

ADVANCING HUMAN PERFORMANCE TECHNOLOGY THROUGH
PROFESSIONAL DEVELOPMENT: AN ACTION RESEARCH STUDY

Gary Lorenzo Wash

JAMIE BARRON, Ed.D, Faculty Mentor and Chair

DARLENE VAN TIEM, Ph.D, Committee Member

JOHN KLOCINSKI, Ph.D., Committee Member

Barbara Butts Williams, Ph.D., Dean, School of Education

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Abstract

It is not known to what extent local government human resources (HR) professionals are capable of systematically addressing human performance issues. Literature on human performance improvement has shown that matching interventions with performance issues may prove difficult for teams charged with improving performance. This is due in part to the absence of an effective model in place capable of systematically understanding performance issues and targeted solutions, and evaluating intervention success. This study examined the impact that an action learning intervention on human performance technology (HPT) had on HR professionals' in a local government organization. The importance and value of conducting this study was predicated on previous research indicating that systems are required for addressing organizational performance issues. The literature review for this study indicated that HR processes are linked to human performance improvement strategies. Data was collected pre and post action learning intervention. Baseline, or pre data, indicated the need for HR professionals to acquire knowledge of HPT/HPI principles. Level two post assessments yielded results in favor of action learning implementation and self-efficacy determination.

Dedication

This study is dedicated to the loving memory of my dear Grandparents Frank and Lula Carter. Since the age of nine when they practically demanded that I learn high school math and geography as a fourth grade student, I have never stopped seeking growth through education. My Grandparents instilled in me early on, discipline, courage and a sense of “living and doing right”, all of which have culminated to this significant point in my life—a Doctor of Education.

I would also like to dedicate this study to every fellow soldier and military leader from whom I have learned, developed and grew throughout my 20-year military career. The lessons learned from those experiences have helped shape who I am today--a professional, God-fearing human being. To my comrades I affectionately say—Hoo-ah!

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Dr. Darlene Van Tiem, an incredible industry advocate and leader in my view when it comes to human performance technology and improvement, helped make the impossible...possible! Her willingness to push me harder whenever I thought I mastered a topic, or wrote a great review, added tremendous value to both my learning and my attitude towards critical thinking. There is no way I complete this dissertation with the level of research required to produce a rigorous output without Dr. Darlene. I will never forget her.

To Dr. John Klocinski, I say, thank you, for coming on board when I lost a committee member. Your sound guidance and feedback to restructure elements of chapter one to better set the stage for the rest of my chapters was invaluable. I thank you for giving of your time and incredible expertise to join the committee team.

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Table of Contents

| | |
|---|------|
| Acknowledgments | iv |
| List of Tables | viii |
| List of Figures | ix |
| CHAPTER 1. INTRODUCTION | 1 |
| Introduction to the Problem | 1 |
| Background of the Study | 1 |
| Statement of the Problem | 3 |
| Purpose of the Study | 4 |
| Rationale | 4 |
| Research Questions | 5 |
| Significance of the Study | 6 |
| Definition of Terms | 7 |
| Assumptions and Limitations | 11 |
| Nature of the Study (or Theoretical/Conceptual Framework) | 14 |
| Organization of the Remainder of the Study | 15 |
| CHAPTER 2. LITERATURE REVIEW | 17 |
| Introduction | 17 |
| Human Resources (HR) Management in Organizations | 17 |
| Human Performance Technology/Improvement (HPT/HPI) | 24 |
| Learning Paradigms and Professional Development | 36 |
| Summary | 46 |

| | |
|--|-----|
| CHAPTER 3. METHODOLOGY | 48 |
| Introduction | 48 |
| Research Objectives | 49 |
| Action Research Design with Mixed-Methods Analysis | 50 |
| Participants, Sites and Access | 52 |
| Data Collection and Analysis Strategy | 53 |
| Summary | 59 |
| CHAPTER 4. DATA COLLECTION AND ANALYSIS | 61 |
| Introduction | 61 |
| Collecting Respondent Baseline Data | 63 |
| Action Learning Intervention | 73 |
| Analyzing Post Intervention Respondent Data | 79 |
| Summary | 87 |
| CHAPTER 5. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS | 89 |
| Introduction | 89 |
| Rationale for the Study | 89 |
| Discussion of Findings | 90 |
| Implications for Research and Practice | 94 |
| Recommendations for Further Study | 96 |
| Summary | 98 |
| REFERENCES | 101 |
| APPENDIX A. Baseline Knowledge Assessment Tool | 112 |
| APPENDIX B. Moderate Intensity Assessment | 115 |

| | |
|---|-----|
| APPENDIX C. Self-Efficacy Assessment | 116 |
| APPENDIX D. CityGov Action Learning Steps | 118 |

List of Tables

| | |
|--|----|
| Table 1. HRM as a Strategic Partner | 23 |
| Table 2. Selected Contributors and Accomplishments to HPT | 27 |
| Table 3. Perspectives on Action Research | 40 |
| Table 4. Data Collection Strategy | 59 |
| Table 5. Delineating Data Collection Tools | 62 |
| Table 6. HR Demographic and Experience Data | 67 |
| Table 7. Functional and Role-Specific HR Data | 69 |
| Table 8. Descriptive Statistics from Baseline Knowledge Assessment Tool (BKAT) | 71 |
| Table 9. Action Learning Core Elements and Process Steps | 76 |
| Table 10. Categorical Response Data for Moderate Intensity Assessment | 80 |
| Table 11. Qualitative Codes and Themes – Action Learning | 81 |
| Table 12. Self-Efficacy Likert Scale for Learning Application | 84 |
| Table 13. Coding and Themes for Participant Qualitative Feedback | 86 |

List of Figures

| | |
|---|----|
| Figure 1. A Model for the HPT Process | 30 |
| Figure 2. A cyclical approach to action research | 50 |
| Figure 3. Components of Action | 74 |
| Figure 4. CityGov Dialectic Action Research Model | 91 |

CHAPTER 1. INTRODUCTION

Introduction to the Problem

The broad subject matter of concern for this study was to advance the concept of human performance technology through professional development. Organizations are complex cultures with stakeholders and teams comprised of employees from various business units such as information technology (IT), human resources (HR), finance and operations. These stakeholders are responsible for creating, building, and maintaining processes and conceptual tools that promote and sustain a continuous improvement environment. Local governments' organizational responsibilities are not much different. Human performance improvement is therefore paramount to all organizational operations including city governments.

Background of the Study

Human resource (HR) systems in organizations (for-profit or not-for-profit) must be capable of delivering processes and tools that impact organizational performance. As such, HR departments must create unique value by executing strategies aimed at influencing work force behaviors in order to achieve desired organizational outcomes. This personal perspective of the researcher for this study is a brief conceptualization of the importance of HR based on over 15 years of HR process work. HR professionals should be central to sustaining individual and organizational performance.

Mohrman (1998) believes that [through people], HR functions must be strategically aligned as integral stakeholders to the management team in order to improve organizational performance. It is obvious from Mohrman's position that HR professionals will play a critical

role in process applications that leverage people resources to achieve sustained organizational performance.

A city government Department of Human Resources (DHR) was the location for this study. Known as CityGov, the organization's DHR is led by a Commissioner of Human Resources with a staff of about 60. The DHR team is responsible for supporting its 8000-city workforce and acts as such through its vision to be a forward looking, strategic business partner with national recognition for maximizing the effectiveness of human capital. This vision as articulated by CityGov DHR has a direct inference to human performance improvement through its goal to maximize the effectiveness of human capital.

The primary focus of this background and contextual explanation centers on the DHR's human resources (HR) processes. Seeking creative strategies by HR teams to improve human performance in city government may imply that improvement solutions or interventions be appropriately matched to the desired business outcomes. Cross collaboration and communication within city departments will be essential in meeting business outcomes.

Literature on human performance improvement has shown that matching interventions with issues may prove difficult for teams charged with improving performance. This is due in part to the absence of an effective model in place capable of systematically or systemically "diagnosing performance issues, recommending and implementing targeted solutions, managing cultural issues, and evaluating the selected interventions success" (Sanders, 2002, p. 1). The Human Performance Technology (HPT) model (Stolovitch & Keeps, 1999; ISPI, 2000; Sanders, 2002) provides such a model. A review of the literature will define and delineate human performance technology. It should also be noted that Human Performance Improvement (HPI) is used interchangeably when referencing HPT.

In terms of knowledge acquisition as it relates to HPT, the CityGov's HR support teams may face increased scrutiny related to providing performance support to the organization. By not having qualified staff capable of administering a systematic approach to performance improvement, which is what the concept of HPT espouses, CityGov HR teams stand the risk of being labeled a non value-adding function. It is therefore imperative that HPT/HPI be advanced through the professional development of key HR practitioners.

Statement of the Problem

It is not known to what extent HR professionals at CityGov are capable of systematically addressing human performance issues. This study examined a specific organizational concern within CityGov, with the goal of improving practice among HR personnel. Such a situation is characterized by Creswell (2005) as a practical research problem because the research seeks to address issues or concerns within the actual work settings. The overarching goal of this study was to advance human performance technology through professional development. Thus the current concern or issue is HR practitioners required knowledge and development on analyzing human performance.

“Typical organizational structures encourage single solutions to problems, where each support unit such as training, HR, quality control, or IT, endorses and has expertise in only one single methodology” (LaBonte 2001, p. viii). Although “an effective human resource [HR] system...requires a focus on performance” (ISPI, 2008, sec. 3), a gap in the research literature suggests a need exists to develop local government HR support practitioners on the value of systematically addressing human performance issues.

Purpose of the Study

The purpose of this study was to identify the overall impact a HPT/HPI knowledge intervention played on developing HR professionals. The objectives for this study were based on identified research questions presented in chapter one of this research report. The objectives were:

1. Determine the current knowledge and comprehension of HR professionals regarding performance technology/improvement models.
2. Identify learning paradigms that will support adult learning through action research.
3. Assess the perceived value from HR professionals of the HPT/HPI action learning intervention.
4. Measure the perceived confidence level from HR professionals to apply learned knowledge and skills on the job.

Rationale

Research relating to knowledge and acumen of human performance technology by human resource professionals appears lacking. There is a significant amount of literature that suggests human performance technology as a results-based approach to improving performance. Van Tiem, Moseley, and Dessinger (2000) note that performance technology “is the systematic process of linking business goals and strategies with the work force responsible for achieving goals” (p. 2). This statement by the authors concerning performance technology has a relevant connection to current responsibilities of HR stakeholders.

HR leaders and professionals within organizations are accountable in many ways for addressing strategies that link organizational goals to human performance. HR stakeholders must be strategic players as they go about the business of continuously improving both human and organizational performance. The scarcity of research rationalizing the ability of HR professionals' to systematically analyze performance and identify relevant causes, propose and implement valid solutions, and evaluate and manage change may call for action learning to add to the literature.

As a means to affect organizational change and improve human performance, this study implemented an action research design. The goal of the action research study was to close the current knowledge gap which existed among HR professionals at CityGov relating to human performance technology/human performance improvement.

Research Questions

This study captured the important high-level processes necessary to address the action research problem. It was important to address why an action learning intervention may (or may not) be required (research question # 1). As well, identifying elements that support action learning was necessary (research question # 2) in order to adhere to principles of adult learning. After participating in, and completing the action learning intervention, participants provided data concerning the value of the professional development intervention (research question # 3). Finally, the action research participants provided data specifically related to their perceived level of confidence to apply learned skills upon return to the workplace (research question # 4).

Based on the preceding discussion, this study answered the following research questions:

1. What does baseline data indicate regarding CityGov's HR professionals' current knowledge and comprehension of human performance technology/improvement models?
2. What learning paradigms (i.e. principles, models) support action learning knowledge acquisition for CityGov's HR professionals?
3. What reaction did CityGov's HR professionals have on learning new human performance improvement skills through action learning?
4. What was the perceived confidence level of CityGov's HR professionals to apply newly learned HPT/HPI knowledge and comprehension back at the workplace?

Significance of the Study

The importance and value of conducting this study was predicated on previous research indicating that systems are required for addressing organizational performance issues. "The HPT approach has evolved over many years and has shown to be able to address [the] range of [organizational] situations" (Public Health Institute, n.d.) requiring improvement.

This study is important to human resources practitioners because, as LaBonte (2002) states, "our background as training, HR, and OD professionals provides a context for learning and using a systematic approach to client partnering and improved results" (p 71). This systematic approach to client partnering that LaBonte refers to is exactly what HPT and/or HPI is all about. This study has even greater significance to HR support practitioners in local

government infrastructures because it offers a path to development that supports enhanced performance. Practitioners of HR can gain insight, knowledge and comprehension, and learned skills in performance improvement methodology.

Definition of Terms

The literature review conducted for this study assisted in the identification and defining of some key terms. An alphabetized list of terms is provided as follows:

1. Adult Learning Principles
2. Andragogy
3. Baseline Data
4. Front-End Analysis/Instructional Systems Design
5. Human Performance Technology
6. Human Performance Improvement
7. Moderate Intensity Assessment
8. Self-Efficacy Assessment

Each term identified in this study required additional delineation for better comprehension.

Adult Learning Principles

There are six assumptions about adult learners that have been generated by Malcolm Knowles. The assumptions offer a framework for consideration in the advancement of learning in adult education. In an attempt to heighten the awareness of the art of adult learning, Knowles (1980) originally presented four key assumptions about adult learners.

They included:

1. Teachers have a responsibility to help adults in the normal movement from dependency toward increasing self-directedness.

2. Adults have an ever-increasing reservoir of experience that is a rich resource for learning.
3. People are ready to learn something when it will help them cope with real-life tasks or problems.
4. Learners see education as a means to develop increased competencies.

St. Clair (2002) states that Knowles, Holton and Swanson added two additional assumptions to the previous four assumptions which stated that (1) adults need to know the reason to learn something, and (2) that the most potent motivators for adult learning are internal, such as self-esteem. The addition of the latter assumptions about adult learners adds significant context in reinforcing Knowles' beliefs concerning andragogy. The assumptions can now be viewed together as they were originally provided by Knowles (1989):

1. "Adults need to know why they need to learn something before undertaking to learn it."
2. "Adults have a self-concept of being responsible for their own lives."
3. "Adults come into an educational activity with both a greater volume and a different quality of experience from youths."
4. "Adults become ready to learn those things they need to know."
5. "Adults are life centered (or task centered or problem centered) in their orientation to learning."
6. "While adults are responsive to some extrinsic motivators...the more potent motivators are intrinsic motivators." (pp. 83-84).

Chapter two of this study presents a review of literature capturing a detailed discussion about adult learning from a theoretical and conceptual perspective.

Andragogy

The term andragogy represents a theory or model that helps to understand and support adult professional development. “Andragogy rests on the assumed unique and distinctive characteristics of adults as learners; based on those characteristics, it prescribes a specific set of procedures that should be used for adult educational processes” (Clardy, 2005, p. 4).

Baseline Data

Collecting baseline data is an integral part of evaluation (Kiernan, 2006, sec 1). Baseline data, as it relates to this study, represented quantitative and qualitative data collected to establish a reference point, or ‘as is’ information regarding the current situation. In order to determine whether HR professionals at CityGov possessed adequate knowledge and skills related to human performance technology and improvement, an assessment tool was used to collect baseline information.

Front-End Analysis/Instructional Systems Design

This study makes reference to the terms front-end analysis and instructional systems design as they specifically relate to addressing performance interventions. Separating each term reveals front-end analysis as a means by which analysis uncovers performance, environmental, learner or needs concerns in order to prescribe appropriate interventions (San Jose State University, 2003). As such, instructional systems design, as defined by Broderick (2001), is “a research-based methodological approach that brings the learner from a state of not being able to perform a certain task or skill, to that state of being able to perform it” (para. 2). In either case, be it front-end analysis or instructional system design, each presents an opportunity to systematically address performance issues.

Human Performance Technology (HPT)

As operationalized in this study, HPT was the subject and content used to support knowledge acquisition of HR professionals. According to Roger Chevalier (2004), human performance technology, or HPT, is systematic and systemic as it seeks to sustain organizational effectiveness by identifying issues that affect individual and organizational performance. This perspective by Chevalier appears to place emphasis on how work is accomplished when stakeholders seek to improve performance.

Chevalier's denotation of HPT being systematic and systemic is further conceptualized through LaBonte's (2001) attempt to define HPT/HPI, and for that matter, performance consulting. Multiple definitions include:

1. forms of needs assessments
2. methods to improve systems
3. scientific engineering approaches to improving results
4. business reengineering efforts (p 7).

Human Performance Improvement

Human Performance Improvement, or HPI, is often used interchangeably with human performance technology (HPT). "The term human performance technology sounds somewhat dry and mechanistic. Hence, human performance improvement (HPI) has begun to appear in professional publications as a more acceptable euphemism" (Stolovitch & Keeps, 2007, para 3). Through the application of HPI strategies, HR professionals within organizations are able to apply a system or model that adds value through improvement. The HPI perspective has flourished from somewhat early beginnings. The theoretical constructs of HPI are significantly addressed in this study's literature review.

Moderate Intensity Assessment

Moderate Intensity Assessment (MIA), as implemented in this study, refers to the quantifiable items and responses of an assessment tool used to collect respondent data. Barksdale and Lund (2001) characterize the selected MIA as a level one method of assessment that can be used to obtain the overall reaction of participants to an intervention. The actual MIA used in this study enabled the researcher to capture both quantitative and qualitative data and can be seen at Appendix B.

Self-Efficacy Assessment

Like the MIA, the Self-Efficacy Assessment (SEA) was implemented in this study to collect respondent data, and also contains quantifiable items and responses. The SEA was “used as a self-perception tool to measure confidence increase or perceived belief change” (Barksdale & Lund, 2001, p. 75). The SEA’s primary intent was to provide a low-intensity evaluation aimed at determining knowledge and comprehension gained through the action learning intervention. The SEA tool is can be viewed at Appendix C.

