, two individuals interviewed for the Improving Human Performance AOE, three individuals interviewed for the Delivering Training AOE, and one individual interviewed for the Measuring & Evaluating AOE.

The exemplary participants in this study were asked to describe two incidents, one framed as exemplary and the second framed as typical inclusive of Behavioral Event questions. Their input was sought on knowledge, skills, and abilities that would define an exemplary performer. The comparison group (the typical performers) was asked for one critical incident that could be used to frame a typical incident in their performance inclusive of (BEI) questions seeking information on knowledge, skills, and abilities that define their performance.

The data gathered from the exemplary and typical survey questions provided answers to the two research questions for this study. The research questions were:

1. What are the competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully-successful (typical/average) in the following four Areas of Expertise (AOE):
   1) Designing Learning
2) Delivering Training
3) Improving Human Performance
4) Measuring and Evaluating

2. What knowledge, skills, abilities, and other attributes (characteristics) does a exemplary WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the following four Areas of Expertise (AOE):

1) Designing Learning
2) Delivering Training
3) Improving Human Performance
4) Measuring and Evaluating

These two research questions provided the framework for collecting, organizing, and analyzing the data in determining the distinguishing behaviors and competencies of the exemplary performer in WLP. Study findings were gleaned from responses from a total of 32 interviews. Twenty-three practice and ten attribute competencies emerged from the data. Nineteen practice competencies and 8 attribute competencies emerged for the exemplary performer. Four practice competencies emerged and two attribute competencies emerged for the typical performer. An adaptation of Klemp’s 1994 Workplace Learning and Performance Job Competency Model was used in defining the contrasting differences. The results of this analysis provided three practice competency themes and one attribute competency theme that were most often represented by the exemplary and not the typical performer. Those three distinguishing practice competency themes were: (1) Entrepreneurial and visionary in planning the business project, (2) Documented business performance support to influence change, and (3) Political
prudence and leadership savvy. The one distinguishing attribute competency theme was:
Taking risks, passion, and desire.

*Section Summary*

An overview of the study was presented in this section. The purpose, background, and research questions were discussed. An overview of the major ASTD competencies studies, including a review of the two studies on the exemplary performer, was discussed. The next section summarizes the results of the interviews collected and contains a discussion of the data and themes that emerged.

*Discussion of the Research Questions*

This section presents a discussion of the conclusions for each research question for the study. The findings are presented first by each AOE: Designing Learning, Delivering Training, Improving Human Performance, and Measuring and Evaluating—The typical performer; and then by distinguishing competencies based on the overall contrast-comparison performed.

*Research Question 1 Discussion*

1. What are the competencies that uniquely distinguish exemplary (best-in-class) performers in WLP from fully-successful (typical/average) in the following four Areas of Expertise (AOE):

   1) Designing Learning
   2) Delivering Training
   3) Improving Human Performance
   4) Measuring and Evaluating
The purpose of the first research question was to identify specific distinguishing competencies held by exemplary performers in the four areas of expertise (AOE) in Workplace Learning and Performance (WLP). Participants were asked for two critical incidents, or a story that explained a personal experience from their own record of outstanding performance. Each participant was asked for two critical incidents, with the first demonstrating exemplary performance, and the second in contrast representing the experience of a typical performer. Based in the tradition of Grounded Theory, using an exploratory approach with naturalist inquiry, the findings sought to explore the “process of generating theory” and to “emphasize the steps and procedures used for connecting induction and deduction through a constant comparative method” (Patton, 2002, p. 125). Exploring “distinguishing competencies” held the assumption that these exemplary performers would possess the foundational competencies as cited in the 2004 Mapping the Future competency study but were also left broad enough for other outside factors to emerge. The final categories for each AOE were divided into practice competencies “what people do on the job to get results” and attribute competencies “knowledge skills and other characteristics that people bring to the job that enable them to carry out leadership tasks” (Klemp, 2004, p. 2). The responses to the survey interview questions relating to the first research question as linked to practice competencies are discussed next.

Most of the exemplary participants interviewed expressed awkwardness in being identified as ‘exemplary’ in their discipline but were delighted to be recommended by one of the nominators or peers as being outstanding in their performance. The interview questions asked for research question 1 were: “Describe a time or event that would best
describe for me your exemplary performance”, “Describe the same kind of event and how a minimally qualified performer would behavior in that same role would behave”.

The participants were also asked, “Would you please describe your job and what you do on a daily basis as an exemplary performer?” Described next are the categories that emerged from the four Areas of Expertise.

Delivering Training

Six practice competency categories emerged for the exemplary performer in the Delivering Training-AOE. All six participants cited responses related to the first three categories: (1) Diagnostic, analytical, intervention planning, (2) Learner and business partner need to be involved at all stages, and (3) Mentoring, coaching, and listening. Five participants cited responses relating to the fourth category: (4) Documented business performance support and evaluation. Four participants cited responses to the fifth category: (5) Networking for relationship building and in support of buy-in. Three participants cited responses to the sixth category: (6) Implementation of a pilot project.

Designing Learning

Four practice competency categories emerged for the exemplary performer in the Designing Learning-AOE. All eight participants cited responses related to each of the four categories: (1) Conceptual know-how in designing the intervention, (2) Analyze data quickly, turn-around time, and report results, 3() Entrepreneurial and visionary in planning the business project, and (4) Relationship building, political prudence and leadership savvy.
Improving Human Performance

Three practice competency categories emerged for the exemplary performer in the Improving Human Performance-AOE. All five participants cited responses related to each of the three categories: (1) Going beyond understanding the organization's business strategy to anticipating the business strategy, (2) Knowing the organization and strategy for performance improvement, and (3) Influencing the organization and key stakeholders to influence change.

Measuring and Evaluating

Six practice competency categories emerged for the exemplary performer in the Measuring and Evaluating-AOE. All four participants cited responses related to the first five categories: (1) Isolating both internal and external metrics for organizational growth, (2) Proficiency in the first three levels of evaluation and level 4 or ROI metrics when necessary, (3) Analytical-knowing what data to collect, what data were collected prior, (4) Command of organizational and business needs, and (5) Negotiation and relationship building. Three participants cited responses related to the sixth category: (6) Presenting information both vertically and horizontally for buy-in to promote or measure performance initiatives.

The Typical Performer (the comparison group)

Four practice competency categories emerged for the typical performer in Workplace Learning and Performance. Eight participants cited responses related to the first two categories: (1) Project management and decision-making skills, and (2) Organizational networking and relationship building. Seven participants cited responses
related to category 3: Effective communication. Five cited responses related to theme 4: Assessment and identifying gaps.

Distinguishing Competency Themes

Three practice competency themes emerged overall for the Workplace Learning and Performance Exemplar performer. The three themes were: (1) Entrepreneurial and visionary in planning the business project, (2) Documented business performance support to influence change, and (3) Political prudence, and leadership savvy.

Research Question 2 Discussion

2. What knowledge, skills, abilities, and other attributes (characteristics) does a exemplary WLP performer need to possess in order to be considered outstanding (an expert practitioner) in the following four Areas of Expertise (AOE):

   1) Designing Learning
   2) Delivering Training, and
   3) Improving Human Performance
   4) Measuring and Evaluating

The purpose of the research question was to identify knowledge, skills, abilities, and other attributes an exemplary performer held in the four Areas of Expertise (AOE) in Workplace Learning and Performance. The participants were asked three questions pertaining to the skill, knowledge, and abilities (KSAs) that make an exemplary performer inclusive of anything other that could not be categorized into one of the KSAs.

Knowledge, skills, and abilities (KSAs) are the “raw ingredients of performance: they are the capabilities needed by people to do their job (Klemp, 2004, p. 2). Originally, the acronym KSA meant knowledge, skills, and aptitudes (Kierstead, 1998). Human
resources practitioners used these ingredients in addressing many employee relation
issues such as hiring, promotion, and performance management processes. The *Federal
Personnel Manual* referred to these as “the factors that identify the better candidates from
a group of persons basically qualified for a position” (*The Federal Personnel Manual*,
2005, Para 3). Identifying these “raw” ingredients could help to ascertain key areas that
are beyond those found in a typical performer.

