

The Nature of the Knowledge Acquisition Process  
Trainers Use to Achieve Content Expertise

by

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B.A., Kansas Newman College, 1981

M.A., Webster University, 1985

M.S., Kansas State University, 1998

AN ABSTRACT OF A DISSERTATION

Submitted in partial fulfillment of the  
requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Educational Leadership  
College of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

2005

## Abstract

Eduard Lindeman (1926) stated, “the approach to adult education will be via the route of *situations*” (p. 8, emphasis in original). Training professionals often face *situations* that require them to develop and present training programs on subjects for which they have limited or no previous content expertise. This occurs even though the literature stresses the need for trainers to be experts or masters on the material they present (Berntal et al., 2004; Brookfield, 1990; Draves, 1984, 2000; Galbraith, 1990; Houle, 1984; Long, 2002; McArdle, 1993; McCain, 1999; Slusarski, 1994; Symonds, 1968; Wlodkowski, 1999). Although there is considerable literature on the roles and responsibilities of trainers (McLagan & Suhadolnik, 1989; Nadler & Nadler, 1989), self-directed learning (Candy, 1991; Knowles, 1975; Tough, 1979), and developing training programs (Caffarella, 2002; Long, 1983; McCain, 1999), very little links these areas with the knowledge acquisition process trainers use.

This dissertation describes the phenomenological inquiry into the nature of the process trainers use to acquire the knowledge necessary to develop and present training programs for which they have little or no previous content expertise. The population was selected because of the researcher’s background in training and adult education. Criterion, snowball, convenience, and maximum variation purposeful sampling techniques were used to identify trainers who met the criterion of the study. Potential participants were contacted by the researcher and asked to participate in the study. Data was collected via semistructured interviews until thematic saturation was reached. Constant comparison was used to analyze the transcripts of the interviews.

Twenty-six common themes were identified during the study and were categorized into six different categories. The six categories are self-directed learning, the training and

development process becomes part of the trainer's life, the needs assessment is part of knowledge acquisition, knowledge acquisition is a continuous part of the trainer's life, understanding the importance of adult learning principles, and reflection. The results of this study have implications for the adult education, self-directed learning, program planning, human resource development, and training literature.

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Approved by:

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Major Professor  
Dr. W. Franklin Spikes

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## DEDICATION

To the grandchildren

Victoria, Rachel, Phoebe, Anjelika, Abbigail, Zoe, Mackenzie,

Cameron, Aidan, Keira, Cormac, Teagan, and Lydia

In the hope that they will encounter a teacher

who makes a difference in their lives by

helping them discover their own ability to learn.

“Let the main object of this, our didactic, be as follows: To seek and to find a method of instruction, by which teachers may teach less, but learners may learn more.”

The Great Didactic of Comenius  
(1628-1632) (Cantor, 1950, p. vi)

## Chapter 1

In their book, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, Cameron and Quinn (1999), noted that the most frequent reason given for the failure of most planned organizational changes was neglect of the organization’s culture. As a result, as many as three-quarters of re-engineering, total quality management, strategic planning, and downsizing efforts have either failed entirely or created problems serious enough to threaten the organization’s survival. In short, these organizations failed to consider the resource that has the greatest impact on their culture: people. The development of people within an organization has traditionally been the function of trainers assigned to the training department (McLagan & Suhadolnik, 1989; Tobin, 2000). The development of people, of human resources, to increase organizational effectiveness is one of the many facets of adult education (Darkenwald & Merriam, 1982).

In organizations across the country, thousands of people work in human resource development (HRD), organizational effectiveness, training, and staff development positions. The American Society for Training & Development (ASTD) is the primary professional organization for HRD/training professionals; in 2005, they had more than 37,000 members (P. Wagner, personal communication, March 3, 2005). Many of these professionals are directly responsible for developing and presenting training programs intended to increase their organization’s effectiveness.

Lindeman (1926) stated, “the approach to adult education will be via the route of *situations*” (p. 8, emphasis in original) and this holds true for the field of training (Fenwick, 2000; McCain, 1999; McLagan & Suhadolnik, 1989; Watkins, 1989; Tobin, 2000; Zielinski, 2001). As situations in society and the economy change; so must organizations (Bernthal et al., 2004; Bierema, 2000; Blanchard & Bowles, 1998; Blomberg, 1989; DePree, 1989; Johnson, 1998; Long, 1983; McLagan, 2002; Tobin, 2000). As a result, training professionals are often confronted with situations that require them to develop and present new training programs when they know little about the subject (Long, 1983; Tobin, 2000; Watkins, 1989). This happens even though the literature stresses the need for trainers to have content expertise on the subject they are presenting (Bernthal et al., 2004; Brookfield, 1990; Draves, 1984, 2000; Galbraith, 1990; Houle, 1984; Long, 2002; McArdle, 1993; McCain, 1999; Parish & Necessary, 1996; Slusarski, 1994; Symonds, 1968; Wlodkowski, 1999).