Assumptions and Delimitations/Limitations

Assumptions

Three primary assumptions were fundamental to this study:

1. HR professionals at CityGov lacked a comprehensive knowledge of human performance technology/improvement.
2. Action research, or action learning, was the most appropriate research methodology to implement to facilitate a knowledge acquisition intervention.
3. Individuals completing the Baseline Measurement Survey, Moderate Intensity Assessment and the Self-Efficacy Assessment provided accurate responses.

Further discussion to support each assumption is provided to strengthen clarity.

Assumption # 1. Fundamental to this study is the underlying assumption that HR professionals from CityGov, a local government organization, do not provide a systematic or systemic approach to improving human performance. As such, CityGov HR professionals require a knowledge base that will prepare them to be better strategic partners to the organization—especially where improving performance is concerned.

With much uncertainty and change in organizational environments today, employee engagement is seen as a vital element to success. Managing employee engagement in the change environment prompts leaders to both emphasize and scrutinize the strategic role of [HR] (Rowden, 1999). Endorsing HPT/HPI practices may be an effective alternative to status quo approaches by HR professionals to address performance issues. Dormant (1999) states that “[HPT] professionals implement wide varieties of interventions. Almost constantly, they try and get others to accept new and better ways of working” (p. 237).

Assumption # 2. In order to increase the awareness of HR professionals to the importance of systematically addressing business goals through performance analysis, it was assumed that an action research/learning intervention was appropriate. Greenwood and Levin (1998) suggest that action research “is social research carried out by a team encompassing a professional action researcher and members of an organization or community” (p. 4). The researcher for this study implemented systematic procedures in order to collect data leading to improving human performance in the identified workplace. The social research team for this study consisted of the researcher implementing the action learning and the HR professionals receiving the professional development.

Assumption # 3. A final underlying assumption of this study assumed that the study participants provided accurate respondent data on all assessment tools. Accurate respondent data is critical to validity and analysis.

Limitations

This practical action research study of human performance technology development for HR professionals was limited to a select number of professionals in the CityGov organization. Generalizing any findings as a result of the study “are [limited] to theoretical propositions and not to populations or universes” (Yin, 1994, p. 10). Additionally, the researcher for this study is not a formal academic researcher; therefore, the methods of inquiry operationalized in this study are subject to being labeled less than scientific. Stringer (1999) suggests that while action research continues to gain acceptance, many critics still question its legitimacy as a scientific form of inquiry.

This study assessed the knowledge of HR professionals on human performance technology/improvement concepts and methods. The findings of this assessment may be considered a limitation. HR professionals may interpret that their current skills at applying performance improvement techniques bears no differentiation from skills inherent to the human performance improvement methodology. This interpretation thus creates an impression that HPT/HPI concepts are understood and practiced, but, in different ways by HR professionals.

A final limitation from the study involves the learning process. Evaluating all components of learning to include learning transfer was not the intent of this study. The researcher’s scope was limited to advancing HPT/HPI methodology through action learning

and then seeking reaction and self-efficacy of participants to adequately apply learned knowledge and skills.

Nature of the Study

Advancing human performance technology (HPT) through action learning provided key stakeholders, in this case, HR professionals, with a professional development intervention. The goal of the intervention was to enable the acquisition of knowledge specifically related to HPT/HPI. In this regard, action learning was critical to the success of this study. It is therefore proposed that action learning has as its framework principles of adult learning.

It was stated in earlier discussion that Malcolm Knowles pioneered adult learning, or andragogy (Knowles, 1980; Swanson & Holton, 2001). Knowles was arguably the contemporary lead proponent of andragogy, espousing a model centered on six identifiable principles. It was extremely important for this study to understand the significance of adult learning and its implication as a theoretical construct to action learning. Equally as significant was the need to clarify action learning.

Hart and Bond (1996) and Meyer (1993) recognize Kurt Lewin as not only the father of contemporary social psychology, but as well, the leading authority and proponent of action learning. Credit is given to Lewin for a model characterized by planning, acting, observing, and reflecting, used as a conceptual framework to modern action research approaches. Chapter 3 of this research study will provide a complete methodological overview of action learning/research. It was also necessary in this study to emphasize the conceptual framework of HPT/HPI.

Chevalier (2001) provides a starting point for understanding what may be thought of as an HPT/HPI theoretical framework. “HPT uses a wide range of interventions that are drawn from many other disciplines including, behavioral psychology, instructional systems design, organizational development and human resources management” (p 1). This perspective by Chevalier emphasizes a systemic approach that clearly shows multiple stakeholders, such as this study’s sample group, as responsible stewards of the performance improvement process. The foundation, by which HPT/HPI is built on, fosters the belief that performance is improved when the corresponding system is effectively managed.

Adding to Chevalier’s perspective that interventions are derived from other disciplines, Sanders and Ruggles (2000) present an excellent review of HPT/HPI in their article *HPI Soup*. Their comprehensive analysis focuses on the history surrounding human performance improvement through contributing experts and contributing disciplines. The authors note, “If we view HPI from the standpoint of the interventions that are offered, there’s a tremendous overlap with other disciplines such as HR, OD, and training” (p. 28). Sanders and Ruggles discuss and delineate a wide range of topics and disciplines in HPI Soup as they relate to HPI, or HPT. Their research and analysis brings to light a cohesive knowledge base that strengthens this research report by offering a literature review that provides significant context and conceptual comprehension of HPT/HPI.

Organization of the Remainder of the Study

The remaining chapters of this research report present a holistic perspective and analysis of the research topic. Chapter 2 presents a literature review used to provide the context for HR management, human performance improvement and action research, the three main foci for this study. Chapter 3 provides an overall discussion of the research

methodology. The methodology will examine key elements of the research design such as sample and population, study instruments and overall methodological procedures.

Rounding out the organization of the study will be chapters 4 and 5. Chapter 4 will present the findings and results of the study as they relate to data collection and analysis. Chapter 5 is the final section of the research report and will be used to discuss and summarize the findings as a result of the study. Implications for practice and recommendations for further study are also discussed in chapter 5.

CHAPTER 2. LITERATURE REVIEW

Introduction

Three key topics addressed in this study centered on (1) HR processes and practitioners, (2) human performance technology, or improvement, and (3) learning paradigms and professional development. The review of literature for this study explored each of the topic's concepts and theoretical frameworks with the goal of aligning the research to the study's identified statement of the problem. This study's literature review also provided the context within each topic necessary to successfully answer the identified research questions as they were presented in Chapter 1. The first topic for discussion provides context concerning the human resources framework.

Human Resources (HR) Management in Organizations

Overview of HR Roles and Processes

HR management has had many themes throughout the years; each proposing differentiating frameworks and strategic approaches that have been articulated in the literature during the 1970s and forward (Liedecker & Hall, 1974; Ruch, Hershauer & Wright, 1976; Briscoe, O'Neil & Cook, 1982). Many interpretations were made throughout the 1980s about several prominent schools during the time such as Harvard, Warwick, Shuler, etc., espoused differentiating theories that sought to deliver a modernistic view of human resources (Sparrow & Hiltrop, 1994). These schools identified approaches such as those related to strategic matching, multiple stakeholders, political and change, and behavioral transformation as theories denoting contemporary HR thought. It was not the intent of this study to significantly delineate a more holistic interpretation of human resources. It was assumed that HR roles, management and processes are widely known in a western society to

some degree. Nonetheless, it was important to address several factors and aspects related to HR in order to provide significant context. The conceptual knowledge acquired as a result of this context helps to establish a connection between HR processes and human performance improvement.

The term human resources is known and understood as a function governing and supporting the people aspects within organizations. As such, HR management is a key driver of HR processes. It is also “a strategic partner in the formulation of company strategies, as well as executing those strategies through HR activities” (Ulrich, Brockbank & Yeung, 1989, p. 315). These functions are but a few aspects of HR’s total reach. HR may be also seen as the function charged with assisting in the achievement of organizational goals through selecting skilled and motivated people capable of sustaining competitive advantage (Desimone, Werner & Harris, 2002; Bolander, Snell & Sherman, 2001).

Much is said today concerning HR’s role as a strategic partner to the organization. Becoming a strategic partner will most certainly require that HR professionals obtain a body of knowledge that must be leveraged for operational success. Losey (1997) warns that anyone lacking such a body of HR knowledge will not be capable of doing the work associated with the HR function. Many professional organizations currently exist to bridge the HR knowledge gap.

Global HR Organizations have been formed to disseminate information and encourage systematic study of HR theories. These HR organizations are seen as communities of experts striving to support HR professionals through provision of comprehensive resources that support strategic application of processes (Academy of HR Development,

2008; International Association for HR Information Management, 2008; National Human Resource Association, 2008; Society for Human Resource Management, 2008).

Alvares (1997) believes that the existence of HR in future business operations will depend on the function's ability to be strategic, not just a "partner to the business" (p. 7). Alvares' belief about the future existence of HR suggests that HR functions apply strategies aimed at validating their ability to add organizational value. It is further proposed that the contextual nature of HR in its more contemporary view places emphasis on people development and performance improvement. This same emphasis applies to such HR-related processes like recruiting, training and development, and other people-related programs. The importance of HR management in organizations warrants further discussion in an attempt to make a clear connection between HR functions and organizational and human performance improvement.

According to Bohlander, Snell and Sherman (2001):

The term "human resources" implies that people have capabilities that drive organizational performance...Other terms, such as 'human capital' and 'intellectual assets' [has] in common the idea that people make the difference in how organizations perform...This is the essence of human resources management. (p. 4)

Bohlander et al provide an understanding into the theoretical framework that best delineates what the HR industry should represent. This delineation offers a perspective that suggests that people are central to shaping and conceptualizing a holistic view of HR. The authors also make a clear connection between people and performance, each of which was a major factor in addressing this study's research problem.

Through HR effectiveness and efficiency, organizations are capable of sustained value and improvement when relevant criteria exist. Such criteria basically point to people resources being rare and of value—that is—having unequal knowledge and skills (Bolander, Snell, & Sherman, 2001). Additionally, people resources should be difficult to imitate and should be organized. These attributes ensure both a unique culture and teamwork (Coff, 1997; Snell, Youndt & Wright, 1996). People resources being unique and capable of extraordinary teamwork should also be important within local government HR processes.

Government-Related HR Processes

Aligning human resource functions to processes within public sector organizations is deemed a critical issue (U.S. Department of Labor, 1993; U.S. General Accounting Office, 1999). This position by the major United States agencies is especially insightful as this study's research participants are HR professionals from a local government organization (CityGov). Private sector and government organizations share similar types of internal issues related to human resources. Acquiring and leveraging talent to sustain organizational effectiveness is seen as a critical role, among others, that HR professionals must perform if they are to successfully partner with organizational management (Ballard, 2003; Silver, 2002). It is proposed by this study's researcher that at the center of strategically aligning people to organizational processes is a value-adding HR function.

Streib (2006) helps in strengthening the case for HR involvement in people and organizational performance by stating:

HR management may well be the most critical activity in local government.

Most local government services are provided by people, and ensuring that all

of them fulfill their responsibilities in an effective manner is what the HR function is all about. (p. 95)

Streib's statement is supported by arguments that suggest that as a critical activity of any organization, HR must develop and accept a theory base grounded in business alignment. The HR function's ability to effectively manage human capital will ultimately determine the success, or failure of the organization (Christensen, 1997; Bolander et al, 2001).

Several U.S. local government organizations espouse theories, models and practices of HR processes through their organizational visions and missions. Such strategies indicate an overwhelming emphasis on people and performance. The city of Atlanta, Georgia places a premium on "ensuring that Atlanta's citizens have a competent and productive workforce, committed to the delivery of quality service" (City of Atlanta Website, 2008, para 1). Through this statement, the city's HR Commissioner clearly denotes employee competence as a driver for quality service. This in turn may be seen as high-performing people driving quality through performance improvement.

The city of San Antonio, Texas has a similar perspective to the city of Atlanta's HR value proposition. According to the San Antonio city Website (2008):

The mission of the Human Resources Department is to provide human resource services in support of City departments to maximize the link between human capital and the City of San Antonio's overall organizational mission to deliver quality services to its citizens. (sec. 1)

The perspective taken by the city of San Antonio positions its HR function as a unique service provider to its customers (city departments). Like the city of Atlanta, San Antonio places emphasis on people and quality service.

Both the City of Atlanta and the City of San Antonio represent public, local government organizations relying on a human capital perspective to add organizational value. Hitt, Bierman, Shimizu, and Kochner (2001) conducted a study to determine effects human capital had on service firm performance. The study found that when organizations leveraged human capital there was a positive effect on performance.

Linking HR to Human Performance Improvement

The literature suggests that human performance improvement (HPI) is achieved when:

1. Strategies align to business needs
2. Efficiencies create cost reductions
3. Employee contributions are increased
4. Organizational capacity for change is increased (Ulrich, 1997; Sanders, 2002).

Each of these aspects of organizational performance encompasses strategic processes that both management and HR professionals address continuously for performance sustainment. In order for stakeholders, in this case, HR teams and management, to align strategies with business needs, a thorough analysis is required to clarify targets. Such an analysis will ultimately lead to diagnosing issues and implementing value-added solutions—thereby impacting resource costs. When employees' contributions increase as a result of increased engagement and development, the capacity for change is increased. These actions are the core deliverables inherent to human performance technology (Stolovitch & Keeps, 1999; Van Tien, Moseley & Dessinger, 2001).

The review of literature for this study included a thorough analysis of human performance technology (HPT)/improvement and is presented later in this chapter. The

immediate goal here is to strengthen the connection between HR management and human performance improvement. In revisiting the aspects of organizational performance listed earlier as precursors to human performance improvement, the aspects appear to be linked to human resource management as strategic partner. This linking of aspects to HR management (HRM) assists HR departments in “focusing aggressively on...increased employee contribution and transforming organizations” (Ulrich, 1997, pp. 232-233). Table 1 captures HRM as a strategic partner.

Table 1

HRM as a Strategic Partner

| <u>Roles</u> | <u>Goals</u> | <u>Deliverables</u> |
|-----------------------|---|---|
| Business Partner | Help to move strategic planning from the conference room to the marketplace | Execute strategies that meet business needs |
| Administrative Expert | Improve the efficiency of both HR functions and the entire organization | Administrative efficiencies that reduce costs while maintaining quality |
| Employee Champion | Represent employees to management: increase employee contributions and commitment | Increased employee contributions and commitment |
| Change Agent | Shape processes and culture that together improve an organization’s capacity for continuous improvement | Increased organizational capacity for change |

Based on Ulrich, 1998, pp. 124-129; Ulrich, 1997, pp.37, 232-233. In D. M. Van Tiem, J. L. Moseley & J. C. Dessinger. (2001). *Performance Improvement Interventions* (p. 145).

A final consideration in an effort to link HR management to performance improvement is seen in the perspective provided by Burke (1997, p. 97):

[HR practitioners]...need to understand more about and expand our measurements of performance. We need to [also] learn more about the critical

antecedents of performance, that is, what are the direct and indirect enhancers and inhibitors of high performance.

Burke presents a clear challenge to HR practitioners to increase their awareness of broader ways to define, conceptualize and measure performance. Understanding what truly contributes to human performance improvement will be critical.

Specifically as it relates to HPT/HPI, HR practitioners must identify approaches to improving the performance of employees. This competency requires an understanding of systems and practices available to enable high-performing people (Bolander, Snell & Sherman, 2001). This position by the authors has relevancy to what Stolovitch and Keeps (1999) assert about human performance systems. “HPT seeks to improve the performance of organizations and the people responsible for achieving desired results” (p. 13). Through an acquired knowledge base related to HPT/HPI, HR professionals can increase their ability to work effectively with people in order to achieve organizational goals. At this point of the literature, the second topic, human performance technology/improvement is conceptualized to ascertain a theoretical framework.

Human Performance Technology/Improvement (HPT/HPI)

The Origins of HPT/HPI

According to Rothwell, Hohne, and King (2007):

Too often, the term performance is confused with behavior. In human performance improvement (HPI), there is a clear distinction between these terms. A simple way to distinguish them is to view performance as the end result and behavior as the means to the end. (p 1)

Rothwell et al introductory passage sets the stage for delineating those aspects (techniques, procedures, and approaches) involving human performance. Human performance improvement, or HPI, is a term synonymous with human performance technology (HPT). “The term human performance technology sounds somewhat dry and mechanistic. Hence, human performance improvement (HPI) has begun to appear in professional publications as a more acceptable euphemism” (Stolovitch & Keeps, 2007, para. 3).

A review of literature suggests many contributions to the field of HPI or HPT. For ease in comprehension, the terms HPI and HPT are used together or interchangeably throughout this study to denote human performance improvement and human performance technology respectively. The point that can be inferred from the use of HPT or HPI strategies is people and organizations are able to apply a system or model that adds value through improvement. Both terms, HPI and HPT, have flourished from somewhat early beginnings.

Stolovitch and Keeps (1999) set the stage for understanding human performance by stating:

Human Performance Technology (HPT) is a field of practice that has evolved largely as a result of the experience, reflection, and conceptualization of professional practitioners striving to improve human performance in the workplace. HPT possesses a base of research and theory... (p. 3).

The fundamental characteristics mentioned by Stolovitch and Keeps are more transparent through LaBonte’s (2001) attempt to define HPI/HPT, and for that matter, performance consulting. Multiple definitions include:

1. forms of needs assessments
2. methods to improve systems

3. scientific engineering approaches to improving results
4. business reengineering efforts (p 7).

Chevalier (as cited at the Society for Human Resource Management Web site, 2002) posits, “HPT uses a wide range of interventions that are drawn from many other disciplines including, behavioral psychology, instructional systems design, organizational development and human resources management (p 1). This statement by Chevalier, particularly that HPT is drawn from HR and OD disciplines, places emphasis on previous discussion. Recall that HR and OD professionals share responsibility for implementing business change strategies and performance improvement within organizations. Therefore, use of a HPT model or framework by professionals whose disciplines are part of such a framework would appear to be a reasonable change strategy to incorporate within organizations.