The final categories for the second research question for each AOE were divided
into *attribute competencies*—“knowledge, skills, and other characteristics that people
bring to the job that enable them to carry out leadership tasks” (Klemp, 2004, p. 2). The
responses to the survey interview questions relating to the second research question as
these were linked to *attribute competencies* are discussed next.

Many of the participants interviewed expressed hesitation when trying to
differentiate between the two terms in the sequence of *skills* and *abilities*, though all
knew exactly what information was sought when grouped and termed as ‘KSA’. Most
had difficulty in identifying specific behaviors for a *skill* and an *ability*. The acronym has
evolved and taken on many different meanings. The “K” and “S” always stood for
knowledge and skills. The current addition of the “O” referred to *other* as in ‘other
behaviors not categorized by the other three indicators’. Then there was the “A”. The “A”
has stood for abilities, attributes, or aptitudes in many venues and disciplines. It was not
surprising that many participants, both exemplary and typical, had much difficulty with
these terms. It was this researcher’s opinion that if the very practitioners who used these
terms as performance indicators have difficulty distinguishing from among them, then a
clear distinction needs to be made among these terms across the profession. The
researcher helped to relieve the participants’ ‘interview stress’ by allowing them to group these behaviors without worrying about identifying them for a particular category.

Described next are the themes that emerged from the four areas of expertise, the typical performer and the distinguishing characteristics.

**Delivering Training**

Three *attribute* competency categories emerged for the exemplary performer in the Delivering Training-AOE. All six participants cited responses related to the first two categories: (1) Knowing your strengths and weaknesses, and (2) Taking risks, passion, and desire. Three participants cited responses to the final category: (3) Self-directed learning.

**Designing Learning**

Three *practice* competency categories emerged for the exemplary performer in the Designing Learning-AOE. All eight participants cited responses related to the first two categories: (1) Current technical skills and soft skills, and (2) Taking Risks, drive, and desire to leverage knowledge. Four participants cited responses the final category: (3) Flexible and self-directed in managing their craft.

**Improving Human Performance**

No consistent or common attributes were described. One participant described many interpersonal behaviors that were categorized into the interpersonal competency cluster.

Participant 1: I like to work with people. This is very important and effective interpersonal skills are important to my daily job.

Participant 2: I push people to take on the responsibilities of the next level. I encourage them [others] to take risks, “qualified risks.”
Several participants did not suggest that they themselves were a risk takers but encouraged others do so.

*Participant 2:* Being able to listen, really listen to the client, saying or conversely what a [person reporting to you] is trying to say.

Though one could assume that many of these types of interpersonal competencies require personal competencies, the meanings in their responses were always collaborative and influential as seen by the supporting practice competencies for this AOE.

*Measuring and Evaluating*

Two *attribute* competency categories emerged for the exemplary performer in the Measuring and Evaluating-AOE. All four participants cited responses related to each of these two categories: (1) Passion, confidence, risk taking, and (2) Adapting to change.

*The Typical Performer (the comparison group)*

Two *attribute* competency categories emerged for the typical performer in Workplace Learning and Performance. Six participants cited responses related to the first two themes: (1) Gaining confidence and personal buy-in. Five participants cited responses related to category (2), Adaptability.

*Distinguishing Competency Theme*

One *attribute* competency theme emerged for the exemplar performer in Workplace Learning and Performance. The theme was: (1) Taking risks, passion, and desire.

Personality traits are what might differentiate exemplary performers who take risks and the typical performers who have risk aversion characteristics. Warner (2004) cited “willingness to experiment and take risks” as one of the seven “identifiable
competencies that contribute to effective creativity/innovation skills” (p. 1). Personality traits are underlying characteristics of an individual that are relatively stable over time. Boone (2000) stated, “Passion is the force that drives us forward even when our motive, intellect, and character are questioned” (Para, 6). Boone (2000) also suggested that this type of risk taking or motivation to do so comes from the “emotional commitment that nothing less than professionalism is acceptable” (Para, 7). If this personality trait was part of our emotional commitment to the profession, then it is this researcher’s thought that Emotional Intelligence (EI) (described next) might play a part in the performer’s effectiveness at work. Performers might consider their profession to be a part of who they are and take failures and successes as a learning process.

Klemp (2005) stated, “there is no consensuses on what emotional intelligence actually is” (p.1). Klemp cited three schools of thought: (1) Emotional Intelligence (EI) were equated to “personal characteristics such as initiative, self-confidence, and drive for results” (Goleman, 1998 as cited in Klemp, 2005, p. 1); (2) Emotional Intelligence is viewed as a “personality dimensions like extroversion, agreeableness and emotional stability” (Bar-on, 1997 as cited in Klemp, 2005, p. 1); and (3) Emotional Intelligence is a specific set of “abilities that include the capability to understand, reason about and use emotions in thinking and action” (Mayer, Caruso, & Salovey, 1999; Mayer, DiPaolo, & Salovey 1990; as cited in Klemp, 2005, p. 1).

A fundamental flaw in testing for emotional intelligence was that the tests were “assessing specific attitudes abilities or behaviors but without regard as to how many of those may relate to success” (Klemp, 2005, p. 1). This point of “testing for competence rather than intelligence” (1973) was the thought process of McClelland. McClelland
(1973) and Klemp (2005) both contended that studying the best performer and finding the differences, and then looking for the identified Emotional Intelligence constructs would lead to a better telescope of performance rather than testing for Emotional Intelligence first.

*Summary Section*

An overview of each research question was discussed. A total of 23 practice and 10 Attribute competency categories emerged for WLP performers. The exemplar and typical performer were described in relation to each research question. The final four distinguishing practice themes and final attribute theme were discussed.

*Study Conclusions*

Study conclusions were based on responses from the 32 Critical Incident and Behavioral Event Interviews and an analysis of the content. The conclusions are not generalizable to all performers in the Workplace Learning and Performance (WLP) profession. Four conclusions were drawn from this study.

1. An exemplary performer in Workplace Learner and Performance possesses entrepreneurial and visionary competencies when planning for the business. Such projects may include strategies for future improvement and performance or creating a high-performance climate. This conclusion was based on the first distinguishing practice competency called *entrepreneurial and visionary in planning the business project*. This type of performer can see ‘outside the box’ in developing solutions for organizational growth.

2. An exemplary performer in Workplace Learner and Performance influences the organization to set direction in promoting learning and change. This
conclusion was based on the second distinguishing practice competency theme called *documented business performance support to influence change*. The performer understands the value of return on investment (ROI) and leverages an organization’s metrics to support the need for acknowledged change and growth.

3. An exemplary performer in Workplace Learner and Performance has the know-how and understanding of the political boundaries that drive an organization. This conclusion was based on the third distinguishing practice competency theme called *political prudence and leadership savvy*. This type of performer has the forethought in leveraging stakeholders, managing across all boundaries with self-confidence and assurance.

4. An exemplary performer in Workplace Learner and Performance might have the following attributes, which allow them to practice such exemplary “practice” competencies as noted above in the first three conclusions. This performer is comfortable taking risks. Risks for this performer give them increased autonomy and a sense of personal power often linked to success and growth. Risks can also be learned, at times, by an unsuccessful risk.

*Implications*

It is this researcher’s opinion, based on the data collected thus far, that *Taking Calculated Risks, Entrepreneurial and Visionary Planning, Political Prudence* along with *Documented Business Performance Support to Influence Change* might be just a few of the key behaviors of exemplary performers in the WLP profession as researched in the four areas identified in this study.
The distinguishing behavior might characterize the exemplary Workplace Learning and Performance performer as being able to take calculated risks, being entrepreneurial and visionary, and being supportive of change through documented performance support. The WLP performer could be characterized as having innate behaviors that include always looking for new opportunities and pushing for action rather than letting events drive their behavior. These findings tend to suggest that Emotional Intelligence (EI) constructs might help to distinguish other “exemplary” performers in the workplace.

Spencer (1997) cited six emotional competencies that distinguished stars from the average in an analysis of more than 300 top-level organizations. The six Emotional Competencies were influence, team leadership, organizational awareness, self-confidence, achievement drive, and leadership. Goleman (1998) suggested that about one-third of this superstar difference was due to cognitive ability and technical skill and two-thirds was due to emotional competence.