Caffarella (1988) provides an example of this type of situation. “George, a technical training specialist, has just been asked to teach a three-week short course on interpersonal skills to new, entry-level supervisory personnel. He doesn’t really know the subject matter very well...” (p. 109). The situation George found himself in isn’t unique. Trainers often find themselves in situations in which they are required to teach topics for which they have limited, or no, previous content expertise (Long, 1983; K. Slempp, personal communication, March 1, 2003; Watkins, 1989). Compounding the problem is the fact that trainers are expected to be content experts when presenting the material, so they must first gain sufficient knowledge about the subject.

## Statement of the Problem

How do trainers, who find themselves in the situations Lindeman (1926), Caffarella (1988), and K. Slemp (2003) discussed, acquire the knowledge they need to develop and present training programs on a subject for which they have limited or no previous knowledge? Is there any process they can use to acquire that knowledge? These questions have yet to be researched and addressed in the adult education literature.

Spear (1988) conducted the initial research into trainers having to develop training without previous content expertise using ten corporate trainers and staff development professionals to determine if and how they used self-directed learning to assist them in developing training programs in areas which they had limited, if any, prior knowledge. According to Spear (1988), these professionals were selected because “typically such professionals are called upon several times a year to develop and present training programs in subject matter in which they themselves have not been trained. In developing such a training program, they must first become adequately proficient themselves before they are able to instruct others” (p. 211). Tobin (2000) indicated that in his review of dozens of HRD and training articles over the previous 10 to 15 years, he had yet to find one that discussed how trainers could prepare themselves for their new roles.

## Purpose of the Study

The purpose of this study was to examine the nature of the process trainers use to acquire the knowledge necessary to develop and present training programs for which they had limited or no previous content expertise.



## Background

### *Roles and Responsibilities of the Trainer*

Trainers were once selected and assigned to specific training positions, e.g., leadership, skills, safety, based upon their knowledge and expertise in a specific area (Bernthal et al., 2004; McLagan & Suhadolnik, 1989; Nadler & Nadler, 1989; Patten, 1971; Senge, 1990; Watson, 1979; Zielinski, 2001). However, corporate downsizing and budget cuts have forced trainers to broaden their experience and perform training outside their field of expertise. In many organizations, especially smaller ones, trainers are not only expected to train myriad subjects, but also to handle tasks outside the classroom such as project management, vendor relations, contract administration/negotiation, and internal consulting (Bernthal et al., 2004; Birnbrauer, 1993) in addition to their normal duties of designing, delivering, and evaluating training programs in areas for which they were originally hired.

Caffarella (2002), provides a realistic description of the diverse roles of the training specialist:

Robert is employed as a training specialist... His major responsibility is to design education programs for both staff and customers of the company. These programs range from one-hour modules to three-week intensive seminars and Web-based programs. Though at times he may actually serve as the instructor for one of the programs, his major job is to develop and coordinate the various programs offered by the organization. In essence, Robert's major role is that of program developer. He functions as a program design specialist and is responsible for planning, coordinating, and evaluating training programs requested by various divisions within the company, and for ensuring that transfer of learning happens.... He works in tandem with content specialists, usually

company personnel from the division that has requested the program and/or outside consultants, which calls on his group's facilitation skills. In addition, he may work with the training center's production group on the development of the instructional materials to be used in the program.... He also finds himself doing more internal consulting work, such as organizational development, and is a catalyst for change, in response to problems he is asked to address. (pp. 5-6)

This example emphasizes the varying expectations put upon trainers when budget cuts result in training staff reductions. It is not uncommon for initial downsizing efforts to begin with training departments because they are often seen as a marginal enterprise, expendable in times of financial cuts (Merriam & Brockett, 1997). With increased responsibilities for conducting training that may be outside their content expertise, many trainers confront situations that require self-directed learning. The current emphasis on six-sigma, lean manufacturing, quality improvement, and customer focus are examples of training programs that have created increased learning opportunities for trainers (Bernthal et al., 2004). Regardless of the type of training, or the reason for the training, the trainer is essential, because the trainer is most directly involved with designing and delivering learning (Bernthal et al., 2004; Nadler & Nadler, 1989; Zielinski, 2001).