The fundamental characteristics and firm foundation of HPT pointed out earlier came about as a result of many contributions by theorists and practitioners. LaBonte (2001) posits, “The accomplishments of these contributors and other HPI professionals over the past half-century have built models, tools and concepts” (p 4) representative of what human performance is today. “Contributors to the field of HPI/HPT such as Thomas Gilbert, Joe Harless, Geary Rummler, and Robert Mager (1997) are well established as the founders” (Sanders & Ruggles, 2000, p 27). The practitioners and pioneers of HPT highlighted by LaBonte have had a significant impact on shaping the constructs and theoretical framework that are today associated with the field of practice.

Pershing (2006) adds to the discussion of HPT contributors by indicating that others such as Chris Argyris, Bill Coscarell, Danny Langdon and Allison Rossett each offered evolving thinking that positively influenced the growth of HPT. The overall contributions to

the field of HPT can be seen as significant theories and knowledge that can be leveraged to increase and/or improve organization performance and productivity. This thought becomes more meaningful when consideration is given to how Pershing (2006) perceives HPT in the context of improving productivity. “Human performance technology is the study and ethical practice of improving productivity in organizations by designing and developing effective interventions that are results-oriented, comprehensive, and systemic” (p. 6).

LaBonte (2001) adds to the identification of HPI/HPT contributors by providing at Table 2 an overview of the contributors and their accomplishments.

Table 2

Selected Contributors and Accomplishments to HPT

| Contributor | Focus of Work | Accomplishment to HPI/HPT |
|-------------------|---|---|
| Thomas F. Gilbert | Behavioral Engineering | Identified six variables—three work environment and three individual—that are required to improve performance (Gilbert 1996) |
| Joe Harless | Front-End Analysis/Instructional Systems Design | Performance interventions require front-end analysis of the performers system. Data builds four types of interventions--: environment, selection, motivation, and knowledge (Harless, 1994) |
| Robert Mager | Instructional Objectives | Learning objectives are written as statements of measurable, expected performance, with conditions specified in order to improve performance (Mager and Pipe, 1997) |
| Geary Rummler | Three Levels of Performance Improvement | Established need for analyzing/aligning three levels of performance—process, organization, and job readiness—to create and sustain exemplary performance (Rummler and Brache, 1995) |

Adapted from “The Origins of Human Performance Improvement,” by T. J. LaBonte, 2001, *Building a New Performance Vision*, (pp. 5-6)

Pioneers of human performance improvement rooted their models in behaviorist concepts, although in some cases, the same theorists rebelled against behaviorism at a point later in their careers (Sanders & Ruggles, 2000, p 29). A reference made in earlier discussion noted that a simple way to distinguish between behavior and performance is to view performance as the end result and behavior as the means to the end. Brethower (1995) and Dean and Ripley (1997) support the belief that the knowledge base of HPT is derived from behavioral psychology. These authors also believe a connection to HPT with general systems thinking. When referring to behavioral psychology, B. F. Skinner deserves recognition.

Skinner (1953) is believed to be the founder of behavioral science and coined the term “operant behavior” that relates to behaviorism. More precisely, operant behavior can be viewed as “An organism modifying its behavior in response to the comparison between its own behavioral output and its experience” (Eckart, 2004). From Eckart’s view, in relation to organizations and their employees, we can interpret the organism to be individuals within organizations. Further, it is perceived that behaviors of the individuals must be a certain way in order to dictate what the rewarding outcome will be.

Skinner (2001) further posits “behavior is best influenced by rewarding acts that most closely approach the desired behavior” (p 6). Application of Skinner’s belief in today’s organizations is evident where people are rewarded for completing projects on time or exceeding predetermined performance goals. One example may be a doctoral student whose behavior allows completion of the program requirements thereby being rewarded with a diploma denoting success. In contrast, a sales manager not meeting predetermined goals may be rewarded with no bonus or possibly a demotion or separation.

It should be noted that some of Skinner’s colleagues and co-researchers, such as Markle, Gilbert, Rummler, Brethower and Kaufman deserve recognition. These pioneers not only provided the theory and fundamentals that underpin HPT/HPI, but they also help found the International Society for Performance Improvement (ISPI)—the organization dedicated “to improving productivity and performance in the workplace” (ISPI, 2008, para. 1). Sanders and Ruggles (2000) also detail the accomplishments of some of these pioneers in *HPI Soup*.

The HPI/HPT discussion to this point has been a discovery that provides some contextual meaning to human performance improvement. It is widely known that organizations are made up of complex processes centered on people, productivity, and many times, profits. Endorsing HPI/HPT practices may be an effective alternative to “status quo” approaches to addressing performance issues. Dormant (1999) states “Human Performance Technology (HPT) professionals implement wide varieties of interventions. Almost constantly, they try and get others to accept new and better ways of working” (p 237). Dormant’s statement provides a transition or an opportunity to explore what Sanders (2002) refers to as “a model that represents HPI’s systematic approach” (p 5).

Components and Elements of a HPI Model

Many models representing HPI or HPT have been introduced to help explain their approaches to performance improvement (Tosti & Jackson, 1997; Atkinson & Chalmers, 1999; ISPI, 2004). The models represent the theories and concepts of the contributors to HPI/HPT mentioned in earlier discussion. In order to gain further knowledge and comprehension of HPI/HPT as a systemic approach, a model is provided. The model at Figure 1 has as its foundation a change management philosophy and will be the basis for further discussion on how HPT/HPI may impact performance improvement in organizations.

HUMAN PERFORMANCE TECHNOLOGY (HPT) MODEL

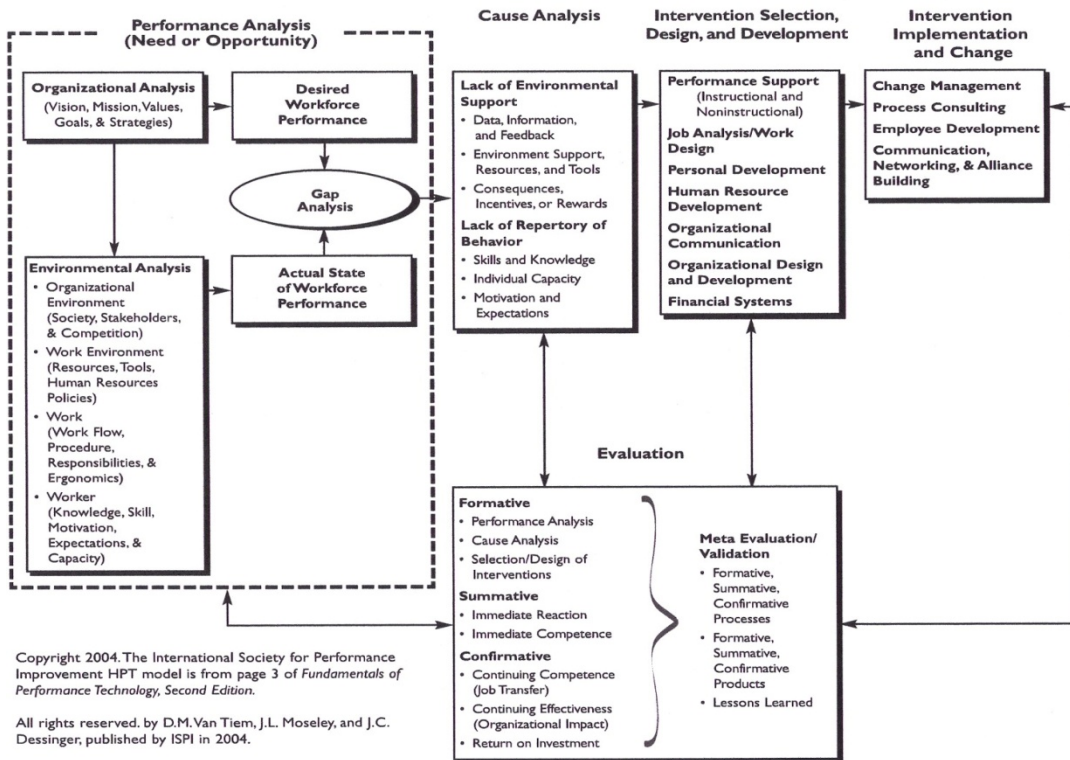


Figure 1. A model for the HPT process. The model represents a systematic approach to articulating business goals, diagnosing performance issues, recommending and implementing targeted solutions, managing cultural issues, and evaluating intervention success.

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A review of the model at Figure 1 reveals components suggesting a systematic path to addressing performance improvement issues. This thought is validated by Sanders (2002) as he states “HPI is systematic because it consistently follows a process for articulating business goals, diagnosing problems, recommending and implementing solutions and evaluating interventions” (p 4). The ‘systematic’ label as suggested by Sanders reflects what other theorists believe about the HPI model as well.

Van Tiem, Moseley, and Dessinger (2001) note that performance technology “is the science and art of improving people, process, and performance” (p. 2). Further description of

an HPI/HPT approach reveals that the “systems approach is the foundation on which what is loosely termed the general process model of HPT” (Rosenberg, 1999, p. 137). What is overwhelmingly clear in defining HPI and HPT models is they use a systematic approach to improving performance. It is also clear that the HPI model’s components and elements outline methods and procedures that are linked to an overall strategy for improving human performance in organizations. The review of HPT/HPI continues in order to validate the importance of advancing its framework.

Rummler (1999) posits that organizational interventions are linked as a result of HPT’s systematic approach to overall performance improvement. This position taken by Rummler can be interpreted as meaning components of the HPT model shown at Figure 1 represent steps in the systematic process approach to improving performance. Because of this interpretation, analyzing the components and the elements of the HPT model will be essential. Gaining a greater perspective on how the model can impact performance and organizational change management is the desired outcome.

The HPT model presented in Figure 1 illustrates five components, each with key elements. The components are:

1. Performance Analysis
2. Cause Analysis
3. Intervention Selection, Design and Development
4. Intervention Implementation and Change
5. Evaluation (Van Tiem et al, 2004).

The performance analysis component also captures a business overview, or analysis, necessary for stakeholders and performance consultants to engage effectively.

Wilmore (2002) states that “the business analysis process consists of three stages; (1) entry, (2) data collection, and (3) agreement” (pp. 16-17). Wilmore makes each stage more transparent as he defines the entry stage as the point where a performance consultant and client meet to discuss perceived problems. From Wilmore’s definition of the entry stage we can see that a process to partner and consult on business issues begins the HPI process. The entry stage is also considered an element of the component, ‘Business Analysis’.

Wilmore (2002) continues by denoting the data collection stage as the point in the business analysis process where the performance consultant collects data through asking key goal-oriented questions. The consultant also “uses a combination of interviews, document reviews, and survey/focus groups to obtain data” (p. 16). Finally, Wilmore highlights the third stage, which is the agreement stage, by saying it “involves returning to the client with findings and seeking common ground and clarification” (p. 17). Wilmore’s account of the above stages can be applied to professional practice in that the process is similar to how training professionals conduct needs assessments with internal clients. The *Performance Analysis* phase is further delineated.

Boyd (2002) states that the “identification and definition of the performance gap is a critical step in helping an organization address human performance improvement” (p 43). At figure 1, the HPT model reveals that a gap, or gaps, is identified in the performance analysis phase. Analyzing desired and actual performance is commonly referred to as gap analysis, a process of diagnosing issues relevant to a performance problem (Rossett, 1999). Both Boyd and Rossett share the emphasis on identifying performance gaps in order to improve performance. Organizations surely cannot improve human performance if they do not know

the gaps that prevent them from achieving their desired performance state. The analysis of the HPT model continues with a look at the 'Cause Analysis' phase.

Doggett (2005) states, "In order to solve a problem, one must identify the cause of the problem and take steps to eliminate the cause. Identifying and eliminating root causes of problems is of utmost importance" (p. 34). In other words, the problem as the author has stated, can represent the gap from the performance analysis, or the problem which prevents realizing a foreseeable desired state. Piskurich (2002) adds to Doggett's position by noting "stated in its simplest terms, the question you want to answer in your cause analysis is: Why does the performance gap exist?" (p. 56).

Through previous discussion it was identified that business and performance analyses are necessary components or phases within the HPT process. After completing each of these phases Chevalier (2002) suggests that "A cause analysis is then done to determine what impact the work environment (incentives, information and resources) and the people (individual capacity, motives and skills) are having on performance" (sec 2, para. 1). The next two components or phases of the HPT process address interventions as they relate to selection and implementation.

Defining an intervention provides significant context to how the term is associated with HPI. MSN Encarta Premium (2007) defines an intervention as "the act of intervening, especially a deliberate entry into a situation or dispute in order to influence events or prevent undesirable consequences" (sec. 1). From this definition, we can see how it might be applied to a performance consultant partnering with a business client. The performance consultant

makes a deliberate entry into a partnership with a client in order to address perceived performance issues. The collaboration subsequently results in possible solutions and tools to influence performance.

According to Spitzer (1999), interventions, as they relate to HPI/HPT, “are used to reduce the gaps between current and desired performance” (p. 163). Spitzer adds that interventions can “virtually take any form, ranging from a job aid...to the development of a completely new organizational system or structure” (p. 163). Spitzer’s thinking is grounded in what Van Tiem, Moseley, and Dessinger (2001) believe about interventions. “The number of possible interventions is almost infinite, because any number of organizational, environmental, and people factors affect performance” (p. 3). It can be interpreted from the description about interventions that they are plentiful and they present opportunities to solve job-related performance issues.

From an intervention-solution perspective, it will be critical to quality to ensure the solution chosen to improve performance issues is directly related to the cause of such issues. This belief corresponds in part to what Powers (1999) believes are the keys to successful interventions. The critical elements of a successful intervention include elements such as resources and time, which are preceded by sound strategies of problem identification and comprehensive recommendations. This reasoning by Powers and what was previously learned about cause analysis suggests that the critical elements highlighted by Powers are not easily obtainable. They are however, achievable once causes of performance issues are known. There is also an intervention-implementation perspective to consider.

Van Tiem et al (2001) addresses intervention implementation by stating that implementing and changing “requires the actual doing and putting into motion selected

interventions...which sometimes requires implementation to be extensive and require major process changes” (p. 20). The statement by Van Tiem, et al suggests that people and technology would most certainly be involved in any implementation project. This clearly implies two important factors; (1) that interventions result from collaborations with various stakeholders and (2) that interventions are tied directly to root causes obtained through cause analysis.

Sponsorship in implementing interventions will be critical. Change is necessary and as Dormant (1999) posits, “perhaps the most important person in a change effort is the sponsor...having the power to envision and initiate the change, but also legitimize the implementation” (p. 251). It makes good business sense to accept Dormant’s position for compelling reasons. Organizations often employ project teams to improve performance in many work processes. The larger the project or change needed the likelihood a sponsor is imminent. A final analysis of the components and elements of the HPT model presented at figure 1 looks at the role evaluation plays in the process.

Perhaps the foremost authority on implementing evaluation measures is Donald Kirkpatrick. Burkett (2002) states that Kirkpatrick “created a four-level model of categorizing evaluation data that has been used as a common frame of reference for several decades” (p. 156). Kirkpatrick (1998) asserts “evaluation that verifies and improves the effectiveness of training is conducted at four levels: reaction, learning, behavior and results (p. 108). This approach to evaluation conceived by Kirkpatrick is a widely accepted framework. It can be implemented as a systematic approach to enabling training departments in most organizations to make value-added decisions in supporting business operations.

The HPT model presented at Figure 1 identifies evaluation as a formative and summative approach of the systematic process. Shrock and Geis (1999) advise that formative and summative evaluation “differ in purpose and often in technique. Formative evaluation seeks data while the intervention is still under development and can be revised. Summative evaluation is conducted to determine whether the intervention is worthy of adoption or continuance” (p. 191). Shrock and Geis’ description of formative and summative evaluation indications each evaluation type is different in nature and better serve the HPI process at different stages. This strategy for evaluation provides a broad focus throughout the HPI process. In an effort to conceptualize a clear vision of what evaluation should accomplish, stakeholders must design and implement an evaluation strategy (Barksdale & Lund, 2001). The final topic of this literature review, learning paradigms, focuses primarily on research and learning strategies aimed at professional development and problem solving.

Learning Paradigms and Professional Development

Introduction

Action learning and action research were at the center of this study as their theoretical constructs were examined to support a professional development intervention used to facilitate knowledge acquisition. The term *paradigm* is used in this literature review to denote an example of a theory or model. As such, the researcher accepts the term paradigm to be used as a basis for a learning methodology or theory. Since the term paradigm usually denotes “a philosophical or theoretical framework of any kind” (Merriam-Webster, 2008), its relevancy in this study sets the stage for discussing philosophical frameworks for research and learning that impact professional development. These frameworks include (1) action learning, (2) action research, and (3) adult learning principles.

Action Learning

Professor Reginald Revans was considered by many as the father of action learning (Marquardt, 1999; Pedler, 1996; Martinsons, 1998). Revans developed action learning as a result of his belief that conventional instructional methods ineffectively addressed research into action. Revans believed that knowledge should emerge from action taken and that this form of learning is instrumental in enhancing skills and performance. He also believed that such an approach was best accomplished in groups. Brockbank (2004) adds to Revans beliefs as she states “Action learning is a continuous process of learning and reflection that happens with the support of a group or set of colleagues working on real issues, with the intention of getting things done” (p. 11).

Revans (1982) suggested that action learning is effective as groups attempt to reinterpret past experiences to reach a solution that is best for the current circumstances. Revans also believed that action learning helped to support organizational change efforts which ultimately lead to lasting behavioral change. Group dynamics would therefore seem integral to the success of action learning where groups “take the time to question, understand and reflect, to gain insights, and consider how to act in the future” (Weinstein, 1998, p. 3). Weinstein’s view of group interaction in action learning appears relevant when considering Revans’ action learning formula.

Revans’ (1982) created an action learning formula that basically consists of two important elements; (1) programmed knowledge and (2) insightful questioning. Therefore, $L=P+Q$, where L is learning. These elements of action learning are delineated for better understanding.