McClelland (1975) defined motivation as “an affectively toned associative network arranged in a hierarchy of strength and importance in the individual,” which determines what goals we seek (p. 81). McClelland proposed the concept of competence as a basis for identifying what differentiates outstanding from average performers. In a review of data, McClelland (1998) identified six EI competencies that distinguished top performers from average performers. The six most distinguishing EI competencies were Achievement Drive, Developing Others, Adaptability, Influence, Self-Confidence, and Leadership.
Performance is not static and exemplary performance might depend on a variety of situational behaviors and events such as personality, job behaviors, and the organization environment. If true, the information in this study suggests that behaviors may lead to exemplary competency. Klein (1996) also suggests that the observable behaviors of superior performers exhibited more consistently were what defined a superior performer over an average performer. This notion leads the researcher to Boyatzis (1982), who maintains that effective performance is dependent on personal qualities.

These implications suggest that an organization may be able to test for the foundational characterizing differences or what this study was referring to as foundational cognitive competencies that lead to typical or even a little more than typical (but not exemplary) performance. Competencies sought in the cognitive domain might be determined through a work product sample or the use of ASTD’s CLCP exam but not for testing for motive or traits as characterized by drive, passion, and risk-taking. Seeking a performer who exemplifies these traits without the foundational competencies and skills needed to excel (or perform to acceptable levels) in their area of expertise, will not alone guarantee exceptional performance. Drive, passion, and risk-taking could be a dysfunctional behavior in the hands of a typical or poor performer.

**Recommendations**

This section of the chapter contains recommendations for performance improvement professionals, academics, and researchers. The recommendations are:
Performance Improvement Professional Recommendations

Study findings suggested that *Taking Calculated Risks, Entrepreneurial and Visionary Planning, Political Prudence* along with *Documented Business Performance Support to Influence Change* might be indicators of exemplary performance. Although the focus of the study was on four Areas of Expertise, some recommendations for the performance professional are suggested.

1. Seek out the best performers and periodically update competency models to reflect foundational and distinguishing competencies.

2. Identify measurable criteria (quantitative and quantitative) that could be used to measure and distinguish WLP performers and their contribution to the business.

3. Combine selection procedures to include selection for the attributes (traits and motives) needed within the business that are the most difficult to develop.

4. Update job descriptions regularly to reflect new competencies needed and measurable indicators for career development and promotional procedures.

Academic Research Recommendations

Due to the exploratory nature of this study, the findings reflect a major role for academics in guiding further research. The recommendations for further research are:

1. One of the major limitations of this study was the absence of established performance standards for the exemplar performer in the four Areas of Expertise. This study was the first effort in developing criteria to measure each of the four areas of expertise. Further research in validating measurable
competencies and testing for nontraditional abilities could yield better assessment criteria for further research.

2. Another limitation of the study was separating the variables for the organizational (environmental) conditions that support exemplary performance. For example, a probing question the researcher asked the participants was ‘if they could, identify constraints to their performance”. Many participants cited constraints ‘in their organizations’ that made it difficult for the exemplary performer. As Rummler and Brache (1995) stated it best, “If you pit a good performer against a bad system, the system will win almost every time’ (p. 13). If organizations want to be competitive, they will need to identify and change the very conditions that deflect exemplary performance.

3. As noted in chapter 3, continued validation of the findings needs to occur. Validation should be conducted through ‘member checks’ (Creswell, 1993) (going back through the nominators and interviewees) with the findings. A second validation process could be implemented by collecting a second sample of exemplary and typical performers in the four areas identified in this study. The critical incidents from the second sample could be coded using the same procedures used in this study to see if the findings in this study predict exemplary performers.

4. This study addressed only the first four Areas of Expertise in WLP. It is critically important to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer in the
final five Areas of Expertise in completing this overall timely research. The five areas of expertise that need to be explored are (1) Facilitating Organizational Change, (2) Managing the Learning Function, (3) Coaching, (4) Managing Organizational Knowledge, and (5) Career Planning and Talent Management.

Chapter Summary

An overview of the study was provided in this chapter. The findings based on the two research questions were presented and discussed. Study conclusions, implications, and recommendations for performance improvement professionals and for academic researchers were presented.

Study Summary

The purpose of the study was to explore and identify the characteristics and behaviors that differentiate a typical performer from an exemplary performer within four Workplace Learning and Performance (WLP) Areas of Expertise as described in the 2004 ASTD study, *Mapping the Future: New Workplace Learning and Performance Competencies*. Using a combined qualitative method of critical incidents and behavioral event interview questions, data were collected from 23 identified exemplar and 9 typical WLP performers through semi-structured 30- to 90-minute tape-recorded telephone interviews. The data were gathered and then analyzed and reported. Four distinguishing differences were described and discussed. The significant results of the study suggested that *Taking Calculated Risks, Entrepreneurial and Visionary Planning, Political Prudence, and Documented Business Performance Support to Influence Change* might be indicators of exemplary performance.
References


Boston, MA: Cambria Consulting, Inc.


APPENDIX A

ASTD Human Resource Wheel

Figure A.1. Copyright © ASTD Models for Workplace Learning and Performance 1999. Reprinted with permission of American Society for Training & Development. p. 7 Figure 1.2 Human Resource Wheel.
Figure A.2. Copyright © ASTD Models for Workplace Learning and Performance 1999. Reprinted with permission of American Society for Training & Development. p. 17
Figure 1.5 The WLP Wheel
Figure A.3. Copyright © 2004 Competency Model. Reprinted with permission of American Society for Training & Development. p. 48 2004 ASTD Competency Model
## Competencies Linked to Roles

<table>
<thead>
<tr>
<th>Competency</th>
<th>Learning Strategist</th>
<th>Business Partner</th>
<th>Project Manager</th>
<th>Professional Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzing Needs and Proposing Solutions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Applying Business Acumen</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Trust</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Communicating Effectively</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrating Adaptability</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Driving Results</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Influencing Stakeholders</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leveraging Diversity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Modeling Personal Development</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Networking and Partnering</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Planning and Implementing Assignments</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Thinking Strategically</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure A.4. Copyright © 2004 ASTD Competency Model. Reprinted with permission of American Society for Training & Development p. 50-Table A-1 Competencies Linked to Roles.*
Delivering Training

Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner.

Key Knowledge

- Adult learning theories and techniques
- Instructional design theory and methods
- Various instructional methods, such as lecture, discussion, practical exercises, etc.
- Various delivery options/media, such as online learning, classroom training, print media, etc.
- Existing learning technologies and support systems, such as collaborative learning software, learning management systems, and authoring tools
- Emerging learning technologies and support systems
- Presentation techniques and tools
- Organizational work environment and systems, including learning delivery channels
- Individual learning styles, such as audiovisual
- Cultural differences in learning styles, communication, classroom behavior, etc.
- Own personal learning preferences, such as a preference for lecture or experience-based learning, and how that impacts delivery capabilities
- Tools for determining learning preferences, such as a preference for lecture or experience-based learning, etc.
- Familiarity with content being taught and how the solution addresses the need (that is, context)
- Legal and ethical issues relevant for delivering training.

Key Actions

Prepares for training delivery—Reviews participant and facilitator materials prior to delivery; gathers information about the participants and their characteristics; tailors examples and analogies to ensure relevance to participants, etc.

Aligns learning solutions with course objectives and learner needs—Monitors needs and learning preferences of users/participants to ensure that the learning solutions meet learner and course objectives; responds to feedback from learners and makes adjustments or enhancements to the learning solution based on feedback.

Conveys objectives—Ensures users/participants are informed of the goals and purpose of the learning solution prior to the training and have a realistic understanding of what the solution can accomplish.

Delivers various learning methodologies—Uses various learning delivery mechanisms/options and selected methodologies that could include a combination of lectures, role plays, simulations, technology-delivered training or e-learning, learning technology support tools, etc; follows facilitator materials to ensure effective and consistent delivery.

Facilitates learning—Varies delivery style to fit the audience; adapts to the needs of learners and adjusts curriculum as needed; presents information in a logical sequence; uses appropriate visual aids; listens and responds to questions and objections; manages group dynamics; manages time on learning topics.
Encourages participation and builds learner motivation—Uses techniques and skills prior to and during delivery to actively engage all participants in the learning experience; adapts own style to different learner and group styles; makes effort to bring in passive or resistant participants; creates excitement and commitment to the learning experience; engages learners by providing opportunities for participation and experimentation in the learning process; values and capitalizes on participant diversity to maximize learning.