Zielinski (2001) summed up the challenges facing today's trainers when he said, "Welcome to the 21st century training organization, where time-honored titles are slowly disappearing, responsibilities are shifting, stand-alone jobs are melting into far broader roles and new career ladders are emerging" (p. 31). Because the literature stresses the importance of knowing the information being presented (Brookfield, 1990; Draves, 1984, 2000; Galbraith, 1990; Houle, 1984; Long, 2002; McArdle, 1993; McCain, 1999; Parish & Necessary, 1996;

Slusarski, 1994; Symonds, 1968, Wlodkowski, 1999; Zielinski, 2001), trainers face the challenge of acquiring knowledge (Long, 1983; Watkins, 1989; Zielinski, 2001).

### *Gaining Expertise through Knowledge Acquisition*

The literature in adult education discusses in some detail the planning, development, and presentation of training programs (Caffarella, 2002; Houle, 1972; Kowalski, 1988; Long, 1983; McCain, 1999; McLagan & Suhadolnik, 1989). Additionally, much information on self-directed learning processes used by adults to gain knowledge and skill can be found; whereas, little work has been done on how trainers acquire knowledge of a content area so they can develop training programs.

Tough (1979) found that adults often face situations where they must learn new information. He said,

They may be faced with the need to perform a task, or accept a new responsibility. In order to perform the action at a higher level of performance, they may spend some time beforehand gaining certain knowledge and skill. He or she will then use or apply the knowledge. (p. 50)

Thus, the need to learn new material is not unique to trainers; however, trainers have a greater responsibility because what they do with the newly acquired knowledge is much different. Traditionally, the trainer is the content expert and knows what should be learned, how to learn it, and how to teach it. Caffarella (1988) suggested that, “When people take on the role of [trainer] it implies that they have an adequate knowledge base in whatever content area they are teaching” (p. 103). McArdle (1993) approached the issue of expertise from a completely different perspective. She suggested trainers have an ethical responsibility to the audience, saying, “the audience expects you to know what you are talking about” (McArdle, 1993, p. 5).

Houle (1972) summed up the need for expertise best when he said “The teacher should be a master operating in an individualistic fashion, his teaching and expression of basic character tempered by thought, study, and experience; he transforms abstract knowledge by the use of what the Danes calls the living word” (p. 8).

The first step in the process of acquiring that knowledge is to assess one’s own personal knowledge about the subject (Boyatzis, Cowen, Kolb, & Associates, 1995; Grice & Skinner, 1998; Verderber, 1997; Wlodkowski, 1999). This has two purposes; first, it provides the trainer with the opportunity to consciously assess how much he or she already knows about the subject. Second, it helps him or her realize how much he or she doesn’t know about the subject. This becomes the foundation and guide for acquiring the knowledge needed to develop a training program (Verderber, 1997; Wlodkowski, 1999).

The literature on self-directed learning discusses several different processes diagnosing learning needs in the pursuit of knowledge. Knowles (1970) suggested a process for diagnosing learning needs that would be helpful for trainers. The process involves three steps: development of a model of desired behaviors or required competencies, assessment of the present level of performance by the individual in each of these behaviors or competencies, and assessment of the gaps between the model and the present performance.

Danis (1992) offered a framework of the process of self-directed learning. Her process consists of reacting to a triggering event/situation and goal setting, seeking and selecting the knowledge/information to be acquired and available sources/resources, organizing and structuring the knowledge acquired and strategies to be used, acquiring and integrating the new knowledge, assessing the quality of both the knowledge acquired and strategies used, and applying the new knowledge.

Wlodkowski (1999) stresses that there is no substitute for thoroughly knowing the subject and suggests that the following questions reveal whether one has sufficient subject knowledge to instruct others.

1. Do I myself understand what I am going to teach?
2. Can I give more than one good example of what I am teaching?
3. Can I personally demonstrate the skill (if teaching a skill)?
4. Do I know the limits and consequences of what I am teaching?
5. Do I know how to bridge what I am teaching to the world of the learners—their knowledge, experience, interests, and concerns?
6. Do I know what I don't know? Where are the boundaries of my own knowledge and skill? How far am I from the cutting edge of my discipline? (pp. 28-29)

Based upon these views of knowledge acquisition, trainers can acquire the knowledge they need by following three steps. The trainers need to determine 1) what they need to learn to be able to teach the subject, 2) what they already know about the subject, and 3) what they need to do to acquire the knowledge they need to close the gap between the two (Boyatzis et al., 1995; Danis, 1992; Grice & Skinner, 1998; Knowles, 1970; Verderber, 1997; Wlodkowski, 1999).