Programmed knowledge (P) is conveyed through books, lectures and other structured learning mechanisms. It is an accessible format for knowledge, but it may take time to find exactly what we need, and in isolation is not sufficient to fulfill all learning needs. Insightful Questions (Q) are those asked at the right time and are based on experiences or an attitude about ongoing work projects, as well as creativity which goes beyond acceptance of ready-made solutions (Gale Group, 2003, para 5-6).

Revans has argued that the element 'Q' is critical to the formula because it enables participants to learn by doing. Others have weighed in on the concept of action learning.

Ortrun Zuber-Skerritt is "Director of OZI, Ortrun Zuber International P/ L. Zuber-Skerritt is also an adjunct professor at Griffith University, Brisbane, Australia, and Professor of Professional and Organisational Development in the UK-based International Management Centres Association [IMCA]" (The Learning Organization, 2002, p. 114). Zuber-Skerritt (2002) argues:

Action learning, in brief, is learning from concrete experience and critical reflection on that experience—through group discussion, trial and error, discovery, and learning from and with each other. It is a process by which groups of people (whether managers, academics, teachers, students, or "learners") generally address actual workplace issues or problems, in complex situations and conditions. (pp. 114-115)

Zuber-Skerritt's position on action learning addresses critical reflection, discovery, and learning as outcomes resulting from group discussion. His position clearly aligns with previous discussion shared by Revans, Brockbank, and Weinstein. These attributes of action

learning will be key objectives of the learning intervention delivered to the action learning participants for this study.

Pedler (1997) adds to the underlying constructs of action learning by advising that “Action learning is an approach to the development of people in organizations which takes the task as the vehicle for learning (pp. xxii-xxiii). Pedler offered a more expansive delineation of action learning and also advised that important elements such as sponsor support, appropriateness of the intervention and the action learner team (researcher and participants) are all essential to action learning terminology.

This study underpins the theories of Revans (1982), Zuber-Skerritt (2002) and Pedler (1997) as it was designed to ensure both the professional development aspects of action learning and the immediate need to address current organizational issues or problems. Although action learning is at the center of this study, it is important to further support the application of its framework by reviewing and discussing the concept of action research. The terms action learning and action research are not synonymous.

Action Research

Whether improving the work of educators and their practice, or solving problems within organizations and communities, action research promises a scientific and collaborative role in tying research to practice (Gall, Gall & Borg, 2003; Swanson, 1995). The belief by Gall et al points to action research as a method readily applicable in both educational and non-educational settings. Schools and school districts, as well as for profit and not-for profit organizations may benefit from the credibility and trustworthiness of action research.

Perhaps the most recognized leader in the cause for action research is social-psychologist Kurt Lewin (Mills, 2000). Lewin’s beliefs about action research were rooted in

his passion to improve social conditions during the middle of the century. Lewin (1948) first used the term ‘action research’ and argued that it represented forms of social practice, primarily conditions, effects and associated research. Whether addressing issues concerned with food shortages or improving intercultural group relations, Lewin felt the process of social discussion could be applied to enhance social uncertainties (Creswell, 2005). As a result of Lewin’s belief that group discussion could enhance unfavorable social conditions, action research and its modern ideas were born.

Other perspectives on action research are discussed. Table 5 captures a snapshot of researchers and/or authors and their conceptualization of action research.

Table 3

Perspectives on Action Research

| Author | Year | Definition of Action Research |
|---------------------------|------|---|
| Greenwood and Levin | 1998 | Conjunction of three elements: research, action and participation. The absence of any element voids the term [action research]. |
| T. G. Badger | 2000 | Collective self-reflective inquiry of participants in a situation to improve the rationality of their practices, whilst developing understanding of both situation and practice. |
| J. Newman | 2000 | Action research is practice as inquiry that requires identifying a problem, searching for possible causes and solutions, testing solutions and validating observations, and disseminating findings. |
| K. Zeichner and S. Noffke | 2001 | Varied motivations that underlie action research include three dimensions—personal, professional, and political. |

Note: Adapted from *Using a Formal Mentoring Program to Develop Nurse Leaders: An Action Research Study* (pp. 60-61), by R. L. Phelps, 2006, Ann Arbor, Michigan: Proquest Information and Learning Company.

The perspectives at Table 3 serve to introduce action research as a model for team participation and improvement. Action research is further explored in order to gain a greater knowledge base of its theoretical foundations.

In Table 3, Ziechner and Noffke (2001) identified three dimensions of action research; (1) personal, (2) professional and (3) political. The *personal* dimension of action research is aimed at the improvement of the researcher's practice. The *professional* dimension of action research points to the practitioner's engagement in staff development. The political dimension of action research is intended to bring about fundamental social change with an emphasis on social justice (Ziechner & Noffke, 2001; Gall, Gall & Borg, 2003).

Action research literature reveals two types of action research designs that are typically discussed. Each type is distinguished by major features that guide the purposes that each project may serve. Action research may either take on a *practical action* or *participatory action* research approach (Mills, 2000). Creswell (2005) argues that "practical action research involves a small-scale research project, narrowly focused on a specific problem or issue..." (p. 552). Creswell attributes his belief about practical action research to teachers and teams within schools or school districts. This thought by Creswell is supported by Mills' (2000) identification of principles related to assumptions about roles of action research participants. One of the principles identified is worth mentioning in order to make a connection of action research to a non-educational setting.

According to Mills (2005), one principle that is correlated to roles of action research participants is "Teacher researchers will choose an area of focus, determine data collection techniques, analyze and interpret data, and develop plans" (p. 553). This description by Mills appears to be process-oriented and may be viewed as a cyclical process. Theoretical constructs are abundant within the literature as they relate to action research's cyclical approach.

Susman (1983) provides a five-phase cyclical process for action research that emphasizes continuation of the entire process until identified issues are resolved. Like Susman, Glanz (1998) offered a multi-phased cyclical model, where 6-steps guided the analysis of the identified research project. Susman and Glanz's action research cyclical models can assist researchers in applying a form of inquiry known as responsive action research—that is—collecting data that is subsequently used to improve practice (Schmuck, 1997). As it relates to a full-cycle approach which may (or may not) begin with gathering data, and culminating with validating evidence to make claims on knowledge, action research's underlying approach is carried out by practitioners to support workplace improvement.

Adult Learning Principles

Adult education is operationalized in this study to reflect both the understanding and outcomes derived from action learning. Study participants are comprised of various adult learners capable of knowledge acquisition and professional development. Learning principles, as they specifically relate to adults, have therefore been deemed by the researcher as a necessary component of the action learning strategy for this study. Adult education is discussed herein in order to emphasize adult learning principles.

Back in the early 1970s, Malcolm Knowles was already a leading figure in the adult education establishment when he embarked upon research and writings about andragogy (St. Clair, 2002). Andragogy was considered in many circles as the catalyst for extended educational research, as well as much controversy regarding its implications to adult learning. St. Clair (2002) describes Knowles as a leading proponent of adult education prior to any formal introduction to the term andragogy as it is known today. As a result of

Knowles' interest and initial work with andragogy, there emerged assumptions, or principles, about adult education.

What may be important to note in this brief analysis of andragogy, although it has its critics, andragogy has survived through many years of being recognized, studied, dismissed, and accepted in many circles of the adult education field—both domestically and abroad. Although some scholars in the education field have dismissed Knowles' concept of andragogy as less than an achievement of a suitable adult learning theory, not many would argue Knowles' impact on adult education and training (Feuer & Geber, 1988). So, if andragogy is accepted as a legitimate framework, what implications might that framework have on adult learning?

In an attempt to heighten the awareness of the art of adult education and learning, Knowles (1980) originally presented four key assumptions about adult learners. They included:

1. Teachers have a responsibility to help adults in the normal movement from dependency toward increasing self-directedness.
2. Adults have an ever-increasing reservoir of experience that is a rich resource for learning.
3. People are ready to learn something when it will help them cope with real-life tasks or problems.
4. Learners see education as a means to develop increased competencies.

Knowles, Holton and Swanson added two additional assumptions to the previous four assumptions which stated that (1) adults need to know the reason to learn something, and (2)

that the most potent motivators for adult learning are internal, such as self-esteem (St. Clair, 2002).

The addition of the latter assumptions about adult learners adds significant context in reinforcing Knowles' beliefs concerning andragogy. The assumptions can now be viewed together as they were provided by Knowles (1989).

1. Adults need to know why they need to learn something before undertaking to learn it.
2. Adults have a self-concept of being responsible for their own lives.
3. Adults come into an educational activity with both a greater volume and a different quality of experience from youths.
4. Adults become ready to learn those things they need to know.
5. Adults are life centered (or task centered or problem centered) in their orientation to learning.
6. While adults are responsive to some extrinsic motivators...the more potent motivators are intrinsic motivators. (pp. 83-84)

While andragogy is still not universally accepted as a separate theory of learning, it was considered groundbreaking back in the 1970's and enjoys wide recognition today by many proponents of the theory. The implications for action learning and adult education are also manifested through Knowles' andragogical assumptions. These aspects of learning imply an awareness of cognition and affect related to relationships established by the adult learner and the teacher-educator. There is also an awareness of learner and contextual analysis, which clearly recognize the need to identify and understand adult learning principles as a preface to action learning.

In a final discussion to emphasize learning as a necessary intervention to advance human performance technology through professional development, it is necessary to connect adult learning principles to action learning. Inglis (1994) views action learning as a way of getting people to find and implement solutions to issues which will ultimately lead to both people and organizational development. Learning, therefore, as a means of finding solutions and solving problems, may be achieved when established learning principles are applied to action learning.

Recall in this study's review of literature that Revans (1982) created an action learning formula, $L=P+Q$, where he argued that the element 'Q' is critical to the formula because it enables participants to learn by doing. The 'doing' in this case takes on insightful questioning (the "Q") and enables learners' experiences or attitudes of about ongoing work projects to take center stage. As it relates to experiences or attitudes, Revans' belief about the element "Q" of his formula appears to be aligned with Knowles (1980) assertion that adults have an ever-increasing reservoir of experience that is a rich resource for learning. This principle of adult learning from Knowles therefore establishes a link to action learning as viewed by Revans.

Zuber-Skerritt (2002) adds to Revans and Knowles discussion by affirming that workplace problems are addressed through groups of people such as managers, teachers, or learners. As such, group discussion in problem solving leads to reflection, discovery and learning. Considering this perspective of Zuber-Skerritt helps to further assert the need to apply adult learning principles when conducting action learning. "Adults are life centered (or task centered or problem centered) in their orientation to learning" (Knowles, 1989, p. 84).

The learning discussion to this point establishes a clear relationship between action learning and adult learning principles. “Action learning has many applications in adult education. It may be used any time learners have a salient, nontechnical problem to solve and the capacity to work in small groups” (Spence, 1998, p. 4). Spence’s statement is effective in showing a relationship to action learning and adult education. As well, the statement enforces previous discussion related to groups of people coming together to solve problems. This study’s researcher contends that action learning’s application is universal. Action learning has been used in public service departments, nursing education, and university HRD programs, just to name a few (Haddock, 1997; Willis, 1998).

Summary

Three key topics were summarized in a review of literature to facilitate an effective transition to the study’s methodology. The topics restated are: (1) HR processes and practitioners, (2) human performance technology, or improvement, and (3) learning paradigms and professional development. The review of literature for this study explored each of the topic’s concepts and theoretical frameworks with the goal of aligning theory to the study’s identified statement of the problem.

This literature review suggests that HR professionals add value to performance improvement when they take a strategic mindset. A contemporary perspective suggests an emphasis by HR professionals on people development and performance improvement. Such an emphasis demands increased focus on transforming organizations through winning strategies and improved employee contribution (Alvares, 1997; Ulrich, 1997; Van Tiem, Moseley, & Dessinger, 2001). In light of this need for HR professionals to take a strategic

mindset toward performance improvement, the literature lacks clear evidence that HR professionals are trained in performance improvement models.

The learning paradigms discussed in the literature review are research-abundant and can be used as catalysts to bring about professional and personal learning that solves organizational problems. Establishing relationships among each paradigm is important. Programmed knowledge and insightful questions from action learning can facilitate conjunction of three key elements related to action research: research, action and participation, where the absence of any element voids the term action research (Greenwood and Levin, 1998). As such, both action learning and action research can be means by which researchers and facilitators introduce adult learning principles.

It is therefore recommended that adult learning principles be the catalyst for a structured professional development intervention. This will enable knowledge acquisition of performance improvement models that will increase HR professionals' ability to systematically address performance concerns. Because the research participants for this study will engage in problem-based learning, adhering to adult learning principles will be critical. Learning, as a means of solving problems, strongly relies on the principles of adult learning (Knowles, Holton & Swanson, 2005).

CHAPTER 3. METHODOLOGY

Introduction

This study was conducted for practical purposes where HR practitioners engaged in a professional development intervention. The study's overarching goal was to assess the impact an action learning intervention had on HR practitioners. A practical action research design (Creswell, 2005) was proposed and implemented. Practical action research, as Creswell posits, "Is to research a specific...situation with a view toward improving practice" (p. 552). Assuming Creswell's position in a non-educational setting (City of Atlanta HR department), the action research study provided research literature on advancing Human Performance Technology/Improvement (the situation) and providing action learning to HR practitioners (improving practice). The design and methodology for this study helped to answer four research questions:

1. What does baseline data indicate regarding HR professionals' current knowledge and comprehension of performance technology/improvement strategies/models?
2. What learning paradigms (i.e. principles, models) support action learning knowledge acquisition for HR professionals?
3. What reaction did CityGov's HR professionals have on learning new human performance improvement skills through action learning?
4. What was the perceived confidence level of CityGov's HR professionals to apply newly learned HPT/HPI knowledge and comprehension back at the workplace?

The implementation of this study's methodology was feasible because the researcher is employed as a HR practitioner-leader at the action research site, and has appropriate resources and commitment available to support the action research/learning implementation. The future goal as a result of the action research is to gain consensus on proposing and adopting a human performance improvement methodology aligned with HR processes.

Research Objectives

The overarching goal for conducting this study was to identify the impact a HPT/HPI knowledge intervention will play on developing HR professionals. The objectives for this study were based on research questions presented in chapter one of this research report. The objectives are:

1. Determine the current knowledge and comprehension of HR professionals regarding performance technology/improvement models.
2. Identify learning paradigms that will support adult learning through action research.
3. Assess the perceived value from HR professionals of the HPT/HPI action learning intervention.
4. Measure the perceived confidence level from HR professionals to apply learned knowledge and skills on the job.

The practical application of action research was explored in this study to support its usefulness in guiding action learning as a value-added professional development intervention.

Action Research Design with Mixed-Methods Analysis

As it relates to a full-cycle approach which may (or may not) begin with gathering data and culminating with validating evidence to make claims on knowledge, action research's underlying approach within this study is carried out by practitioners to support workplace improvement. Figure 2 illustrates the cyclical responsive action research design that was utilized for this study.

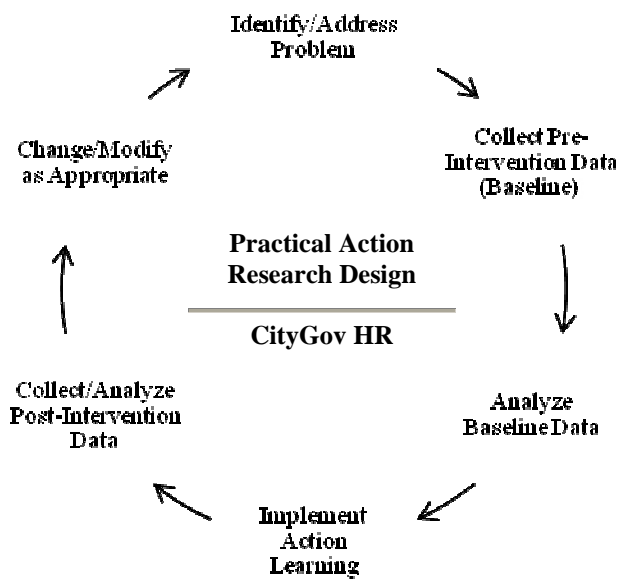


Figure 2. A cyclical approach to action research. The figure is based on J. Glanz cyclical nature of action research model and represents the current project design utilized to advance human performance technology through action learning for HR professionals

Adapted from "Cyclical nature of action research" by J. Glanz, 1998. In Gall, M. D., Gall, J. P & Borg, W. R. (2003) *Educational Research: An introduction* (pp. 585-586). Boston: Pearson Education.

The cyclical process began with the identification of a performance problem at CityGov's HR department. Teams within the department mostly use training solutions as default remedies to improve various performance issues. HR teams also lack systematic strategies to effectively close performance gaps. The researcher for this study easily confirms

these issues because of current employment at the research site as an HR leader. The HR management team at CityGov has always theorized that the execution of strategies to more appropriately meet business needs and increasing capacity for change needed more attention. Adopting a systematic approach to addressing performance issues—that which is espoused through HPT/HPI—was thought to be a viable solution for CityGov’s HR teams. To address more meaningfully the capacity for change, the action research design for this study was supplemented with mixed-method data collection and analysis.

The cyclical process used in this study identified pre and post data collection and analysis (steps 2, 3 and 5). As such, a mixed-method design was utilized to interpret and report the data. It is important to note that the strength of this study was predicated on the use of both action and mixed-method research. Research clearly points to such a design as meaningful and useful in understanding the research problem. Action research has been intentionally used with mixed-method designs in large complicated organizations (Kowalski, Harmon, Yorks & Kowalski, 2003). “Action research is being actively promoted in schools and teachers are strongly encouraged to take up action research projects as an avenue for professional development” (Lim, 2007, p. 1). Lim makes clear the assertion that methodological constraints should not be placed on action research as they may affect quality. Lim therefore supports mixed methods research designs in action research. Lawless-Phelps (2005) also utilized mixed-method analysis to support action research. The author believed that the use of mixed methods to analyze data was useful in explaining outcomes related to nurse leader development through mentoring.