Establishes credibility as instructor—Demonstrates understanding of course content; uses appropriate terminology and relevant business examples; provides useful information when responding to questions; helps participants apply learning to on-the-job situations.

Manages the learning environment—Schedules events and users/participants; selects facilities conducive to learning; prepares agendas/learning objectives in advance; presents and organizes materials and multimedia equipment; arranges room and equipment for optimal learning; provides materials; ensures access to and supplies resources for learning users/participants; provides for breaks/refreshments.

Delivers constructive feedback—Provides behavioral feedback on learners' performance during or after the learning experience; maintains or enhances learners' self-esteem; supports feedback with specific examples of behavior and possible alternatives for improving performance; provides a balance of positive and constructive/developmental feedback; creates opportunities for self-awareness and insight.

Creates a positive learning climate—Establishes a learning environment where learners feel safe to try new skills and behaviors, where individual differences are respected, and where confidentiality is supported; ensures an appropriate level of management and organizational support; personally models behavior that is consistent with the goals of the program.

Ensures learning outcomes—Ensures the learning objectives are met; integrates or embeds appropriate performance support and assessment techniques to check learners' understanding and to ensure skill and/or knowledge acquisition, on-the-job application, and intended business results.

Evaluates solutions—Monitors the impact of learning solutions to ensure their effectiveness; summarizes and communicates evaluation results.

Sample Outputs

- Report of learning usage
- Evaluation report of impact of learning solution
- Return-on-investment report
- Delivery schedule
- Learner feedback
- Presentations of materials
- Facilitations of learning events
- Facilitations of group discussions
- Feedback to learners
- Action plans for knowledge transfer
Designing Learning

Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact.

PLEASE NOTE: This information is based in part on the ISPI (International Board of Standards for Training, Performance and Instruction) competency study for instructional design competencies: The Standards (R. Richey, D.C. Field, & M. Facon, with R. C. Roberts, T. Spannau, & J.M. Spector, [2001]).

Key Knowledge

- Cognition and adult learning theory
- Instructional design theory and process
- Various instructional methods, such as lecture, discussion, practical exercise, feedback, etc.
- Various delivery options/media, such as online learning, classroom training, print media, etc.
- Job/Task analysis and competency modeling
- Content knowledge or techniques to elicit content from subject matter experts
- Assessment methods and formats, such as multiple choice, hands-on, open-ended response, etc.
- Learning technologies and support systems, such as collaborative learning software, learning management systems, and authoring tools
- New and emerging learning technologies and support systems
- Business strategy, drivers, or needs associated with possible learning interventions
- Research methods, including information scanning, data gathering, and analysis
- Individual, group, and organizational differences that influence learning, such as cultural norms/values, cognitive abilities, learning preferences, previous experience, and motivation
- Legal and ethical issues related to designing learning, including accessibility and intellectual property
- Differences between e-learning and traditional courses and their implications
- Design of information displays, access, and resources.

Key Actions

Applies cognition and adult learning theory—Incorporates sound principles of current cognition and adult learning theory to the practice of instructional design.

Collaborates with others—Builds partnerships and relationships among the participants in a learning design project and establishes sign-off and approval processes for each step of the design process.

Conducts a needs assessment—Identifies target population characteristics and characteristics of the environment; gathers and evaluates resources and information, analyzes findings, and incorporates or synthesizes information into the design and development process; identifies anticipated constraints or problems affecting design success or failure, such as equipment deficiencies, lack of support, etc.; defines basic outcomes of the learning intervention to solve the problem or meet the opportunity.

Designs a curriculum or program—Uses a variety of techniques for determining instructional content of curriculum or program; creates or partners with others to plan and design the curriculum or program.
Creates designs or specifications for instructional material—Selects, modifies, or creates an appropriate design or specification document and development model or plan for a given project; identifies and documents measurable learning objectives; selects and uses a variety of techniques to define, structure, and sequence the instructional content and strategies; designs instructional content to reflect an understanding of the diversity of learners or groups of learners; builds into the design on-the-job application tools and learning aids.

Analyzes and selects technologies—Analyzes the characteristics, benefits, pros/cons, etc., associated with existing and emerging technologies, including e-learning options and their possible application in an instructional environment; considers e-learning options, such as extended books and lectures, extended community, extended expert access, simulations, and embedded help; selects technologies based on a needs-driven approach in order to accomplish learning goals and objectives.

Integrates technology options—Integrates existing and emerging technologies to achieve learning goals; integrates new material and technologies with existing learning resources to produce an effective blended solution.

Develops instructional materials—Selects or modifies existing instructional materials or develops new instructional materials; conducts review of materials with appropriate parties, such as subject matter experts, design team, and the target audience; creates logical learning units/objects as appropriate; designs or builds assets (such as role plays, self-assessment tests, job aids) to support the learning experience and meet objectives as appropriate; develops instructional content to reflect an understanding of the diversity of learners or groups of learners.

Evaluates learning design—Proactively identifies appropriate evaluation techniques and applies them, such as summative and formative evaluation, four levels of evaluation, usability testing, etc.; conducts appropriate test and revision cycles to assess and test the learning design solution and its impact; assesses whether the learning design solution produces positive results, such as a change in learner attitude, skill, knowledge, and behavior.

Manages others—Directs, assigns, or manages the work of others on the design team to accomplish project goals and objectives.

Manages and implements projects—Identifies sponsors or champions to help ensure successful project implementation; sources work, budgets, plans and organizes, manages activities, and executes learning design projects.

Sample Outputs

- Business case for learning solution
- Templates for instructional materials
- Learning objects
- Learning objectives
- Design specifications
- Content outline
- Storyboards or scripts
- Job aids
- Instructor/Facilitator materials
- Evaluation tools.

Improving Human Performance

Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results.

PLEASE NOTE: This information is based in part on ASTD Models for Human Performance Improvement (Rathwell, 1996 and 2000).

Key Knowledge

- Human performance improvement discipline, including the mindset, vision, culture, and goals
- Performance analysis and organizational analysis
- Front-end analysis
- Approaches for selecting performance-improvement solutions
- Change management theory
- Measurement and evaluation methods and theory
- Facilitation methods
- Project management tools and techniques
- Evaluation methods and theory
- Communication channel, informal network, and alliance
- Group dynamics process
- Human Performance Improvement model
- Systems thinking and theory
- Questioning techniques.

Key Actions

Analyzes systems—Identifies inputs, throughputs, and outputs of a subsystem, system, or supra-system, and applies that information to improve human performance; realizes the implications of solutions on many parts of an organization, a process, or an individual, and takes steps to address any side effects of human performance improvement solutions; evaluates how organizational politics may affect performance.

Conducts performance analysis—Compares actual and ideal performance; identifies performance gaps or opportunities; identifies who is affected by the performance gap and conditions that affect performance.

Conducts cause analysis—Identifies the root causes of a past, present, or future performance gap; clarifies the real problem underlying the need for the performance improvement; breaks down the components of a larger whole; examines work environments for issues or characteristics that affect human performance.

Gathers data—Gathers pertinent information to stimulate insight in individuals and groups through use of general research methods, interviews, and other data-gathering techniques.

Identifies the customer—Identifies the real customer rather than just assuming the individual requesting help is the customer.

Incorporates customer/stakeholder needs—Partners with the customer/stakeholder to clarify needs, business goals, and objectives; agrees on desired results and gaits agreement on how those results can be achieved efficiently and effectively.
Selects solutions—Selects appropriate human performance improvement solutions that address the root cause of performance gaps rather than symptoms or side effects.

Manages and implements projects—Identifies sponsors or champions to help ensure successful project implementation; sources work, budgets, plans and organizes, manages, and executes complex performance improvement projects.

Builds and sustains relationships—Builds credibility and trust with the client based on knowledge and understanding of the business; partners and collaborates with the client on an ongoing basis to maintain a sustained business relationship.

Evaluates results against organizational goals—Assesses how well the results of a human performance improvement solution match intentions; ensures that goals are converted effectively into actions to close existing or pending performance gaps; obtains results despite conflicting priorities, lack of resources, or ambiguity; links human performance improvement to organizational goals.