#### *Program Planning/Training Program Development*

Once trainers have the expertise, they begin the next part of their job: planning the program. Preparation is the key to developing successful training programs (Pike, 1989) and versions of program planning models can be found throughout the adult education and training literature (Bergevin, Morris, & Smith, 1963; Caffarella, 1994, 2002; Galbraith, 1990; Houle, 1972; Knowles, 1980; Kowalski, 1988; McArdle, 1993; McCain, 1999; Pike, 1989; Sork, 2000;

Sork & Buskey, 1986; Sork & Caffarella, 1989). The three most prevalent models found in the literature are the linear, non-linear, and interactive (Caffarella, 1994, 2002; Kowalski, 1988).

Kowalski (1988) provided examples of both linear and nonlinear models. In his discussion, the linear model is used sequentially in six steps: assessing needs, creating objectives, designing the program, building the budget and obtaining resources, marketing the program, and starting the program. On the other hand, the nonlinear model has program evaluation at its center and is surrounded by assessing needs, forming objectives and curriculum, building the budget, marketing the program, securing resources, and developing a mission. In this model, many of the steps can be completed simultaneously, which can be an advantage or disadvantage. Kowalski suggested that the critical factor in selecting one model over the other is time. The nonlinear model requires less time, but requires a higher level of planning skills and additional resources, especially human resources.

Caffarella (2002) offers the interactive model of program planning as a guide, not a blueprint, for planning. It has 12 components that can be used in any order or combination based upon the planning situation. The components are discerning the context; building a solid base of support; identifying program ideas: sorting and prioritizing program ideas; developing program objectives; designing instructional plans; devising transfer-of-learning plans; formulating evaluation plans; making recommendations and communicating results; selecting formats: schedules; and staff needs; preparing budgets and marketing plans; and coordinating facilities and on-site events. According to Caffarella (2002), the model is interactive because it has no real beginning or ending and because the activities can be negotiated among the people involved. It also allows enough flexibility for planners to take culture into account.

The linear, nonlinear, and interactive models represent most of the program planning models found in the literature. Sork and Buskey (1986) conducted an analysis of ninety-six publications containing different program planning models. Their analysis of the different models in the publications identified nine generic steps of program planning: analyze planning context and client system; assess needs; develop objectives; select and order content; select and design instructional processes; select instructional resources; formulate a budget and administrative plan; design a plan for assuring participation; and design program evaluation. Significantly, most of the models they reviewed ignored the specific roles and proficiencies required of adult educators in the planning process.

Clearly, much of the literature assumes trainers already have the knowledge they need to develop training programs (Caffarella, 2002; Houle, 1972; Kowalski, 1988). With the exception of Spear's (1988) study and Wlodkowski's (1999) questions for determining if someone knows something well enough to instruct others, there is little information in the adult education and training literature about the knowledge acquisition process trainers use to prepare for developing and presenting training programs. Additionally, nothing in the literature links the roles and responsibilities of trainers, self-directed learning, or program planning with the knowledge acquisition process used by trainers.

### Research Questions

The following research questions guided this study.

1. What is the nature of the process trainers use to acquire the knowledge they need to develop training programs when they don't already possess sufficient knowledge about the subject?

2. Are there common factors that facilitate this acquisition of the knowledge on subjects in which trainers are not already knowledgeable? If so, what are they? And,
3. If these common factors exist, how do they influence a trainer's acquisition of knowledge?

### Significance of the Study

This study of how trainers gain the knowledge necessary to develop training programs contributes to the adult education, self-directed learning and training literature in several ways. Knowledge acquisition has been studied in several venues, such as cognitive processes, adult development, participation in organized instruction, and self-directed learning (Cross, 1981); however, it has not been studied in relation to trainers. To date, Spear's (1988) research is the only study in the adult education literature that discusses issues similar to what this study will research.

This study may also help re-conceptualize the process used to develop training programs, specifically gaining content expertise. The literature on developing training programs (Bergevin et al., 1963; Caffarella, 2002; Galbraith, 1990; Houle, 1972; Kowalski, 1988; Knowles, 1980; McArdle, 1993; McCain, 1999) suggests a variation of Curry's (1983) problem solving model: "collect information, identify problems; look at alternative plans; select a plan; implement the plan, and evaluate the plan" (p. 26). This study adds another step of "gaining content expertise," as either a primary step or as a sub-category of the needs assessment step. Although much literature covers related areas (self-directed learning, the roles and responsibilities of trainers, program planning, developing and presenting training programs), very little of the literature linked these areas to the knowledge acquisition process.