Participants, Sites and Access

Population and Sample

The CityGov organization's total population of HR professionals consists of 60 personnel in various job functions which include compensation, employee relations, employee development, policy and planning, and business operations. The 60 HR professionals represent 100 percent of the HR practitioner target population for the organization. The goal of this study was to select a representative percentage of the population in order to avoid both unwieldy sample sizes and considerable time in the research process.

Twenty (20) HR professionals from CityGov were selected to participate in the action learning intervention. This number represents 33 percent of the target HR population within the organization and will be seen as the study's sample. All participants at some point in their HR careers have received professional development training or action learning on various topics.

Approval and Access

Access and approval to the action research site was granted. Accessibility to the research site is feasible because the study's researcher is employed as a HR leader at the action research site, with appropriate resources and commitment available to support the action research implementation. The research project was approved at two levels; (1) academic institutional level (Capella University) and (2) government organizational level (CityGov).

Capella University approval. An Institutional Review Board (IRB) application was submitted for approval to the attention of Capella University's designated reviewer.

According to Capella University's (2006) IRB manual, "The purpose of the IRB review and approval process is to ensure ethical treatment and protection of human research participants and their records" (p. 6). In addition to this study's proposal approval, a Collaborative IRB Training Initiative (CITI) was completed. There were eight mandatory modules and 75 percent of them required a learning assessment.

CityGov approval. The researcher for this study obtained authorization by the organization's Chief Human Resources Officer to access resources, participants and to implement an action learning intervention. The Chief Human Resource Officer is referred to as the Human Resources Commissioner (HRC). The researcher's aim was to get the HRC to approve access to resources and participants, but more importantly, offer continued support throughout the process. It should be noted that this study's researcher has direct-report accountability to the HRC and was also the primary facilitator for the action learning intervention. A form used by the HRC to grant access and approval to the participants and the site was provided as part of this study.

Data Collection and Analysis Strategy

Collection

"Collecting data means identifying and selecting individuals for a study, obtaining their permission to study them, and gathering information by asking people questions or observing behaviors" (Creswell, 2005, p. 10). As part of the action learning, data was collected pre and post intervention. Because of the importance of answering this study's research questions, a data collection strategy was devised and implemented.

The six study design steps previously identified at Figure 2 represent a cyclical action research approach utilized for this study. The second, third and fifth steps of the cyclical

model indicate actions pertaining to data collection and analysis. As such, these steps in the cyclical process underlie the structure of the data collection strategy. This strategy possesses elements which make it whole. The elements include:

1. Identified research questions
2. Types of research data (quantitative-qualitative)
3. Types of data collection instruments
4. Types of data collection assessments

With action research, there is also the matter of systematic data collection and analysis.

This study utilized a mixed-method data collection and analysis design which was guided by practical action research. According to Greenwood and Levin (2000):

...action research is inherently multimethod research, including scientific experiments, quantitative social research, and qualitative research methods from as many disciplines as necessary to address the problem at hand. Effectively, action research cannot accept an a priori limitation to one or another research modality (pp. 85-106).

Greenwood and Levin appear to posit that qualitative and quantitative research methods may co-exist in action research to broadly delineate research inquiry across multiple designs and methods. In this study, the discipline affected is local government HR processes and the goal is to support the improvement of practice. Creswell (2005) adds credibility to Greenwood and Levin's theory by explaining that action research designs are systematic and similar to mixed method research in that they use data collection which relies on qualitative or quantitative approaches, or both. This study will utilize both qualitative and quantitative data collection and analysis and warrants further justification for their use.

Jean Lee (1992) helps to bring the review of quantitative and qualitative methods further into perspective by stating:

Quantitative and qualitative research methods are based upon different ontological and epistemological assumptions that shape the aims of research inquiry, the roles of the researcher, and the researcher-respondent relationship. Although the different research approaches are mutually exclusive and offer alternative paths to understanding reality, both are important in organizational research (p 87).

Jean Lee (1992) distinguishes each of the research paradigms but is careful to note that each offers value as a viable form of research. Jean Lee's perspective on the use of qualitative and quantitative research also implies that each approach can offer some aspect of value in attempting to shape identified organizational outcomes. The researcher's purpose for using both quantitative and qualitative approaches is to provide a thorough account of the action learning intervention's impact on HR professionals at CityGov.

Analysis

Data analysis for this study was based on collecting numeric and text data resulting from a mixed-method approach to data collection. The analysis of data consisted of nonexperimental descriptive analysis and inductive inquiry analysis. As operationalized in this study, the terms nonexperimental and inductive refer respectively to quantitative and qualitative inquiry.

“[In nonexperimental research], the descriptive method... [can] involve describing characteristics of a particular sample of individuals at one point in time” (Gall et al, 2003, p. 288). This assertion aligns well with the general direction of this study in terms

of its participants. The HR professionals at CityGov represent a sample of all CityGov HR professionals whose characteristics, as related to the action learning, were described. This description of characteristics was not longitudinal-based (Magnusson, Bergman, Rudinger & Torestad, 1991) thus, description occurred at one point in time. The primary focus of the quantitative descriptive analysis for this study centered on two types of central tendency: (1) mean (average response scores) and (2) categorical data.

With respect to qualitative data collection, inductive analysis served as a method to gain an enhanced understanding of multiple perspectives that emerged from the data without assuming such perspectives beforehand. This objective of the analysis is in line with Patton's (2002) belief that "inductive designs allow...dimensions to emerge from the patterns...without presupposing in advance what the important dimensions will be" (p. 56). An example is provided of the usefulness of inductive analysis as it relates to this study's action learning intervention.

Using inductive analysis to assess or evaluate the action learning intervention allowed for better comprehension of the impact the action learning had on the participants. This was accomplished primarily because the researcher, as facilitator of the action learning intervention, was able to observe learner participation. The collection and review of data will also allow for better understanding of intervention activities. As Patton (2002) posits, what is ultimately understood about the effects from the intervention emerges from both observation of the program and interviewing of the participants. Analysis and interpretation of data is critical, as such, a method of triangulation was used to support the mixed-method design.

Triangulation mixed-method designs offer the researcher the ability to simultaneously collect, merge, review and analyze quantitative and qualitative data in order to:

1. Better understand the research issue
2. Offset strengths and weaknesses of one or the other data methods
3. Provides information for both generalizability and context or setting (Jick, 1979; Creswell, 2005).

Triangulating data can assist the researcher by helping to minimize the occurrences of biases as a result of utilizing only one method of data collection.

It was further determined that the credibility and trustworthiness of action learning as a professional development intervention needed to be validated. Particularly of concern to this study was process validity. Due to the implementation of a cyclical process (Figure 2), it was necessary to examine the adequacy of the processes used during each step of the cyclical process. As such, Gall, Gall and Borg (2003) advise that “triangulation, or the inclusion of multiple perspectives or data sources, also contributes to process validity” (p. 591). All pre and post data for this study was collected and analyzed using multiple instruments.

Instruments

Baseline knowledge assessment tool. Baseline data, as it relates to this study, represented quantitative and qualitative data collected to establish a reference point, or ‘as is’ information regarding the current situation. In order to determine whether HR professionals at the study site possessed adequate knowledge and skills related to human performance technology and improvement, a baseline knowledge assessment worksheet tool was used to collect information.

The Baseline Knowledge Assessment Tool (BKAT) was developed by this study’s researcher. Care was taken to ensure that the research problem was clearly defined along with the objectives to be achieved. Benson and Clark’s (1983) *Steps in Developing or*

Constructing an Instrument was used as a guide to plan and subsequently validate the BKAT. The four phases of instrument development (planning, construction, quantitative evaluation, and validation) presented by Benson and Clark were determined to be rigorous. Nonetheless, the researcher was able to leverage the four phases to assist in constructing the BKAT.

In crafting the BKAT, the researcher used several techniques as recommended by Berdie, Anderson and Niebuhr (1986):

1. Using the terms *questionnaire* or *checklist* to denote the collection tool should be avoided.
2. Include instructions that are brief, clear and understandable.
3. Organize the questionnaire in a logical sequence.

The baseline data collection tool can be viewed at Appendix A of this report.

Moderate intensity assessment. Moderate Intensity Assessment (MIA), as utilized in this study, refers to the items and responses of an assessment tool that can be used to collect respondent data. Barksdale and Lund (2001) characterize the selected MIA as a level one method of assessment that can be used to obtain the overall reaction of participants to an intervention. The actual MIA to be used in this study will enable the researcher to capture both quantitative and qualitative data. Appendix B depicts the MIA tool.

Self-efficacy assessment. Like the MIA, the Self-Efficacy Assessment (SEA) implemented in this study to collect respondent data, also contains quantifiable items and responses. The SEA is “used as a self-perception tool to measure confidence increase or perceived belief change” (Barksdale & Lund, 2001, p. 75). The SEA’s primary intent is to provide a low-intensity evaluation aimed at determining knowledge and comprehension

gained through the action learning intervention. The MIA data collection tool can be seen in this report at Appendix C. Table 5 depicts the overall data collection strategy for this study.

Table 4

Data Collection Strategy

| Research Question | Assessment Type | How Data Received | Measure(s) |
|---|-----------------|--|--------------|
| What does baseline data indicate regarding CityGov’s HR professionals’ current knowledge and application of human performance improvement models? | Baseline | Questionnaire | Mixed-Method |
| What learning paradigms (i.e. principles, models) support action learning knowledge acquisition of HPI/HPT skills for CityGov’s HR professionals? | Research | Literature Review | Qualitative |
| What reaction did CityGov’s HR professionals have on learning new human performance improvement skills through action learning? | Reaction | Level One Moderate Intensity Reaction Form <hr/> (Barksdale and Lund, 2001) | Mixed-Method |
| What was the perceived confidence level of CityGov’s HR professionals to apply newly learned HPT/HPI knowledge and comprehension back at the workplace? | Self-Efficacy | Level Two Low Intensity Tool (Anchored Likert Scale) <hr/> (Barksdale and Lund, 2001) | Mixed-Method |

Summary

This study explored the impact action research had on HR professionals. Action learning drove the advancement of human performance technology as a systematic approach to performance improvement. The overarching goal of this study’s methodology was to establish an effective design plan to facilitate and enhance action research. As such, this methodology emphasizes the inclusion of an action learning intervention as a driver of professional development for HR professionals. Action learning offers a unique approach to

development because it allows for critical reflection, discovery, and learning as outcomes resulting from group discussion.

Mixed-method research techniques were used to gather both qualitative and quantitative data. This design approach seemed idea because it enabled the researcher to provide a thorough account of the action learning intervention's impact on HR professionals at CityGov. Using mixed-method research was also complimentary to the action research initiative utilized in this study. Research suggests

Using each technique also helped to offset strengths and weaknesses of one or the other data methods. Because of the importance of answering this study's research questions, a data collection strategy was devised and implemented. Data was also analyzed and both collection and analysis strategies are covered in Chapter 4 of this report.

CHAPTER 4. DATA COLLECTION AND ANALYSIS

Introduction

As part of the overall action research approach to this study, data was collected and analyzed pre and post action learning intervention. Chapter three provided a data collection and analysis strategy (Table 4) showing how data would be collected and analyzed. The strategy depicts research questions, instruments and data types (quantitative/qualitative) linked together in order to comprise a strategy explaining the relevant research findings. The usefulness, or need, to conduct data collection has greater validity when consideration is given to the current organizational situation.

Several internal issues, of which most can be attributed to performance concerns, have plagued the organization. A discussion about the overall culture and climate of the organization at the time of this study is relevant due to the study's research topic concerning the advancement of human performance technology. The climate at CityGov as this study unfolded was seen as complex. Many changes in both organizational processes and human resources had occurred as a result of financial uncertainty related to fiscal budgets. Budget deficits were drivers of increased internal changes and uncertain performance outcomes.

This insight regarding the current climate is all public information. Additionally, the organization had recently made changes to its core HR group which originally consisted of 77 HR professionals. As of the collection of data for this study, the HR employee count had decreased by 17 employees, or 22%. This decrease was due to reductions in force as a result of budget issues. HR support is seen as critical to quality in CityGov government and its decreased ranks may signal future performance issues.

This study utilized a mixed-method data collection and analysis design which was guided by practical action research. Because there appears to be limited research on the use of performance improvement models by HR professionals, an action learning professional development intervention was used to support performance improvement knowledge acquisition. The need to implement the action learning resulted from data collected containing baseline information related to the study participants' knowledge of key HPT/HPI methods. Data was also collected upon completion of the intervention, thus, there were three data collection tools utilized. They are presented at table 5 with information providing clarity on their use within this study.

Table 5

Delineating Data Collection Tools

| Assessment Type | Data Collection Tool | Used as... | Measure(s) |
|-----------------|--|--|--------------|
| Baseline | Baseline Knowledge Assessment Tool (BKAT) | A pre intervention assessment to collect baseline information to determine knowledge level. | Mixed-Method |
| Reaction | Level One Moderate Intensity Reaction Form <hr/> (Barksdale and Lund, 2001) | A post intervention reaction tool to assess the effectiveness of the content and the action learning approach. | Mixed-Method |
| Self-Efficacy | Level Two Low Intensity Tool (Anchored Likert Scale) <hr/> (Barksdale and Lund, 2001) | A post intervention tool to assess and measure participants' confidence level in applying learned skills. | Mixed-Method |

Collecting Respondent Baseline Data

Instrument Validation

The first instrument used to collect data was the Baseline Knowledge Assessment Tool (BKAT). Upon completion of constructing the BKAT, the next step was to test the instrument with individuals similar to the HR participants for this study. In doing so, the aim was to obtain content validity. Content validity according to Creswell (2005), gives the researcher the ability to seek experts to provide them with information about the instrument. This information may be related to particular content areas of the instrument but as well, and the difficulty of questions within the instrument.

On March 16, 2009, three individuals volunteered to pilot test the BKAT. Each individual is considered highly-knowledgeable of HR processes. One individual is also a college professor at a local university who teaches quantitative analysis. The researcher provided each volunteer tester with the BKAT and asked that the tool be completed to include feedback on its effectiveness and validity. Although the researcher originally requested the pilot testers to return the BKAT with feedback by March 19, 2009, all instruments were not returned until March 23, 2009.

In the BKAT's original format, there were 10 questions related to elements associated with HR processes and components of human performance technology (HPT). The BKAT also provided 3 possible choices to answer each question, each on a scale from 1 to 3. One tester of the instrument, an HR Director, strongly suggested that the questions be re-written as statements. The HR Director making this suggestion had 4 employees participate in the study. He felt he knew them well enough to know that they would better understand the

statements more easily than the questions. He also believed that suggestion would serve well for the other participants.

Another tester, the college professor, was quite adamant about changing the three possible choices for each question. She believed that the choices did not adequately reflect even distances between each level. The college professor suggested that a likert-type scale might be a better choice. She supported her suggestion by asking the researcher to research Cooper and Schindler (2003). “Likert scales...are useful...when the organization plans to conduct an experiment or undertake a program of change or improvement” (p. 253). The statement by the authors clearly aligns with the study’s agenda to undertake a program of change or improvement (action learning to improve performance improvement knowledge). The college professor agreed that the levels, 1 through 3, represented on the BKAT could remain, but suggested that the statements for each level be replaced to coincide with what research states about likert scales.

The feedback from each tester of the assessment tool was extremely beneficial to the study. The feedback helped to ensure that the BKAT had valid items that made sense. Also, by asking each tester to time them from start to finish of completing the instrument, a reasonable assumption could be made by the researcher as to length of time needed to administer the assessment. The feedback also assisted in gauging the difficulty of the statements. The revised BKAT can be viewed at Appendix A.

Selecting, Informing and Briefing Respondents

Selecting respondents. Participants for the study were selected using a form of simple random sampling. This method of selection was chosen because the researcher wanted to ensure that the possible participants within the population had an equal chance of being

selected. “The intent of simple random sampling is to choose individuals to be sampled that will be representative of the population” (Creswell, 2005). There were 60 HR professionals in the population at the time of the study. The researcher obtained the master roster for all HR professionals and assigned each a number from 1-60. The numbers were placed in a large bowl and 20 participants were randomly selected by the researcher. This technique is a slight deviation from using a random numbers table (Kerlinger, 1972), but nonetheless effective in maintaining random selection.

Informing respondents. After the 20 participants were identified and access was granted to the research site, study subjects were notified in mid-March 2009 seeking their participation in the research study. The researcher is located in relative proximity to all research participants and was therefore able to contact prospective participants through email and telephone. All randomly selected participants agreed to take part in the proposed study. Upon receiving initial commitment from participants to partake in the study’s data collection, the researcher provided each participant with an informed consent document. The informed consent form is a critical first step to data collection that ensures participants are informed enough to make a decision on whether to take part in the research. It also ensures ethical treatment is enforced (Bard College, 2008).

Briefing respondents. Participants accepted a meeting invitation to assemble in the organization’s large meeting room on March 31, 2009. The meeting’s purpose provided each participant with an overview of the study and data collection process. The researcher also used the meeting to deliver the consent form and allow participants to ask questions about the study. The meeting was also used to conduct a basic knowledge assessment to determine the extent at which the study participants were familiar with human performance technology and

performance improvement strategies. Once it was clear that participants understood the study and its goals and the consent form was signed, the researcher introduced the study's first assessment tool.

Data Collection Using the BKAT

The BKAT was used to collect baseline information necessary to support answering this study's first research question: *What does baseline data indicate regarding HR professionals' current knowledge and comprehension of performance technology/improvement strategies/models?* The BKAT was administered as a statement-based questionnaire to assess the study participants' current knowledge and use of HPT/HPI practices. The BKAT questionnaire asked the same questions and was administered to the study sample consisting of 20 participants, or, 33% of the HR population. Recall from chapter 3 that the entire HR population at CityGov during the time of this study was 60.

Research question # 1 sought to obtain quantitative data and was therefore identified a descriptive quantitative question with a single variable. Creswell (2005) confirms that researchers seek to identify participants' quantitative responses through the use of descriptive questions. The single variable identified for the research question is *current knowledge and comprehension* and is considered a dependent variable. Section I of the BKAT consisted of three parts and provided basic demographic, experience and role-specific data for each participant. The actual BKAT document can be seen at Appendix A.