Monitors change—Monitors the human performance improvement solutions as they are being implemented and assesses how changing conditions inside and outside the organization affect or impact the solution.

Uses feedback skills—Collects information about performance and feeds it back clearly, specifically, and on a timely basis to affected individuals or groups.

Sample Outputs

- Analysis data and recommendations
- Data collection tools
- Action plans
- Solution designs
- Evaluation reports
- List of root causes
- Performance metrics
- Solutions specifications
- Risk-management reports
- Systems flowcharts
- Project reports
- Project plans
- Evaluation plans.

Copyright © 2004 ASTD Competency Model. Reprinted with permission of American Society for Training & Development (pp. 75–76). Appendix A Roles, Competencies, and Expertise.
Measuring and Evaluating

Gathering data to answer specific questions regarding the value or impact of learning and performance solutions; focusing on the impact of individual programs and creating overall measures of system effectiveness; leveraging findings to increase effectiveness and provide recommendations for change.

Key Knowledge

- Statistical theory and methods
- Research design
- Analysis methods, such as cost-benefit analysis, return-on-investment, etc.
- Interpretation and reporting of data
- Theories and types of evaluation, such as four levels of evaluation.

Key Actions

Identifies customer expectations—Works with customers or stakeholders to determine why they are interested in measurement and what they hope to accomplish with the results; clearly defines research questions, expectations, resources available, and desired outcomes of the measurement project; manages unrealistic expectations.

Selects or designs appropriate strategies, research design, and measures—Uses customer questions and expectations to guide the selection or design of appropriate strategies, research design, and quantitative and qualitative measurement tools; employs a variety of measures and methods to reduce bias and ensure objective conclusions; identifies appropriate sample sizes, data-tracking methods, and reporting formats; balances practical implications of rigor, effort, real-life constraints, and objectivity to create a workable approach.

Communicates and gains support for the measurement and evaluation plan—Summarizes measurement approach into a clear plan that can be communicated to customers and stakeholders; communicates timelines and roles/responsibilities, and identifies other project management needs; gains buy-in for the plan and ensures that all parties understand the approach and their responsibilities.

Manages data collection—Ensures that all data collection methods are applied consistently and objectively; monitors ongoing data collection to ensure that assumptions required for statistical inference are being met; manages and documents data in a format that can be adequately manipulated during the analysis process (such as spreadsheets).

Analyzes and interprets data—Counts descriptive and inferential summaries of data in a format that can be readily understood and communicated; adheres to rules of statistical analysis to reduce bias and provide adequate support for conclusions; uses a process of creative inquiry to fully explore the data and all of its possible implications and meaning.

Reports conclusions and makes recommendations based on findings—Provides data summaries in a format that can be readily understood and interpreted by customers and stakeholders (potentially multiple summaries); organizes information in a way that directly responds to research questions; bases recommendations and conclusions on sound analysis methods; clarifies customer questions and the meaning of the data.

Sample Outputs

- Research or measurement plans (includes data collection plan, project plan, communication plan, implementation plan)
- Reports that summarize the impact of the solution in question (includes statistical analyses, charts, tables, interpretation of data)
- Recommendations for change based on the data
- Measurement tools (such as surveys, focus group protocol)
- Scorecard.

Copyright © 2004 ASTD Competency Model. Reprinted with permission of American Society for Training & Development (pp. 81–82). Appendix A Roles, Competencies, and Expertise.
APPENDIX B

Invitation to Participants and Accompanying Information

December 20, 2004

Title, Company
Mailing Address
City, State, Zip

Dear Salutation

On behalf of the American Society for Training & Development (ASTD), I would like to congratulate you for your outstanding contributions and achievements in advancing learning and performance in the workplace. You have distinguished yourself as a leader and a model for the field, and because of this, I’d like to invite you to provide your expertise and input in support of two important initiatives for the learning and performance profession: the ASTD 2004 Competency Study and ASTD’s emerging certification program.

Specifically, I invite you to nominate exceptional performers—your peers or yourself—who have expertise in one or more of the following areas: designing learning, delivering training, improving human performance, or measurement and evaluation. These topics are four of the areas of expertise (AOE’s) as defined in the ASTD 2004 Competency Study.

Through this nomination process, you or the peers you nominate will have the opportunity to participate in interviews that will help ASTD’s research efforts in two important areas: 1) the development of certification assessments, and 2) the identification of the subset of competencies that differentiate best in class or exceptional performers from acceptable performers. The results of this research effort will help individuals like yourself advance career development and the development or hiring of others in the learning and performance space. Your insights are an important part of the research process for ASTD’s emerging certification program for individuals in the workplace learning and performance field.

Dr. William Rothwell, Professor at Pennsylvania State University, and Terri F. Smith, a doctoral candidate, are conducting this research in collaboration with ASTD. I invite you to nominate your peers or yourself for this important research project. To do so, please complete the nomination form provided and return it to Terri Freeman Smith, preferably by early January 2005. If you have any questions about the research effort, feel free to call Terri directly at 570-941-6218.

Thank you for helping ASTD shape the future of the workplace learning and performance profession. We look forward to hearing from you.

Sincerely,

Tony Bingham
President and CEO
Directions for nomination:

1. Please nominate one or two exceptional performers for each Area of Expertise (AOE) listed. Each AOE listed describes the specific technical and professional skills and knowledge required for success in each area. We are seeking the Superstar, Best-in-Class, i.e., exemplary employee in each of these areas.

   It is critical for the research process that you nominate Exemplary performers in the workplace learning and performance field based on “Competencies that are above and beyond the threshold competencies that are necessary to do the job, but are causally related to superior (exemplary) performance” (Boyatzis, 1982).

2. Once complete, please fax the form to Terri Smith at 570-941-5882 or if necessary, mail the form to the address above. If you have any questions or need further information please contact Terri at 570-941-6218.

NOMINATION FORM

Areas of Expertise
Designing Learning
Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact.

Delivering Training
Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner.

Improving Human Performance
Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results.

Measuring and Evaluating
Gathering data to answer specific questions regarding the value or impact of learning and performance solutions; focusing on the impact of individual programs and creating overall measures of system effectiveness; leveraging findings to increase effectiveness and provide recommendations for change.

General information about the competency study upon which these definitions were based can be found at www.astd.org/competency.
Nomination Prepared by:

Your Name: ______________________________
Title: _________________________________
Phone: _________________________________
E-mail: _________________________________
___ Check here if you do not wish to be interviewed

Instructions: Please nominate one or two individuals (i.e., exemplary performers) for each area of expertise.

1. Designing Learning

Name:_____________________________________________________________________
Address:_________________________________________________________________
Phone:__________________________
E-mail:__________________________

Why I am nominating this individual. (i.e. performance that goes beyond normal job responsibilities)
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Name:_____________________________________________________________________
Address:_________________________________________________________________
Phone:__________________________
E-mail:__________________________

Why I am nominating this individual. (i.e. performance that goes beyond normal job responsibilities)
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

2. Delivering Training

Name:_____________________________________________________________________
Address:_________________________________________________________________
Phone:__________________________
E-mail:__________________________

Why I am nominating this individual. (i.e. performance that goes beyond normal job responsibilities)
____________________________________________________________________________
____________________________________________________________________________

Name:_____________________________________________________________________
Address:_________________________________________________________________
Phone:__________________________
E-mail:__________________________

Why I am nominating this individual. (i.e. performance that goes beyond normal job responsibilities)
____________________________________________________________________________
3. Improving Human Performance

Name
Address
Phone
E-mail

Why I am nominating this individual. *(i.e. performance that goes beyond normal job responsibilities)*

Name
Address
Phone
E-mail

Why I am nominating this individual. *(i.e. performance that goes beyond normal job responsibilities)*

4. Measuring and Evaluating

Name
Address
Phone
E-mail

Why I am nominating this individual *(i.e. performance that goes beyond normal job responsibilities)*.

Name
Address
Phone
E-mail

Why I am nominating this individual. *(i.e. performance that goes beyond normal job responsibilities)*

Fax to Terri Smith at 570-941-5882
The University of Scranton
C/O Terri Freeman Smith, HAHR Department
APPENDIX C

Data Collection Instruments
Information Sheet

Problem Statement
Research suggested that, while all people may be created equal for voting purposes, they are not all equal in their productivity. Some people are outstanding (exemplary) performers who can achieve productivity differences far beyond those who are only qualified (fully-successful). If those competencies that distinguish exemplary performers can be pinpointed, it may be possible to hire or develop fully-successful performers closer to the productivity levels of exemplary performers.