Analyzing Baseline Knowledge Data

Demographic and experience data consisted of name, age, gender, total number of years in the HR profession, and total number of years practicing HR in a government setting. Data is presented at Table 6.

Table 6

HR Demographic and Experience Data

| Participants (Coded) | Age | Gender | Years HR Experience | | % Gov HR Experience |
|-------------------------|-----|--------|------------------------|----|------------------------|
| | | | T | G | |
| A | 56 | M | 30 | 10 | 33% |
| B | 47 | F | 20 | 13 | 65 |
| C | 32 | F | 4 | 3 | 75 |
| D | 35 | F | 11 | 3 | 27 |
| E | 50 | F | 15 | 6 | 40 |
| F | 28 | F | 2 | 2 | 100 |
| G | 44 | M | 7 | 7 | 100 |
| H | 52 | F | 20 | 13 | 65 |
| I | 46 | M | 10 | 6 | 60 |
| J | 50 | F | 24 | 20 | 83 |
| K | 44 | M | 20 | 3 | 15 |
| L | 36 | F | 8 | 8 | 100 |
| M | 42 | F | 9 | 9 | 100 |
| N | 47 | F | 13 | 8 | 61 |
| O | 49 | M | 5 | 5 | 100 |
| P | 29 | F | 5 | 2 | 40 |
| Q | 29 | F | 3 | 3 | 100 |
| R | 33 | F | 7 | 4 | 57 |
| S | 34 | M | 6 | 4 | 66 |
| T | 30 | F | 4 | 3 | 75 |

T = Total HR experience; G = Government

Participant names were coded with letters of the alphabet. There were 20 participants, 6 men and 14 women, between the ages of 28 and 56. In terms of total years in the HR profession, each participant had greater than 3 years of HR experience, but no more than 30 years. The average years of HR experience for all participants was 11.15 years. The average

number of years of government HR experience for all participants was 6.6 years. Table 6 provides statistical data on HR demographics and experience.

The literature review for this study provided insight on HR as an overall discipline from a government perspective. This was necessary because participants were located at a government organization. A participant breakdown in Table 6 shows that the majority of HR professionals had more than 50% experience in a government organization. Six participants from the study had 100% of their HR experience in the government sector, while 9 other participants were between 57% and 83%. The remaining 5 participants had less than 50% government HR experience. The average age of all HR participants was 40.

Section I of the BKAT also consisted of functional and role-specific data for each HR participant. The 20 HR study participants represented an interdisciplinary group from seven HR functional areas; compensation/payroll (2 employees), diversity management (2 employees), employee recruitment/relations (3 employees), HR benefits (3 employees), HR business office (3 employees), organization development (3 employees), and policy and planning (4 employees). Each participant also had a specific job role related to the identified functional areas. Table 7 highlights functional and role-specific data.

Table 7

Functional and Role Specific HR Data.

| HR Functional Area | Frequency | Percentage |
|------------------------------------|-----------|------------|
| Compensation/Payroll | 2 | 10% |
| Diversity Management | 2 | 10% |
| Employee Recruitment/Relations | 3 | 15% |
| HR Benefits | 3 | 15% |
| HR Business Office | 3 | 15% |
| Organizational Development | 3 | 15% |
| Policy and Planning | 4 | 20% |
| Total | 20 | 100% |
| HR Function Role | | |
| Individual Contributor | 10 | 50% |
| Team Lead/Supervisor | 7 | 35% |
| Manager/Director/Executive | 3 | 15% |
| Total | 20 | 100% |
| * Decision-Making Authority | | |
| Budget Preparation/Spending | 3 | |
| New Initiatives/Programs | 10 | |
| Work Accomplishment | 20 | |
| All of the Above | 3 | |
| *Total | 35 | |

* Participants were able to select more than one choice for the 3rd category, Decision-Making Authority, making the frequency count larger than the participant count. No total percentage was necessary for the category.

There were 3 identified HR job roles for this study. HR professionals were (1) individual contributors, (2) team leads/supervisors, or (3) manager/director/executive. The greater percentage of the study participants, 50%, fell into the role of individual contributor. The role with the least number of participants, 3 (or 15%) was manager/director/executive. The study also determined specific decision-making authority of the study participants. Study participants could select one or more of the decision-making areas as long as it was part of their HR responsibilities. This of course, changed the frequency count. In determining the

types of decision-making topics to include in the questionnaire, the researcher leveraged information related to the HPT model from this study's literature review. Because the HPT model has as one its elements 'intervention selection', decisions to be made with respect to this element may involve budget spending, new programs and new work accomplishment.

Section II of the BKAT provided relevant quantitative data to help determine the level of use and corresponding knowledge related to performance improvement. Study participants were asked to review and evaluate 10 statements designed to obtain their level of agreement regarding the use or knowledge associated with the statement. Each statement was specifically designed to correlate with key expectations and outcomes related to human performance technology. Once participants completed rating their level of agreement for each statement, the researcher analyzed the data to determine three key outcomes; (1) the frequency at which participants selected a given level, (2) the percentage of n for each frequency, and (3) the average score, or mean for each statement. The first statement, with its 3 outcomes is discussed to help understand the layout of the remaining data.

In statement 1, study participants were asked to rate their level of agreement as to whether statements in the organization's mission, vision, goals and values reflect organization and/or employee performance improvement as drivers for success. An interval scale of measure was used to obtain participants' responses. Interval scales, sometimes called continuous or rating scales, are considered popular and assumes that response options have equal distances in between (Creswell, 2005). The interval scale for the BKAT data collection tool in this study utilized a 3-response option format with assigned scores and follows:

1. (3) To a great extent
2. (2) Somewhat

3. (1) To a less extent

Table 8 provides the descriptive data for each statement outlined in the BKAT.

Table 8

Descriptive Statistics from Baseline Knowledge Assessment Tool (BKAT).

| Statement | N=20 | | % N | M |
|--|-----------------------|-----------|------|-----|
| | Response | Frequency | | |
| Statement(s) in the organization’s mission, vision, goals, and/or values reflect organization and/or employee performance improvement as driver(s) for success? | (3) To a great extent | 1 | .05% | 1.5 |
| | (2) Somewhat | 8 | 40 | |
| | (1) To a less extent | 11 | 55 | |
| The HR function uses various strategies to communicate the importance of human performance improvement in process/program effectiveness. | (3) To a great extent | 3 | 15 | 2 |
| | (2) Somewhat | 14 | 70 | |
| | (1) To a less extent | 3 | 15 | |
| The HR function employs performance consultants or espouse a performance/customer service mentality. | (3) To a great extent | 0 | 0 | 1.5 |
| | (2) Somewhat | 11 | 55 | |
| | (1) To a less extent | 9 | 45 | |
| I understand the terms “Human Performance Technology” (HPT) and/or “Human Performance Improvement” (HPI). | (3) To a great extent | 2 | 10 | 1.7 |
| | (2) Somewhat | 11 | 55 | |
| | (1) To a less extent | 7 | 35 | |
| Since business goals are critical drivers for the organization, I engage with leaders (or my team) in conducting business analysis ? | (3) To a great extent | 5 | 25 | 1.9 |
| | (2) Somewhat | 9 | 45 | |
| | (1) To a less extent | 6 | 30 | |
| I understand and have a regular role in the organization as it relates to diagnosing performance issues, or Gap Analysis (conducting performance analysis)? | (3) To a great extent | 1 | .05 | 1.5 |
| | (2) Somewhat | 8 | 40 | |
| | (1) To a less extent | 11 | 55 | |
| I am capable of identifying causes of performance issues? | (3) To a great extent | 7 | 35 | 2.2 |
| | (2) Somewhat | 10 | 50 | |
| | (1) To a less extent | 3 | 15 | |
| I participate with leaders (or my team) to propose or recommend improvement interventions ? | (3) To a great extent | 4 | 20 | 1.8 |
| | (2) Somewhat | 9 | 45 | |
| | (1) To a less extent | 7 | 35 | |
| I prioritize and determine what programs/solutions will be considered for implementation ? | (3) To a great extent | 2 | 10 | 1.6 |
| | (2) Somewhat | 8 | 40 | |
| | (1) To a less extent | 10 | 50 | |
| I initiate and/or participate in conducting evaluation strategies for interventions, programs, etc. | (3) To a great extent | 2 | 10 | 1.6 |
| | (2) Somewhat | 9 | 45 | |
| | (1) To a less extent | 9 | 45 | |

N= total participants; M = Mean (average) statement score; % N = percent of total participants

The first statement in section II is discussed here to get an idea of the meanings of data for the remaining statements. In statement one, .05% of the participants, or 1, believed that *to a great extent*, statements in the mission, vision, goals and values of the organization reflect performance improvement as a driver of success. 40% of the participants, or 8, *somewhat* believed such statements reflect performance improvement as a driver, and the remaining 11 participants (55%) believed statements about performance improvement existed to a *lesser extent*.

Over 50% of all participants believed that to a lesser extent, the organization does not espouse performance improvement drivers as part of the vision and mission. Only 2 of the 10 statements scored at, or above the mid-level (somewhat) indicating below mid-level mean scores for the remaining 8 statements. The mean scores in the last column in Table 8 represent the average response score for each individual statement on a scale of 1 to 3. The mean was calculated by adding each response score and dividing them by the total participants.

A mean score is known as a measure of central tendency representing a single value that can describe an average of a set of scores (Gall, Gall & Borg, 2003; Creswell, 2005). Identifying the mean score was very useful because it provided an average response rate by participants for each statement from the assessment. The overall mean score for all statements was 1.73, which is below the mid score of 2. This information was extremely important. It helped guide the decision of the researcher to implement an action learning intervention to increase human performance technology (HPT) knowledge and comprehension. It should be noted that lack of knowledge and comprehension of HPT was deemed the real-world problem being addressed through action learning for this study.

Action Learning Intervention

This study was conducted for practical purposes where HR practitioners engaged in a professional development intervention. Action research and action learning were at the center of this research as their theoretical constructs were examined to assist in answering this study's second research question; *What learning paradigms (i.e. principles, models) support action learning knowledge acquisition of HPI/HPT skills for CityGov's HR professionals?* The determination was made to implement the action learning intervention because of the mean scores reflected in the BKAT.

Revans (1982) suggested that action learning is effective as groups attempt to reinterpret past experiences to reach a solution that is best for the current circumstances. The suggestion by Revans clearly led to the researcher's choice in utilizing action learning as a professional development intervention for HR professionals. Reinterpreting past experiences in how HR professionals conducted performance improvement meetings with their clients was critical. Doing so helped to focus the action learning on reaching solutions for current circumstances. Revans also believed that action learning helped to support organizational change efforts which ultimately lead to lasting behavioral change. In this regard, action learning was feasible because HR personnel at CityGov required a behavioral change based on the results of the BKAT administered earlier in the study.

Facilitating Action Learning

Action learning was implemented in order to address what was deemed as a real-world issue for the organization. Instead of focusing specifically on a real business problem, this study sought to address the concerns related to employee performance. The organization found this performance problem to be significant because it ultimately impacts internal

client/customer relations. HR professionals in CityGov are considered client business partners to their assigned departments. Not having qualified staff capable of administering a systematic approach to performance improvement, which is what the concept of HPT espouses, CityGov HR teams stand the risk of being labeled a non value-adding function. Thus, for the sake of clarity, it is reiterated and operationalized in this study that action learning is implemented to address a performance, rather than a business problem.

The action learning intervention was guided by six components of action as expressed by the World Institute for Action Learning (2008). Each component of action can be attributed to action learning effectiveness. The components were introduced to the study participants by the facilitator just prior to the start of the intervention. Figure 3 illustrates the components' relationship to action.



Figure 3, Components of Action. Action's components in relationship to the effectiveness of action learning

Adapted from "The Components of Action" by the World Institute of Action Learning (2008) *Overview of Action Learning* (sec 2, para 2).

Study participants were offered learning through teamwork and researcher facilitation of group dynamics. Bens (2000, p. 70) states “we must ensure people participate actively in facilitated sessions, and that we avoid allowing people to dominate or withdraw from the learning.” The context which underlies the theories presented by Dierk and Saslow (2007) and Bens (2000) can be seen as constructs that underpin both the rationale for, and success of, the action learning intervention.

The researcher as facilitator empowered learners to be responsible participants within the action learning environment. The group setting allowed for true collaboration through empowered learners. Based on the theoretical framework espoused by Marquardt (1999), core elements were used as action steps to be used by the study participants. Table 9 lists Marquardt’s core elements of action learning in relationship to the actual action learning steps used in this study’s action learning intervention.

Table 9

Action Learning Core Elements and Process Steps

| Element Number | Marquardt’s Core Elements | AL Step Number | CityGov Action Learning Steps |
|----------------|--|----------------|--|
| 1 | Real Problem to Solve – Emphasizes importance of solving real problems | 1 | Identify/Address Problem |
| 2 | Group Assigned to Problem – Group assigned as the learning/problem-solver set | 2 | Identify Group to Address Problem |
| 3 | Questioning and Reflection Process – Participants engage in questioning/reflection to surface hidden assumptions | 3 | Implement Questioning and Reflection as Part of Learning |
| 4 | Commitment to Taking Action – Taking necessary action to achieve outcomes | 4 | Take Action on Real-World Issue (Team Performance) |
| 5 | Commitment to Learning – Action learning set is committed to both problem-solving and learning to achieve outcomes | 5 | Engage with Group on High-Level to Achieve Success |
| 6 | Role of Facilitator – Help the group reflect on learning | 6 | Validate Learning through Effective Questioning and Reflection |

The action learning steps for CityGov depicted in Table 9 have sub tasks or steps for better understanding. These steps will be addressed later in this study.

Participants were divided into 5 “action learning groups,” consisting of 4 learners per group. Each group was identified by a “company” name such as the Department of Training, or the Department of Benefits. The objective was to keep a HR focus. Each fictitious company had 2 laptops assigned in order to better facilitate self learning and problem solving through action learning.

The facilitator (researcher) utilized a learning process design that reflected the needs of both the learner and the current situation. In other words, it was important for the action

learning intervention to support 2 main criteria; (1) center the learning on solving an organizational issue or problem and (2) ensure learning is voluntary and learner-driven. Professional development content and curriculum for the intervention was assembled by the researcher from various print articles and books on the subject of HPT/HPI. The actual time of the action learning intervention was 7.5 hours in which 20% was facilitation-driven and 80% learner-driven.

The 20% facilitator-driven aspect of the learning was necessary in order to effectively drive the process of learning and reflection. The facilitator organized the group, introduced the action learning activity and outlined ‘rules of engagement’ (McGill & Beaty, 2001). The facilitator utilized action learning process steps as subsets of steps introduced in Table 9. The additional steps helped to set the stage for both facilitator and group participation. The process steps customized from action learning process steps presented by the Association of American Colleges and Universities and can be seen at Appendix D. Post-intervention activities included reaction and confidence assessments.

Post Intervention Data Collection

Upon completion of the action learning intervention, study participants were asked to assess its overall effectiveness. The participants were also asked to assess their level of confidence in applying learned knowledge back in the workplace. Two data collection tools were utilized—a level 1 moderate intensity assessment and a level 2 self-efficacy assessment (Barksdale & Lund, 2001). Each tool was pilot tested by the same testers mentioned earlier in this report.

Moderate intensity assessment (MIA). The MIA was used to collect participant data regarding their immediate reaction to the overall action learning process. This type of

assessment process was primarily utilized because CityGov anticipates using action learning for future implementation. As such, the reaction from participants may prove valuable. In addition to reporting the assessment findings for this research study, data will also be reported to the research site's chief HR officer.

According to Barksdale and Lund (2001), the MIA is a level 1, reaction-type tool that can be used to collect data that will be used for the organization. In developing the MIA, care was taken to ensure that data collected would be meaningful and useful. Also, as its name implies, the MIA measures what is known as moderate intensity data. "At this level of intensity [data] is viewed statistically as having qualitative value and low level quantitative value" (Barksdale & Lund, 2001, p. 41). The MIA assessment tool used to collect data for this study consists of 3 low level quantitative questions and 2 qualitative-type questions. The MIA tool can be seen at Appendix E.

Self-efficacy assessment (SEA). The SEA was used to collect participant data on their level of confidence to apply knowledge obtained from the action learning intervention. Like the MIA, the SEA was implemented in this study to collect qualitative respondent data, and also contains quantifiable items and responses. The SEA was "used as a self-perception tool to measure confidence increase or perceived belief change" (Barksdale & Lund, 2001, p. 75).

The SEA's primary intent as a level 2 evaluation tool was to provide a low-intensity assessment aimed at determining knowledge and comprehension gained through the action learning intervention. Using the SEA as a level 2 evaluation for this study was necessary for obvious reasons. Measurement before the intervention to assess baseline knowledge and then measurement following the intervention is usually the intent of level 2 evaluations (Barksdale & Lund, 2001; Kirkpatrick, 1998).

Analyzing Post Intervention Respondent Data

Two post intervention assessments were utilized in this study to primarily collect participant opinions. Because the study focused participants gaining only knowledge and comprehension of HPT strategies, participant opinions were more prevalent. Knowledge and comprehension are the first two educational levels as described in Bloom's Taxonomy. Application, analysis, synthesis and evaluation are the remaining four cognitive domains of the taxonomy (Anderson & Krathwohl, 2001). It is important in this study to clarify cognitive levels to avoid any misconceptions that may be related to proper evaluation based on higher cognitive levels.

Post Intervention: Moderate Intensity Assessment

Quantitative review. Data collected from the Moderate Intensity Assessment (MIA) was analyzed. The goal of the analysis was to determine participant reaction to the action learning intervention. The MIA provided 3 low level quantitative questions which allowed the researcher to record and analyze categorical data for each question. Each category had a score value of 3 being the highest and 1 the lowest. For example, the categories from the first assessment question were:

- (3) The HPI strategies simulated real work world
- (2) The HPI strategies had minimal application to my job
- (1) The facilitated session did not reinforce content

When asked what the value was of the HPI objectives in terms of practice and review, 15 participants, or 75% responded that the HPI course content simulated the real work world. Approximately 5 participants or n=25% said that the HPI content would have minimal application at their workplaces. No participants thought that the action learning session did

not reinforce content. The remaining assessment questions, to include each question's categories and respondent data can be reviewed at Table 10.

Table 10

Categorical Response Data for Moderate Intensity Assessment

| | | <i>n</i> =20 | | |
|---|--|--------------|------------|----------|
| | | Frequency | % <i>n</i> | <i>M</i> |
| What was the value of the HPI objectives in terms of practice and review? | | | | |
| (3) | The HPI strategies simulated real work world | 15 | 75% | |
| (2) | The HPI strategies had minimal application to my job | 5 | 25% | 2.75 |
| (1) | The facilitated session did not reinforce content | 0 | 0% | |
| What was the value of the facilitated session to your time? | | | | |
| (3) | Value exceeded time | 10 | 50% | |
| (2) | Value was equal to time (just enough time to learn new skills) | 6 | 30% | 2.30 |
| (1) | Value was less than time (not enough time to grasp concepts) | 4 | 20% | |
| What will you do when you return to the job to begin the process of applying what you have learned? | | | | |
| (3) | Meet with my manager and set goals for myself | 11 | 55% | |
| (2) | Talk with others who took the class | 5 | 25% | 2.35 |
| (1) | Nothing; Learning does not apply to my specific job roles | 4 | 20% | |

n = Total number of participants. Frequency = Number of participant responses.
M = Mean: Represents the average score for levels of belief.

The information contained in Table 10 provides mean data for each question. The average score for each question was above the mid-point of 2 on the scale from 1 to 3. The highest average score was 2.75 out of 3 and was measured from the first question. The data clearly indicates that the majority of participants (75%) believed that what they learned had a lot to do with what goes on, or should go on at work. In terms of actual value perceived in relationship to the time, approximately 80% of the participants believed that value was equal to, or exceeded the time spent in the action learning intervention. The remaining 20% of participants did not feel enough time was provided to fully understand the concepts learned. Study participants also were asked to assess the action learning-method of professional development through qualitative feedback.

Qualitative review. In addition to quantitative data, the MIA tool, particularly questions 4 and 5 provided qualitative data. Participants identified strengths and weaknesses they perceived from the action learning intervention. Analysis of the data led to a coding process of segmenting labeling (Creswell, 2003; Tesch, 1990). Qualitative data can be seen at Table 11.

Table 11

Qualitative Codes and Themes – Action Learning

| Participants | Codes | Action Learning Strengths | Themes |
|---------------------------------|-------------------|---|---|
| B, C, D, E, G, H, I, | Technology | Use of the computer to generate ideas and solutions via the internet was extremely useful. | Group learning through Web access |
| A, B, D, E, F, H, J, L, O | Learning by doing | Learning the difference between action learning and regular training was extremely helpful in understanding why we were learning the way we were during the intervention. | Self-learning and problem solving |
| C, F, I | | Discussing our issues openly (reflection) and questioning to gain move in another direction. Doing it with large group was interesting. | Discussion through reflection and questioning |
| A, B, H, I | | Finding solutions on the Web to complete the activities and solve problems was both enjoying and beneficial. | |
| Action Learning Weaknesses | | | |
| G, H, I, J, | Time | Did not appear to be enough time to navigate through all activities. Too much time spent on computer finding answers. | Value of content less than time |
| | | Instructor participation appeared to be too minimal. | |
| D | Participation | Some participants seemed unfocused and at times, unwilling to participate. Not used to the action learning format. | Lack of focus/participation |
| K, M, N, P, Q, R, S, T | No response | Did not respond to strengths or weaknesses of action learning | |

The primary goal of the coding process was to enable the researcher to make sense out of the data towards reaching a series of broad themes. Prior to dissecting the data, transcripts of participants' feedback were examined several times in order to fully understand the details.

Text data was divided into categories of information in order to be labeled with codes. Once data was segmented, an additional review served to reduce any possible redundancy of codes. This process helped in identifying emerging themes. The MIA tool provided common words from the participant feedback which, in turn, led to the overall coding method. The 2nd and 4th columns from Table 11 clearly captures coding and themes of qualitative responses. The table also delineates participant comments regarding strengths and weaknesses of the learning experience.

Data from the qualitative analysis in Table 11 suggest that action learning strengths outweighed action learning weaknesses. This finding however, may be misleading when consideration is given to the fact that 7 participants (35%) did not provide feedback on strengths or weaknesses of action learning. The researcher contacted the 7 participants to seek their support in completing the assessments, but received no updates as of completing the data analysis and reporting.

With respect to the previous quantitative analysis of the moderate intensity assessment (Table 10), responses were somewhat aligned with the participant feedback in Table 10. This alignment of quantitative and qualitative responses may be seen as a form of corroborating evidence from different types of data—or triangulation (Creswell, 2005). In the quantitative analysis, 20% of participants responded that value of learning was less than time—that is—not enough time to grasp concepts. The qualitative analysis also revealed that 20% of all participants found time to learn to be weakness of action learning.

The codes *technology* and *learning by doing* received the most feedback for action learning strengths. Participants liked the idea of using the computer to find answers to questions and completing action learning activities. Participants also were able to have large group discussions that focused on reflection and questioning of their current and future work processes. By doing so, they were able to focus the learning and group dynamics on solving the identified problem which was lack of knowledge on a systematically solving performance issues. These conclusions by the researcher was based on the data analysis and the researcher's own observation of action learning participation from the study group. Analysis of participant self-efficacy followed the preceding analysis of participant reaction.

Post Intervention: Self-Efficacy Assessment

Quantitative review. Participants were asked to provide their level of confidence in applying the topics discussed and practiced in the action learning intervention. There were 6 areas of learning; (1) Business Analysis, (2) Performance Analysis, (3) Cause Analysis, (4) Intervention Selection, (5) Intervention Implementation and (6) Evaluation. Responses to these topics were provided on the self-efficacy assessment (SEA) tool and were completed shortly after the conclusion of the intervention. The results of the assessment are seen at Table 12. Further analysis is also provided below.

Table 12

Self-Efficacy Likert Scale for Measuring Confidence Levels to Apply Learning

| | 1 | | 2 | | 3 | | 4 | | 5 | | <i>M</i> |
|--|---|-------|---|-------|--|-------|---|-------|--|-------|----------|
| Human Performance Improvement Components | Unsure of how to apply and will need help in doing so | | Moderately unsure of how to apply and will need periodic guidance | | Moderately confident of how to apply but may need assistance in doing so | | Confident of how to apply and will be able to do so independently | | Extremely confident of how to apply and able to assist others in doing so. | | |
| | Freq | (% n) | Freq | (% n) | Freq | (% n) | Freq | (% n) | Freq | (% n) | |
| Business Analysis | 0 | 0% | 0 | 0% | 0 | 0% | 11 | 55% | 9 | 45% | 4.45 |
| Performance Analysis | 0 | 0% | 0 | 0% | 3 | 15% | 14 | 70% | 3 | 15% | 4.00 |
| Cause Analysis | 0 | 0% | 0 | 0% | 7 | 35% | 7 | 35% | 6 | 30% | 3.95 |
| Intervention Selection | 0 | 0% | 0 | 0% | 2 | 10% | 12 | 60% | 6 | 30% | 4.20 |
| Intervention Implementation | 0 | 0% | 0 | 0% | 1 | .05% | 9 | 45% | 10 | 50% | 4.35 |
| Evaluation | 0 | 0% | 1 | .05% | 1 | .05% | 13 | 65% | 5 | 25% | 4.00 |

n = Total number of participants; Freq = Frequency: Number of participant responses

M = Mean: Represents the average score for levels of confidence in applying HPI components.

The data in Table 12 reflects quantitative measures which indicate levels of confidence in applying human performance improvement components. For each level of confidence a frequency count (number of participants responding) and its relationship percentage-wise to total participant count was annotated. With respect to the first component, business analysis, 55% of all participants (*n*=11) indicated that they were confident they could apply the component without any assistance. The remaining 45%, or *n*=9 believed that as well as having confidence in applying the component, they could also assist others in applying it as well. During the action learning intervention, the business analysis component dealt specifically with identifying and writing measurable business goals. The average

(mean) score for the business analysis component was 4.45 on a scale of 1 to 5 and represented the highest mean score of all components.

It is interesting to note that the lowest mean score, 3.95, was registered with the component cause analysis. This score is worth highlighting because the results in the baseline knowledge assessment tool (BKAT) indicated higher scores pertaining to cause analysis. These pre and post test results regarding cause analysis make sense because during the action learning, many participants were not immediately clear about cause and effect diagrams and other methods of cause identification. However, prior to the action learning, approximately 80% of the participants indicated higher than the mid score for knowledge of cause analysis (45% were somewhat capable of identifying causes and 35% were capable to a great extent). All remaining components and their representative scores are seen in Table 12. Qualitative data was also collected and analyzed.

Because qualitative data was also collected, a triangulation mixed-method design was used. This design offered the ability to simultaneously collect, merge, review and analyze quantitative and qualitative data in order to:

1. Better understand the research issue
2. Offset strengths and weaknesses of one or the other data methods
3. Provides information for both generalizability and context or setting (Jick, 1979; Creswell, 2005).

Furthermore, the triangulation mixed method design helped to increase trustworthiness and credibility of utilizing action learning, or in other words, validating the action learning process. As such, Gall, Gall and Borg (2003) advise that “triangulation, or the inclusion of multiple perspectives or data sources, also contributes to process validity” (p. 591).

Qualitative review. As with the qualitative review from the MIA tool (see Table 11), text data was divided into categories of information in order to be labeled with codes. Once data was segmented, an additional review served to reduce any possible redundancy of codes. This process helped in identifying emerging themes. Like the qualitative section of the MIA tool, the SEA tool provided common words from the participant feedback which, in turn, led to the overall coding method. Table 13 depicts the results.

Table 13

Overall Coding and Themes for Participant Qualitative Feedback

| Participants | Codes | Transcript of Comments on Applying Learning in the Workplace | Themes |
|---------------------|---|--|---|
| A, B, C, D, I, L, N | Information sharing | We will discuss concepts learned with managers, to include the overall leadership teams in the HR function. Discussion will center on overall topics, with emphasis on gap and cause analysis. | Sharing with managers |
| F, G, M, P | | Learning and discussions from the training will be shared with teams...mostly peers. Before discussing with managers, I will try and convince teams that concepts will work in our processes. | Sharing with teams |
| B, D | Continue learning concepts to better transition | In order for me to transition learning effectively, I will need to keep learning more about HPT. Doing so will make it more simple to include concepts in work processes | Continuous learning |
| E, F | Change management | I am willing to change how we do work to include HPT but realize this will only occur if managers are exposed to, and support HPT concepts. | Affecting change as a result of learning |
| A, H, O | General comments | Overall, the information from the action learning intervention was good. I believe good opportunities exist as they relate to HPT. Maybe managers should receive the same training. | General comments unrelated to "next steps and behavior change |
| Q, R, S, T | No response | | |

The 2nd and 4th columns in Table13 captures coding and themes of qualitative responses.

Table 13 shows a transcript of sorts providing words from participants as to how they would apply activities from the action learning intervention. Participants are shown in the first column of the table and are subsequently matched to the codes and themes aligned with their shared comments. For example, 55% of all participants, or n=11 indicated that they would share information back at the workplace, either with managers, or with teams or peers. These responses from participants to share information were seen as their way of trying to make some changes about how they would approach performance improvement.

In further review, some participants, although a small percentage (20%) thought that the best way to effectively apply what they learned is to continue studying the topic of HPT. These participants also believed that more learning was necessary to help facilitate any possible inclusion of HPT into their work processes. One unexpected and even disappointing occurrence of the data analysis was no qualitative feedback responses received from 4 participants. Nonetheless, the feedback seems to suggest that participants responded well to both the action learning intervention and the HPT knowledge acquisition. It also suggests that there is a tendency to share information with different levels of employees back at the workplace.

Summary

Data was collected and analyzed pre and post action learning intervention with the overarching goal to answer this study's four research questions. The questions are repeated here for continuity:

1. What does baseline data indicate regarding CityGov's HR professionals' current knowledge and comprehension of human performance technology/improvement models?
2. What learning paradigms (i.e. principles, models) support action learning knowledge acquisition for CityGov's HR professionals?
3. What reaction did CityGov's HR professionals have on learning new human performance improvement skills through action learning?
4. What was the perceived confidence level of CityGov's HR professionals to apply newly learned HPT/HPI knowledge and comprehension back at the workplace?

The data included in this chapter provided an exploratory account of study participants' views. It also provided responses and feedback that ultimately led to successfully answering each research question.

In many cases, the findings presented as analysis of data, suggested that action research and action learning can present frameworks worthy of supporting knowledge acquisition and professional development. This belief is held by the researcher based on the results of the collected data and personal observations of study participants' behavior. Chapter 5 of this report will attempt to summarize the entire study by discussing and summarizing the findings, sharing implications for research and practice, and finally, addressing recommendations for further study.

CHAPTER 5. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study examined the process of action research and the outcomes of an action learning intervention program for HR professionals at a local government organization. Action research may be thought of as collective self-reflective inquiry of participants in a situation to improve the rationality of their practices, whilst developing understanding of both situation and practice (Badger, 2000). Conversely, action learning “is a continuous process of learning and reflection that happens with the support of a group or set of colleagues working on real issues, with the intention of getting things done” (Brockbank, 2004, p. 11). The real issue identified in this study was specifically related to employee performance rather than a broad business problem.

As a result of action research and action learning, the goal was to advance human performance technology through professional development. Because adult HR learners served as study participants, it was appropriate to include in the literature review discussions about human resources roles and processes, human performance technology (HPT), adult learning principles, and the connection between HR and HPT. The theoretical constructs of action research and action learning served as the primary catalyst for this study’s approach in answering all research questions.

Rationale for the Study

Research relating to knowledge and acumen of human performance technology by human resource professionals appears lacking. Literature suggests human performance technology as a results-based approach to improving performance. Van Tiem, Moseley, and Dessinger (2000) state that performance technology “is the systematic process of linking

business goals and strategies with the work force responsible for achieving goals” (p. 2). This statement by the authors concerning performance technology has a relevant connection to current responsibilities of HR stakeholders. HR leaders and professionals within organizations are accountable in many ways for addressing strategies that link organizational goals to human performance. HR stakeholders must be strategic players as they go about the business of continuously improving both human and organizational performance.

Discussion of Findings

First and foremost of importance regarding this study is addressing any perceptions of statistical significance. Such significance is not necessarily supported quantitatively on any broad basis. The results presented in this study were annotated and discussed to reflect significance to the organization. It is therefore stressed that no claims to statistical significance are being made.

Action research’s underlying approach within this study was carried out by HR practitioners to support workplace improvement. Badger (2000) defines action research as "collective, self-reflective inquiry of participants in a situation to improve the rationality of their practices, whilst developing understanding of both the situation and their practices" (p. 202). For this study, a cyclical action research process was identified and began with the identification of a performance problem at CityGov’s HR department. HR professionals lacked requisite knowledge and skills in systematically addressing performance issues. Addressing the performance concern led to collecting pre and post assessment data, which in turn led to developing a plan for action.

Chapter three presented an action research model (Glanz, 1998) that served to set the direction for this study. The use of Glanz’s model helped to focus on the two most important

aspects for addressing the previously identified employee performance issue. The first aspect was to establish a strong baseline to determine the level of knowledge required to build performance improvement knowledge and comprehension. The collection of such baseline data was accomplished through the use of the baseline knowledge assessment tool discussed throughout this study. Baseline data was also analyzed. Like Glanz’s model, Mills (2000) presented what he referred to as a dialectic model which placed emphasis on collecting and analyzing data. Figure 4 shows the model considered by the researcher for this study and is based on Mills dialectic action research spiral (p. 554). Similar steps are evident in Glanz’s cyclical model and Mills’ dialectic approach.

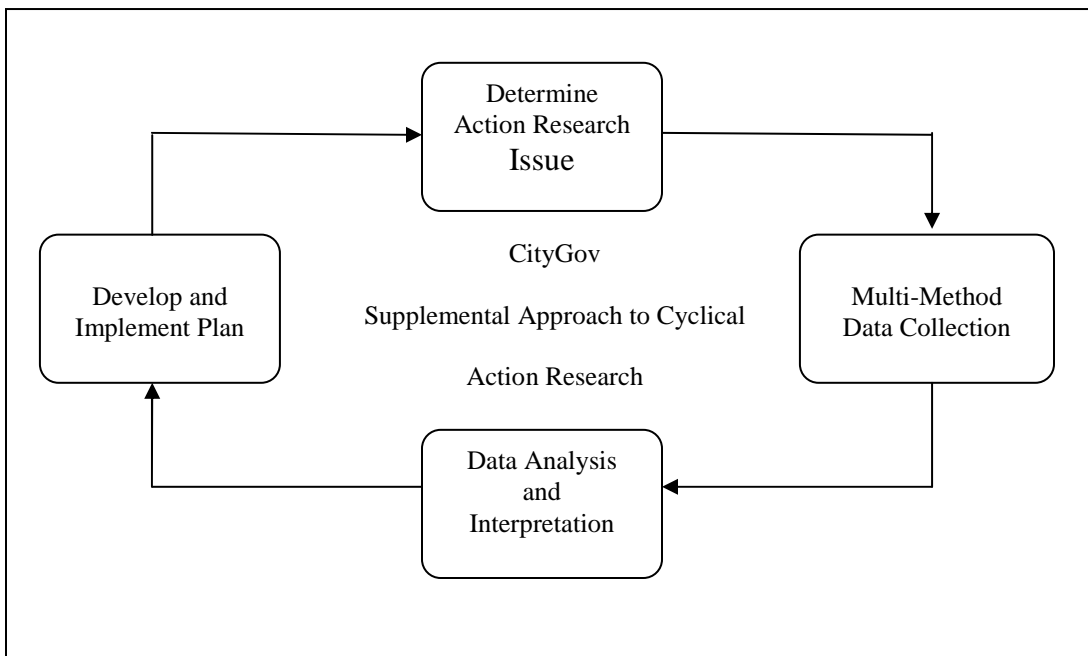


Figure 4. A dialectic model for action research to supplement the cyclical nature of action research.