Purpose of the Study
Awareness of these competencies or behaviors and characteristics offer professionals a guide for hiring and promotion; offers ASTD a method of identifying competencies for the knowledge portion of the ASTD WLP certification exam and lastly an area of exploration and further study to examine and justify measurable outputs and standards of the profession.

Participation in the Study
Your participation in the study is voluntary in which you will be asked a series of Open ending questions relating to the AOE area that you were nominated. You will be asked to tell me a story about an incident or event that would best describe for me your “exemplary” performance. You will also be asked to identify a similar incident or event that describes how a “minimally qualified” performer in that same role would behave.

Areas of Expertise

Designing Learning
Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact.

Delivering Training
Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner.

Improving Human Performance
Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results.

Measuring and Evaluating
Gathering data to answer specific questions regarding the value or impacted learning and performance solutions; focusing on the impact of individual programs and creating overall measures of system effectiveness: leveraging findings to increase effectiveness and provide recommendations for change.

Confidentially
No information identifying you or your organization will appear on either the telephone survey or on the typed transcripts from the tapes. All tape recordings will be destroyed after being transcribed into text. However, all or part of your answers will be used in a published dissertation and open for the future use of others for the purpose of furthering research. Personal Risk involved in the study is very low.
Title of Project:  
Critical Incident Interview: Differences Between Fully-Successful and Exemplary Workplace Learning Performers

Principal Investigator:  
Terri Freeman Smith M.S.  
Telephone: 570-941-6218,  
Email: freemant1@UofS.edu

Advisor: Dr. William Rothwell, 301 Keller Building, University Park, PA 16802  
Telephone: 814-863-2581,  
Email: wjr9@psu.edu

1. Purpose of the Study: The purpose of this research is to document, as comprehensively as possible, the differences between fully-successful and exemplary workplace learning performers. This study will focus on identifying what competencies uniquely distinguish best-in-class (exemplary) WLP practitioners from fully successful (qualified) ones in three of the nine areas of expertise. (Designing Learning, Delivering Training, Improving Human Performance)

2. Procedures to be followed: Participation in this research will be interview via phone. The interview will be audio recorded. The data from these interviews will be used in the dissertation research 1) Differences Between Fully-Successful and Exemplary Workplace Learning Performers, 2) help develop certification assessments for ASTD, and 3) identify the subset of competencies which differentiate best-in-class from average performers.

The interview should take about 1 hour. After transcribing the interview, the participant will be sent the transcription to double-check that the interview reflects what the interviewee/respondent intended. The organization or person will not be identified.

3. Benefits: The potential benefit of this research project is the development of sound research of WLP certification standards.

4. Duration/Time: The interview will take 1 hour.

5. Statement of Confidentiality: Only the person (Terri Freeman Smith) in charge will know your identity. Critical incident Numbers will be used during the transcription and subsequent reports. No one other than the principal investigator will be able to link responses to particular individual or organization. The audio-tape will be stored in a locked filing cabinet in Terri Smith’s office and she will have the only access to the tape. The tape will be destroyed on December 15, 2005. The Office for Research Protections and the Social Science Institutional Review Board may review records related to this project.

6. Right to Ask Questions: Participants have the right to ask questions and have those questions answered. If you have questions about your rights as a research participant, contact Penn State’s Office for Research Protections at (814) 865-1775.

7. Voluntary Participation: Participation is voluntary. Participants can withdraw from the study at any time by notifying the principal investigator. Participants can decline to answer specific questions.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

You will be given a copy of this consent form to keep for your records. (Via E-mail and faxed consent)

Participant Signature ___________________________ Date ___________________________

I, the undersigned, verify that the above informed consent procedure has been followed.

___________________________________________  ___________________________
Terri F. Smith, Investigator Signature Date
INFORMED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH
The Pennsylvania State University

Title of Project: Critical Incident Interview: Differences Between Fully-Successful and Exemplary Workplace Learning Performers

Principal Investigator: Terri Freeman Smith M.S.
Email: freemant1@UofS.edu

Advisor: Dr. William Rothwell, 301 Keller Building, University Park, PA 16802
Telephone: 814-863-2581, Email: wjr9@psu.edu

1. Purpose of the Study: The purpose of this research is to document, as comprehensively as possible, the differences between fully-successful and exemplary workplace learning performers. This study will focus on identifying what competencies uniquely distinguish best-in-class (exemplary) WLP practitioners from fully successful (qualified) ones in three of the nine areas of expertise. (Designing Learning, 2. Delivering Training, 3. Improving Human Performance)

2. Procedures to be followed: Participation in this research will be interview via phone. The interview will be audio recorded. The data from these interviews will be used in the dissertation research 1) Critical Incident Interview: Differences Between Fully-Successful and Exemplary Workplace Learning Performers, 2) help develop certification assessments for ASTD, and 3) identify the subset of competencies which differentiate best-in-class from average performers.

The interview should take about 1 hour. After transcribing the interview, the participant will be sent the transcription to double-check that the interview reflects what the interviewee/respondent intended. The organization or person will not be identified.

3. Benefits and Risks: The potential benefit of this research project is the development of sound research of WLP certification standards. There are no known risks to participating in this research beyond those experienced in everyday normal living.

4. Duration/Time: The interview will take 1 hour.

5. Statement of Confidentiality: Only the person (Terri Freeman Smith) in charge will know your identity. Critical incident Numbers will be used during the transcription and subsequent reports. No one other than the principal investigator will be able to link responses to particular individual or organization. The audio-tape will be stored in a locked filing cabinet in Terri Smith’s office and she will have the only access to the tape. The tape will be destroyed on December 15, 2005. The Office for Research Protections may review records related to this project.

6. Right to Ask Questions: Participants have the right to ask questions and have those questions answered. If you have questions about your rights as a research participant, contact Penn State’s Office for Research Protections at (814) 865-1775.

7. Voluntary Participation: Participation is voluntary. Participants can withdraw from the study at any time by notifying the principal investigator. Participants can decline to answer specific questions.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. You will be given a copy of this consent form to keep for your records. (Via E-mail and faxed consent) Please sign the consent form and Fax to Terri Smith at 570-941-5882

I, the undersigned, verify that the above informed consent procedure has been followed.

Participant Signature ____________________________ Date __________

Terri F. Smith, Primary Investigator Signature ____________________________ Date __________

Informed Consent Form
INFORMED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH
The Pennsylvania State University

Title of Project: Critical Incident Interview: Differences Between Fully-Successful and Exemplary Workplace Learning Performers

Principal Investigator: Terri Freeman Smith M.S.
Email: freemant1@UofS.edu

Advisor: Dr. William Rothwell, 301 Keller Building, University Park, PA 16802
Telephone: 814-863-2581, Email: wjr9@psu.edu

1. Purpose of the Study: The purpose of this research is to document, as comprehensively as possible, the differences between fully-successful and exemplary workplace learning performers. This study will focus on identifying what competencies uniquely distinguish best-in-class (exemplary) WLP practitioners from fully successful (qualified) ones in three of the nine areas of expertise. (Designing Learning, 2. Delivering Training, 3. Improving Human Performance)

2. Procedures to be followed: Participation in this research will be interview via phone. The interview will be audio recorded. The data from these interviews will be used in the dissertation research 1) Critical Incident Interview: Differences Between Fully-Successful and Exemplary Workplace Learning Performers, 2) help develop certification assessments for ASTD, and 3) identify the subset of competencies which differentiate best-in-class from average performers.

The interview should take about 1 hour. After transcribing the interview, the participant will be sent the transcription to double-check that the interview reflects what the interviewee/respondent intended. The organization or person will not be identified.

3. Benefits and Risks: The potential benefit of this research project is the development of sound research of WLP certification standards. There are no known risks to participating in this research beyond those experienced in everyday normal living.

4. Duration/Time: The interview will take 1 hour.

5. Statement of Confidentiality: Only the person (Terri Freeman Smith) in charge will know your identity. Critical incident Numbers will be used during the transcription and subsequent reports. No one other than the principal investigator will be able to link responses to particular individual or organization. The audio-tape will be stored in a locked filing cabinet in Terri Smith’s office and she will have the only access to the tape. The tape will be destroyed on December 15, 2005. The Office for Research Protections may review records related to this project.