Based on Mills, 2000. In J. W. Creswell’s (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, (p. 554).

The second aspect sought to begin the process of getting participants to think differently about performance improvement—especially in how they engage their respective clients. Mills’ model is a 4-step process with the fourth step requiring development of an action plan. Once baseline data suggested a lack of performance improvement knowledge, a plan was developed to address the issue. The plan, as related to this study, was the implementation of an action learning intervention. This approach can be tied to the use of Glanz’s (1998) cyclical action research model. The plan led to implementing an action learning solution, but as well, changing and modifying performance behavior as appropriate. Each of these actions was a component of the Glanz’s action research cyclical process. The action learning component of the cyclical process served as the most critical approach to the study and therefore requires further discussion.

“While action learning exists in varied versions..., it is typically characterized by certain key components: a ‘real business’ problem as content, learning through teamwork, and time for personal and group reflection on lessons learned” (Dierk & Saslow, 2007). The real business problem for this study was HR professionals needed to acquire knowledge about strategies that would help them be more responsive to performance improvement issues.

The action learning intervention, to include post assessments, provided clear evidence that continued use of these strategies and tools may produce similar professional development outcomes in other HR professionals—particularly those in local government environments. As such, action learning to address the knowledge deficit centered on advancing human performance technology. Quantitative and qualitative analysis of data

indicated learning new skills and ideas took place. The data also indicated that further use of action learning could benefit both HR and non-HR managers.

As revealed in chapter 4 of this study, participants were asked to assess the action learning's overall effectiveness. The participants were also asked to assess their level of confidence in applying learned knowledge back in the workplace. Two data collection tools were utilized—a level 1 moderate intensity assessment and a level 2 self-efficacy assessment (Barksdale & Lund, 2001). Each assessment yielded qualitative and quantitative responses that basically acknowledged two important findings.

Participant responses helped to answer this study's third research question; *what reaction did CityGov's HR professionals have on learning new human performance improvement skills through action learning?* The responses from the moderate intensity assessment, or the MIA, indicated that the participants found the content and the overall action learning approach beneficial. Participants used technology, group discussion and self-learning as drivers for problem-solving. Many of the study participants had not before experienced a learning situation where the facilitator's involvement was about 20% while participant involvement was 80%.

Factors to address about this study and its findings are HR professionals ranged in age from 28 to 56. They also had an average of 11-plus years of HR experience and worked in 7 different HR functions. Their exposure to HPT and the concepts of action research and action learning may have a lasting effect in terms of transferability and sustainability. In other words, the study participants were mature, experienced and from different work processes. If efforts are made to transfer knowledge acquisition from the intervention to the workplace, such a behavior change could set the stage for sustained performance improvement. There is

a great chance of this occurring when consideration is given to participant responses related to research question # 4; *what was the perceived confidence level of CityGov's HR professionals to apply newly learned HPT/HPI knowledge and comprehension back at the workplace?*

Even as the material on HPT from the action learning intervention was new to most participants, the average confidence score was 4.15 on a scale of 1 to 5. In other words, participants on average were confident they could apply learned knowledge back in the workplace, and do it independently. Participants freely noted that they would discuss concepts learned with managers, to include the overall leadership teams in the HR function. Discussions, they said, will center on overall HPT topics, with emphasis on gap and cause analysis. Not only did participants commit to changing if they had manager support, but as well, a promise was made to continue learning more about HPT.

Action learning for the HR learners participating in this study proved to be a beneficial learning experience. This conclusion is based on the results of the moderate intensity and self-efficacy assessments administered to the participants. It is the opinion of this study's researcher that action learning be strongly considered as an operational strategy used to address current business issues. The questioning and reflection adherent to action learning can serve as a qualitative communication approach to solving real world performance issues. Because effective communication is a necessary competency for CityGov's HR teams, action learning therefore represents a viable intervention solution.

Implications for Research and Practice

This study was mainly an action research approach for advancing the ideas and concepts of human performance technology. The actual action research model

operationalized in this study was a six step process which had as its fourth step, “implement action learning” (Glanz, 1998). Action learning set the stage for assisting HR participants of this study to take the time to question, understand and reflect, gain insights, and consider how to act in the future” (Weinstein, 1998, p. 3). In other words, address and confront a real employee performance issue and take the necessary steps to change behavior to solve the issue.

Action research and action learning for HR professionals, as well as other managers should be seriously considered in local government organizations. The benefits derived from action research and action learning can prove to be significant as methods of education and development. Through these attempts to intellectually grow, HR professionals are better equipped to address ongoing performance improvement challenges within their respective organizations. With regard to this study’s action learning intervention, the team or peer learning fostered improvements in both communication and development of strategies. These improvements realized by the participants can set the stage for solving long-standing problems that had no previous solutions.

The self-efficacy assessments (SEA) administered to participants can serve as an initial approach to transferring what was learned to the workplace. These assessments allow participants to determine their specific levels of ability to use what they learn. Because participants are now able to take immediate action implementing a systematic approach to performance improvement, transfer of learning may be increased (Yorks, 1998). In this study, the SEA was “used as a self-perception tool to measure confidence increase or perceived belief change” (Barksdale & Lund, 2001, p. 75).

To ensure that efforts achieved through the action learning process are meaningful and sustained, CityGov (and other organizations), can identify metrics or other strategies to measure the ongoing impact action learning has on solving important organizational issues. Burke (1997) presents a clear challenge to HR practitioners to increase their awareness of broader ways to define, conceptualize and measure performance. Understanding what truly contributes to human performance improvement will be critical.

A final implication to research and practice may be action research and/or action learning's theoretical constructs being expectations for development in organizations. Senior management teams in varying organizations can use action research and action learning to engage teams and groups in performance improvement activities. Such a recommendation falls in line with what Spence (1998) believes—that action learning has been used to facilitate teamwork among middle management, for personal development, to increase productivity, and to increase effectiveness in a public service department.

Recommendations for Further Study

First, action learning, as a key component of the action research cyclical approach used for this study, should be further explored as a viable professional development intervention. An intriguing continuation of this study may be to focus more closely on action research's further benefits through increased knowledge and learning transfer. The insight on action research and action learning provided in this study can assist in the development of HR professionals. However, the relationship between action learning implementation and the knowledge and learning change of HR professionals needs to be further explored. Confirming the relationship from a purely quantitative perspective may add value to ongoing development.

Learning transfer, albeit derived from action learning, must add value to real-world work processes. Transfer of learning can be defined as the degree to which those receiving training apply to their jobs the knowledge, skills, behaviors and attitudes they gained in training (Kirkpatrick, 1998). The self-efficacy assessment administered to participants in this study was used to measure confidence levels related to future application of learning. While such data is meaningful from a level 2 evaluation (Barksdale & Lund, 2001) perspective, it does little to actually observe the use and application of learned skills in the workplace.

A second consideration for further research deals with specifics related to action learning, particularly, Revans' (1982) action learning formula $L=P+Q$. The formula should be prominently enhanced as part of any action learning undertaking. The action learning implementation utilized in this study was done so with the pre knowledge and literature on Revans' work with action learning. While an understanding existed in relation to the $L=P+Q$ formula, emphasis to ensure the formula's potency and relevance to this study's action learning offering was minimal at best. Learning (L) is achieved when programmed knowledge (P) and insightful questions (Q) are key elements of the action learning process. Additionally, Revans argued that the element 'Q' is critical to the formula because it enables participants to learn by doing. Others have weighed in on the concept of action learning.

A third and final recommendation for further research focuses on the cyclical approach to action research as operationalized in this study. The cyclical process began with the identification of a performance problem at CityGov's HR department and culminated with a change in performance improvement knowledge. Future researchers may direct studies that highlight the use of the action research cyclical model (Glanz, 1998) without the need to implement action learning as a solution to an identified problem.

Glanz's original six step process of action research has as its fourth step "take action" (p. 586). It is at this step where an alternative solution other than action learning may be proposed and implemented—based on analyzed and interpreted data from the focus or issue. This study utilized action learning as the 'take action' approach because the data indicated that HR professionals lacked certain knowledge to solve an important issue. Further research may find that after the learning has occurred and actions of participants have been modified, projections of future action research cycles become necessary.

One example of a future cycle for action research would be to use Glanz (1998) or Mills' (2000) models to devise a plan that will delineate how knowledge and comprehension of HPT strategies will be transferred to the workplace. Application and implementation will be extremely important in determining whether learned skills are applied (Phillips, 2003). Interestingly, another example of a future cycle for action research could be seen as a natural progression from the learning transfer example.

Glanz's cyclical model could also be used to address how the business impact and return on investment would be measured as related to learning transfer. If these aspects of measurement are important to organizations, but employees lack the skills to implement them, a cyclical approach to action research could provide the data collection and analysis necessary to determine solutions to close performance gaps. The cyclical approach would also enable the development of a plan needed to take action.

Summary

This study examined the process of action research and the outcomes of an action learning intervention program for human resources (HR) professionals at a local government organization. The goal was to advance human performance technology through professional

development. The HR industry must continually seek aggressive strategies aimed at aligning performance with business goals. There are increasingly more demands heard from the voice of the customer in local communities to provide quality services. HR systems in organizations (for-profit or not-for-profit) must be capable of delivering processes and tools that impact organizational performance. As such, HR departments must create unique value by executing strategies aimed at influencing work force behaviors in order to achieve desired organizational outcomes.

The climate at CityGov as this study unfolded was seen as complex. Many changes in both organizational processes and human resources structure (personnel losses) had occurred as a result of financial uncertainty related to fiscal budgets. Budget deficits were drivers of increased internal changes and uncertain performance outcomes. HR support is seen as critical to quality in CityGov government and its decreased ranks may signal future performance issues.

The fundamental characteristics and firm foundation of human performance technology (HPT) can be seen as significant theories and knowledge that can be leveraged to increase and/or improve organization (and people) performance and productivity. HPT's link to HR processes and functions are undeniable. Burke (1997) provides a reminder of this link by suggesting that HR practitioners must be familiar with expanding measurements of performance. Understanding what direct and indirect enhancers and inhibitors of high performance exists, will give HR professionals a great starting point for valued added performance improvement support. Facilitating the execution of such strategies is capable through the implementation of action research as a framework for improvement.

This research may therefore be a very valuable contribution to the HR industry in terms of a methodological approach for acquiring and sustaining knowledge and skills. As part of the overall action research approach to this study, data was collected and analyzed pre and post action learning intervention. Action research, with action learning as a ‘take action’ solution may engender a new form of learning for HR professionals. Such a new form of learning, as perceived by this study’s participants, should be the catalyst for ongoing performance improvement.

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APPENDIX A. Baseline Knowledge Assessment Tool



This assessment is designed to obtain demographic, experience and knowledge **baseline data**. Please respond to ALL areas. The information you provide will be secured by the investigator and remain totally confidential.

Section I

Name of Participant: _____ Age _____ Gender _____

Number of Total Years in HR Profession _____ Number of Total Years in Local Government HR _____

Select only one response in items (1) and (2) and select ALL that apply in item (3).

(1) Human Resource Functional Area (Select One):

- Compensation/Payroll
- Diversity Management
- Employee Recruitment/
Relations
- HR Benefits
- HR Business Office
- Organizational Development
- Policy and Planning

(2) Human Resource Functional Role (Select One):

- Individual Contributor
- Team Lead/Supervisor
- Manager/Director /Exec

(3) Decision-Making Authority (Select all that apply)

- Budget Prep/Spending
- New Initiatives/Programs
- Work Accomplishment
- All the above

Baseline Knowledge Assessment Tool, continued

Name of Participant: _____

Section II

Please read each statement carefully in left column. Select appropriate response in right column by placing an (X) over the number representing your answer.

| Statement | Level of Agreement |
|---|---|
| Statement(s) in the organization’s mission, vision, goals, and/or values reflect organization and/or employee performance improvement as driver(s) for success? | (3) To a great extent (2) Somewhat (1) To a less extent |
| The HR function uses various strategies to communicate the importance of human performance improvement in process/program effectiveness? | (3) To a great extent (2) Somewhat (1) To a less extent |
| The HR function employs performance consultants or espouse a performance/customer service mentality. | (3) To a great extent (2) Somewhat (1) To a less extent |
| I understand the terms “Human Performance Technology” (HPT) and/or “Human Performance Improvement” (HPI)? | (3) To a great extent (2) Somewhat (1) To a less extent |
| Since business goals are critical drivers for the organization, I engage with leaders (or my team) in conducting business analysis ? | (3) To a great extent (2) Somewhat (1) To a less extent |

Baseline Knowledge Assessment Tool, continued

Name of Participant: _____

Please read each statement carefully in left column. Select appropriate response in right column by placing an (X) over the number representing your answer.

| Statement | Current Practice |
|--|---|
| I understand and have a regular role in the organization as it relates to diagnosing performance issues, or Gap Analysis (conducting performance analysis)? | (3) To a great extent (2) Somewhat (1) To a less extent |
| I am capable of identifying causes of performance issues? | (3) To a great extent (2) Somewhat (1) To a less extent |
| I participate with leaders (or my team) to propose or recommend improvement interventions ? | (3) To a great extent (2) Somewhat (1) To a less extent |
| I prioritize and determine what programs/solutions will be considered for implementation ? | (3) To a great extent (2) Somewhat (1) To a less extent |
| I initiate and/or participate in conducting evaluation strategies for interventions, programs, etc. | (3) To a great extent (2) Somewhat (1) To a less extent |

APPENDIX B. Moderate Intensity Assessment

Moderate Intensity Assessment

Name _____ Title _____

ADVANCING HUMAN PERFORMANCE TECHNOLOGY THROUGH PROFESSIONAL DEVELOPMENT

Directions: This self-assessment is to be completed after the action learning intervention on HPT/HPI. The purpose of this assessment is to obtain your reaction to the training immediately after training is completed.

Please select only **one response** for **questions 1-3**. Provide comments for **question 4 & 5**. The results of this assessment will remain confidential.

-
1. What was the value of the HPI objectives in terms of practice and review?
 - The HPI strategies simulated real work world
 - The HPI strategies had minimal application to my job
 - The facilitated session did not reinforce content

 2. What was the value of the facilitated session to your time?
 - Value exceeded time
 - Value was equal to time
 - Value was less than time

 3. What will you do when you return to the job to begin the process of applying what you have learned?
 - Meet with my manager and set goals for myself
 - Talk with others who took the class
 - Nothing; Learning does not apply to my specific job roles

 4. Action learning strengths. What was the most valuable to you? (Attach additional sheet if necessary)

 5. Action learning weaknesses. What would you recommend to improve future sessions? (Attach additional sheet if necessary)

APPENDIX C. Self-Efficacy Assessment

Self-Efficacy Assessment – Part I

Name _____ Title _____

ADVANCING HUMAN PERFORMANCE TECHNOLOGY THROUGH PROFESSIONAL DEVELOPMENT

Directions: This self-assessment is to be completed after the action learning intervention on HPT/HPI. The purpose of this assessment is to rate your perceived confidence in applying the knowledge and tools presented in the training immediately after training is completed.

Read and review each HPI component/category one at a time in the left column. After reading a component, use the rating scale across from the component and place an “X” in the appropriate section to indicate your confidence level in applying the knowledge and tools in a workplace situation. The results of this assessment will remain confidential.

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|--|---|--|
| Human Performance Improvement Components/Categories | Unsure of how to apply and will need help in doing so | Moderately unsure of how to apply and will need periodic guidance | Moderately confident of how to apply but may need assistance in doing so | Confident of how to apply and will be able to do so independently | Extremely confident of how to apply and will be able to assist others in doing so. |
| Business Analysis <ul style="list-style-type: none"> • Identifying important goals • Determining specificity and measures | | | | | |
| Performance Analysis <ul style="list-style-type: none"> • Desired vs. Actual state • Diagnosing issues | | | | | |
| Cause Analysis <ul style="list-style-type: none"> • Root Cause • 5-whys | | | | | |
| Intervention Selection <ul style="list-style-type: none"> • Matching interventions to causes • Recommendations | | | | | |
| Intervention Implementation <ul style="list-style-type: none"> • Manage the project • Adapt to change | | | | | |
| Evaluation <ul style="list-style-type: none"> • Formative • Summative | | | | | |

Self-Efficacy Assessment – Part II

Name _____ Title _____

Based on the overall ratings you indicated in Part I of this assessment, please provide a general statement or some feedback on your ability to apply the learning you received today. Consider these questions:

What would it take to change the way you approach performance improvement in your department?

How would you get management to “buy-in”, at a minimum, to reviewing and considering human performance technology/improvement methods in HR practices?

What can/will you do to share human performance technology/improvement methods with co-workers, supervisors and managers?

APPENDIX D. CityGov Action Learning Steps

ADVANCING HUMAN PERFORMANCE TECHNOLOGY THROUGH PROFESSIONAL DEVELOPMENT

Action Learning Steps “Discipline-Specific” Based on AACU Model

1. Instructor provides a foundation of knowledge for action learning group to work from with a more traditional learning approach, but fostering personal reflection & critical thinking
2. Instructor then transitions to “model” of the process
3. Instructor reviews the overall project agenda with timelines and expectations; teams consult with instructor at each step
4. Instructor consults with teams regarding the process of reflective inquiry, “not knowing” approach, group dynamics, and dialogue
5. Team generates their own objectives & goals for learning and problem-solving via reflective inquiry & dialogue
6. Each team analyzes the information and solutions involved in solving the stated real-world issue within the given time frame
7. Team identifies specific timeline strategies for meeting objective and goals
8. Teams take action
9. At completion of project, teams present their work to the larger group, sharing what they learned regarding making a difference, what went well, what they would change and why