6. Right to Ask Questions: Participants have the right to ask questions and have those questions answered. If you have questions about your rights as a research participant, contact Penn State’s Office for Research Protections at (814) 865-1775.

7. Voluntary Participation: Participation is voluntary. Participants can withdraw from the study at any time by notifying the principal investigator. Participants can decline to answer specific questions.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. You will be given a copy of this consent form to keep for your records. (Via E-mail and faxed consent) Please sign the consent form and Fax to Terri Smith at 570-941-5882

Participant Signature ________________________ Date __________

I, the undersigned, verify that the above informed consent procedure has been followed.

_________________________________________ Date __________
Terri F. Smith, Primary Investigator Signature
Telephone Interview Guide
For Nominated Exemplary Performers

Dr. William J. Rothwell, Professor at the Pennsylvania State University co-researcher and I, Terri F. Smith, a doctoral candidate, have the opportunity to work on a project for the development and delivery of the National ASTD WLP Certification exam and seek your expert involvement.

The proposed study will have significant contributions for the development and delivery of the first National ASTD WLP Certification Exam that will span three of the nine Areas of Expertise identified in 2004 Competency Study: Mapping the Future of the Workplace Learning and Performance Field. This project, approved by ASTD, will be used as the basis for designing the performance assessment portion of the WLP Professional Certification Program. This type of certification will stimulate personal development and career growth of the profession.

In collaboration with ASTD, and Thomson Prometric, this study will explore and extrapolate needed information from you and other nominees for the development of the knowledge exam questions used for the pilot exam for the Workplace Learning and Performance (WLP) Certification.

The Human Competency movement is to focus attention on training or developing (and hiring) for best-in-class performers, who are called exemplary, rather than train or hire merely qualified performers. Research suggests that, while all people may be created equal for voting purposes, they are not all equal in their productivity.

Do you have any question so far about this research?

As a researcher, I have the responsibly to keep whatever you tell me confidential. That means that your name will not appear on any transcript-I will code this meeting as# (number only). I have an obligation to destroy all Audio recordings after transcribing them. This interview will last about one hour. (Discuss the informed consent form that was completed by the participant).

Do you have any questions or concerns at this time?

This is a critical incident interview protocol for you, the interviewee. A critical incident focuses on a specific event and captures important information related to that event.

Some people are outstanding (exemplary) performers (like you) who can achieve productivity differences far beyond those who are only qualified (fully-successful). If those competencies that distinguish exemplary performers can be pinpointed, it may be possible to hire or develop fully-successful performers closer to the productivity levels of exemplary performers.

Identification Code: ________________________________

Phone Number: ________________________________

Interview Starting Time ________________________________
Question Session for Nominated Exemplary

Note to Interviewer: AOE title nominated for (circle one)
Designing Learning
Delivering Training
Improving Human Performance
Measuring and Evaluating

For demographic purposes, please answer the following questions.

I. Job
1. What is your job title?
2. How long have you been working in that job?
3. What is your educational background (degrees, certificates, workshops, etc),
   including dates?
4. What position did you hold prior to your current “state job title here” position?

II. Workplace
1. How long have you been working for this company?
2. What industry would you consider yourself in?
3. How many, approximately, are employed by your organization?
4. What is the name of your department, unit, or division?
5. How many employees work in your department, unit, or division?
6. Organizationally, whom does your department report to?
7. If you supervise staff, how many do you supervise?
   Part-time ______  Full-time____
8. What is the title of the person you report to?
9. Would you please describe your job and what you do on daily basis as an
   exemplary performer?
10. What skills do you have that make you an exemplary performer?
11. What knowledge do you have that make you an exemplary performer?
12. What abilities do you have that make you an exemplary performer?
13. Anything “Other”
14. Can you identify constraints that an exemplary would come up against in trying to
    be exemplary?
15. What are the measurable outcomes (Qualitatively and Quantitatively) used by which your performance or productively is judged?

III. Critical Incident # ________ (exemplary)

1. Directions: Based on the following expertise area (state area again) for which you were nominated and holding the nomination for being best-in-class, exemplary, a superstar at your job (would you like me to read the description area? It is listed on your consent form) take a moment and think of a time or event that would best describe for me your “exemplary” performance. Describe to me all the events from start to finish, bring it to life for me.

BEI Probing Questions

a) What let up to the situation?
b) Who was involved?
c) What did you think about, feel, and want to accomplish in dealing with the situation?
d) What did you actually do?
e) What happened?
f) What was the outcome of the incident?

g) If you encountered any problems during this event, why/how did you choose to resolve it in the way you did?
h) How do you get the information you need to resolve a problem?

IV. Critical Incident # ________ (qualified)

1. Directions: Please take a moment and think of a time that would best describe for me in the same kind of event how a “minimally qualified” performer in that same role
would behave. Describe to me all the events from start to finish; please try to bring it to life for me.

**BEI Probing Questions**

a) What let up to the situation?

b) Who was involved?

c) What did you think about, feel, and want to accomplish in dealing with the situation?

d) What did you actually do?

e) What happened?

f) What was the outcome of the incident?”

**Note to Interviewer:** Verify that the following questions were covered in their story. Do not interrupt the interviewee while the story is being told. As the questions are answered, check it off. If not answered in the story, ask the question after the whole story has been told.

g) How would a minimally qualified person in this role choose to resolve any problems encountered during this event?

h) How would a minimally qualified person in this role get the information you need to resolve a problem?

**V. Closing Questions**

Note to interviewer: list each question and answer separately.

I. As part of the interview, what additional questions would you like to have been asked?

II. Do you think time is “the” or “a” factor that separates exemplary performers?

III. How did you achieve such status? Was this learned or was this something innate?

IV. Could you at this time nominate a “minimal qualified performer” A performer who meets the criteria to perform the job with success but who does not clearly support the nomination for an “exemplary” performer?

V. To demonstrate that we have been as inclusive as possible in this study we would like your responses to some personal questions. Would you mind telling me

a. What is your gender (male or female)?

b. What is your race (Asian, Hispanic/Latino, Caucasian, African American, Native American, Other - please specify)

c. What is your age (Years)?
Thank you very much for your participation in this activity. Do you have any questions at this time? If I have questions may I contact you at a later date?

Thank you again for your time and participation. I appreciate you helping me to collect the data needed for my research.

**Interview Ending Time:** ________________________________
My name is Terri Smith I am a Doctoral student at Penn State University in the college of Education, specifically Workforce Education and Development. You were nominated by an ASTD Awards recipient; recipients for outstanding contributions and achievements in advancing learning and performance in the workplace.

(Please read the area of expertise you were chosen for)

Areas of Expertise

**Designing Learning**
Designing, creating, and developing learning interventions to meet needs; analyzing and selecting the most appropriate strategy, methodologies, and technologies to maximize the learning experience and impact.

**Delivering Training**
Delivering learning solutions (for example, courses, guided experience) in a manner that both engages the learner and produces desired outcomes; managing and responding to learner needs; ensuring that the learning solution is made available or delivered in a timely and effective manner.

**Improving Human Performance**
Applying a systematic process of discovering and analyzing human performance gaps; planning for future improvements in human performance; designing and developing cost-effective and ethically justifiable solutions to close performance gaps; partnering with the customer when identifying the opportunity and the solution; implementing the solution; monitoring the change; evaluating the results.

**Measuring and Evaluating**
Gathering data to answer specific questions regarding the value or impacted learning and performance solutions; focusing on the impact of individual programs and creating overall measures of system effectiveness: leveraging findings to increase effectiveness and provide recommendations for change.

Dr. William J. Rothwell, Professor at Pennsylvania State University and I, Terri F. Smith, have the opportunity to work on a project for the development and delivery of the National ASTD WLP Certification exam and seek your involvement.

The proposed study will have significant contributions for the development and delivery of the first National ASTD WLP Certification Exam that will span three of the nine Areas of Expertise identified in 2004 Competency Study: Mapping the Future of the Workplace Learning and Performance Field. This project, approved by ASTD, will be used as the basis for designing the performance assessment portion of the WLP Professional Certification Program. This type of certification will stimulate personal development and career growth of the profession.

In collaboration with ASTD, and Thomson Prometric, this study will explore and extrapolate needed information from you and other nominees for the development of the knowledge exam questions used for the pilot exam for the Workplace Learning and Performance (WLP) Certification.
The Human Competency movement is to focus attention on training or developing (and hiring) for best-in-class performers, who are called exemplary, rather than train or hire merely qualified performers. Research suggests that, while all people may be created equal for voting purposes, they are not all equal in their productivity.

Researcher Question: Do you have any question so far about this research?

As a researcher, I have the responsibly to keep whatever you tell me confidential. That means that your name will not appear on any transcript-I will code this meeting as# (number only). I have an obligation to destroy all Audio recordings after transcribing them. This interview will last about one hour. (Discuss the informed consent form that was completed by the participant).

Researcher Question: Do you have any questions or concerns at this time?

This is a critical incident interview protocol for you, the interviewee. A critical incident focuses on a specific event and captures important information related to that event.

Some people are outstanding (exemplary) performers who can achieve productivity differences far beyond those who are only qualified (fully-successful). If those competencies that distinguish exemplary performers from qualified can be pinpointed, it may be possible to hire or develop fully-successful performers closer to the productivity levels of exemplary performers.

Identification Code: ________________________________

Phone Number: ________________________________

Interview Starting Time ________________________________

Question Session for Comparison group

Note to Interviewer: AOE title nominated for (circle one)

Designing Learning

Delivering Training

Improving Human Performance

Measuring and Evaluating

For demographic purposes, please answer the following questions.

1. Job
   1. What is your job title?
   2. How long have you been working in that job?
   3. What is your educational background (degrees, certificates, workshops, etc), including dates?
   4. What position did you hold prior to your current “state job title here” position?
### II. Workplace

1. How long have you been working for this company?
2. What industry would you consider yourself in?
3. How many, approximately, are employed by your organization?
4. What is the name of your department, unit, or division?
5. How many employees work in your department, unit, or division?
6. Organizationally, whom does your department report to?
7. If you supervise staff, how many do you supervise? Part-time ______ Full-time____
8. What is the title of the person you report to?
9. Would you please describe your job and what you do on daily basis?
10. What skills do you have?
11. What knowledge do you have?
12. What abilities do you have?
13. Anything ‘Other’
14. Can you identify constraints that you would come up against in performing your duties?
15. What are the measurable outcomes (qualitative or quantitative) used by which your performance or productivity is judged?

### III. Critical Incident # ________

1. Directions: Based on the following AOE expertise area *(state area again)* for which you were nominated; take a moment and think of a time or event that would best describe for me your performance. Describe to me all the events from start to finish, bring it to life for me.

**Questions to think about in telling me your story about your incident.**

a) What let up to the situation?

b) Who was involved?

c) What did you think about, feel, and want to accomplish in dealing with the situation?

d) What did you actually do?

e) What happened?
f) What was the outcome of the incident?

**Note to Interviewer:** Verify that the following questions were covered in their story. Do not interrupt the interviewee while the story is being told. As the questions are answered, check it off. If not answered in the story, ask the question after the whole story has been told.

  g) If you encountered any problems during this event, why/how did you choose to resolve it in the way you did?

  h) How do you get the information you need to resolve a problem?

### IV. Closing Questions

*Note to interviewer: List each question and answer separately.*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>As part of the interview, what additional questions would you like to have been asked?</td>
</tr>
<tr>
<td>II.</td>
<td>Do you think time is “the” or “a” factor that separates performers?</td>
</tr>
<tr>
<td>III.</td>
<td>Was your performance learned? Or was this something innate?</td>
</tr>
<tr>
<td>IV.</td>
<td>Could you at this time recommend a performer in your area of expertise that I can interview to give us a critical incident (or story).</td>
</tr>
<tr>
<td>V.</td>
<td>To demonstrate that we have been as inclusive as possible in this study we would like your responses to some personal questions. Would you mind telling me</td>
</tr>
</tbody>
</table>

  d. What is your gender (male or female)?

  e. What is your race (Asian, Hispanic/Latino, Caucasian, African American, Native American, Other - please specify) 

  f. What is your age (Years)?

Thank you very much for your participation in this activity.

**Interview Ending Time:** ____________________________
February 16, 2006

Terri F. Smith
Doctoral Candidate
Penn State University
114 Spring Street
Clarks Green, PA 18411

Dear Ms. Smith,

We are pleased to grant permission for the reproduction of the content listed below for one-time usage in your dissertation for your doctoral studies to be published by December 2006. This permission does include word. No fee will be required but please make the appropriate acknowledgments as indicated below.

This permission is subject to the following conditions:

1. Each copy containing our material that you reproduce or distribute must bear the following copyright notices:

   Authors: Rothwell, Sanders & Soper
   Title: The ASTD Models for Workplace Learning and Performance, 1999
   Page: p. 7 Figure 1.2 Human Resource Wheel
         p. 17 Figure 1.5 The WLP Wheel
         p. 57 Table 4.3 WLP Roles and Associated Competencies


   Authors: Berthall, Colterryah, Davis, Naughton, Rothwell & Wellins
   Title: ASTD’s Mapping the Future
   Page: p. 26 Figure 4-4 Most Important AOE for the Future 2006-06
         p. 32 Table 5-2 Correlation Between Roles and Competencies


2. Permission is granted for use in your doctoral dissertation for any print or electronic use necessary. No permission is granted for any uses unrelated to your dissertation.

If these terms are acceptable, please sign and date this letter below and return it to Kelly Norris (fax # 703-683-6591). This permission becomes effective only upon our receipt of this signed agreement.

Cordially yours,

Cat Russo
Director, ASTD Press

Agreed: ____________________________

Date: 2-18-2006

We have elected not to use this material.
Permission E-mail

Dear Terri — thank you for your interest in my work. Please feel free to use the figure in your dissertation, with appropriate citation.

Joseph D. Novak
Professor Emeritus
Cornell University

TO:  Dr. J.D Novak, Cornell University and University of West Florida, Institute for Human and Machine Cognition

From:  Terri Freeman Smith, Doctoral Candidate; Workforce Education and Development at Penn State University
Date:   December 28, 2004

Copy of e-mail sent on December 28, 2004
VITA

Terri Freeman Smith

Terri Freeman Smith was born in Scranton, Pennsylvania on July 10, 1967. Following her primary and secondary education and graduation from the Scranton School District in June of 1985, she attended the Pennsylvania State University where she majored in Education and earned a Bachelor of Science degree in Elementary and Kindergarten Education in December 1989. She earned a Master’s of Science degree in Human Resources Administration from the University of Scranton in May 2001.

After earning her Bachelors of Science degree, Smith began a career as an elementary school teacher. From February 1989 through June of 1992, Terri worked as an elementary and middle school grade teacher and behavior management specialist at the Philadelphia School District in Philadelphia, Pennsylvania. From March 1992 through December 1993, she was employed as the Director of Education at The Huntington Learning Center in Langhorn, Pennsylvania. She was then employed at the Pennsylvania State University as an Area Representative for the Continuing Education Division from December 1993 through 1995 at the Delaware County Penn State Branch Campus in Media, Pennsylvania and subsequently held the same position at the Berks County Penn State Branch Campus in Reading, Pennsylvania. She was then employed as the Director of the Center for Continuing Education, at The University of Scranton in Scranton Pennsylvania from 1995 through 2003 and in addition served as an adjunct faculty member in the Department of Health Administration and Human Resources (HAHR) from 2001 to 2003. She joined the Department of Health Administration and Human Resources as a full-time faculty member in August 2003 and currently serves as the Director of the Graduate Human Resources Administration Program.

Terri holds a Pennsylvania Instructional I teaching license, and is a certified trainer and test administrator. She holds professional membership in ASTD formerly called the American Society for Training and Development, the Society for Human Resource Management (SHRM), and the Pennsylvania Association for Adult Continuing Education (PAACE). She has been active at the local level in the Northeast Pennsylvania Chapter of the Society for Human Resource Management (NEPA-SHRM) and has served as Chair of the Certification Committee and as a member of the Board of Directors. She currently holds the position of Vice President of Membership. Terri is married to Robert J. Smith and they both reside in Clarks Green, Pennsylvania.