Lastly, when adults plan learning activities, other than organized group learning, what do they do and how do they do it, how well do they do it, and how satisfied are they with the results? Little in the literature provides information on these questions (Cross, 1981).

This study will provide information on how trainers acquire knowledge; link that process to self-directed learning, the responsibilities of trainers, program planning, and developing and presenting training programs; and provide insight into the process of acquiring knowledge in human resources and training.

### Delimitations and Limitations of the Study

This research was delimited in the following ways:

1. Because of resource restrictions, a sample of convenience was used for this study.

The participants were from the central United States, thus, reducing the potential generalizability of the findings to other geographic locations.

2. Because the researcher is the primary instrument of data collection and analysis in qualitative studies (Merriam, 1988) and natural bias is brought into any research by the investigator (Lincoln & Guba, 1985; Merriam, 2002; Strauss & Corbin, 1990; Wilkinson & McNeil, 1996), the results of the study depended upon the interviewer's ability to remain objective.
3. A purposeful sampling technique was used. Identification as an information-rich subject took precedence over attempts to have equal representation in other factors such as ethnicity, economic status, education level, or age.
4. Once trainers were identified as possible participants and a determination had been made as to whether they met the criterion, only those comfortable with participating and being interviewed participated in the study.

The following limitations were present in this research:

1. People bring to the interview personal perspectives and experiences that are outside of the researcher's control. Those perspectives and personal experiences may have affected the accuracy of the interview material, which may have biased the results of the study (Merriam, 1988; Patton, 1990; Wilkinson & McNeil, 1996).
2. The findings of this study were based on interviews with 24 trainers. In qualitative research, a small sample is selected precisely because the researcher wishes to gain an in-depth understanding of the phenomenon, not to find out what is generally true among many (Merriam & Associates, 2002); therefore, generalization to a larger population should be done with caution.
3. Accuracy of responses to the questions were subject to experiences and honesty of the individuals who willingly participated in this study.

#### Assumptions

The following assumptions were made in this study:

1. Participants truthfully answered the researcher's questions.
2. Other variables not investigated during this study are equal across the sample.
3. In qualitative research the data is multi-dimensional and ever changing, it is not a single, fixed, objective phenomenon that can be measured as in quantitative research (Merriam, 2001a).

#### Methodology

The lack of literature shows that this phenomenon has not been adequately studied. Strauss and Corbin (1990) suggest the use of qualitative methods to “uncover and understand what lies behind any phenomenon about which little is yet known” (p. 19). “A qualitative

approach allows discoveries to be made about the phenomenon under investigation. There are no predetermined hypotheses which direct and limit what one looks for, no treatments, and no restrictions on the end product” (Merriam, 1989, p. 166).

Many have suggested that the purposeful acquisition of knowledge for the purpose of learning is a process (Cross, 1981; Knowles, 1975; Merriam & Caffarella, 1999; Spear, 1988; Tough, 1979). Patton (1990), in discussing the use of qualitative methods to research processes, suggests that research “...focus on how something happens rather than on outcomes or results obtained” (p. 94). He provides four reasons why qualitative studies are highly appropriate for studying processes: 1) the researcher must describe the process in detail; 2) each person experiences the process differently; 3) the process is fluid and dynamic; and 4) the perceptions of the participants are key to understanding the process. Marshall and Rossman (1999) and Strauss and Corbin (1990) agree that qualitative research is valuable for gaining a better understanding of processes.

The phenomenological inquiry research tradition was used for this study. It is a qualitative design that uses purposeful sampling to find information-rich participants for the study. Criterion, snowball, convenience, and maximum variation purposeful sampling were used to identify potential participants for the study. First, the researcher found known trainers who had developed and presented a training program on a subject for which they had limited or no previous content expertise and asked them to participate in the study and to suggest the names of other trainers who meet the criterion. The researcher then solicited names of additional potential participants in the central United States. The names were solicited from people who were in a position to know others who met the criteria for the study. This included the trainers who were initially asked to participate and then human resources and training vice-presidents, community

college business and industry training directors, training directors, training managers, consultants and the Oklahoma City, Kansas City, and Wichita chapters of the ASTD. Once potential participants were identified using the four types (criterion, snowball, convenience, and maximum variation) of purposeful sampling, the researcher contacted each of them personally to determine if they met the criterion and were willing to participate in the study.

A pilot study was conducted to test the interview protocol and determine if the proposed purposeful sampling procedures were appropriate. Three trainers (Appendix C) who met the criterion for participation in the study, but would not participate in the final research, were interviewed using the semistructured interview guide and procedures found in Appendix A. Changes were made to the semistructured interview guide as a result of the pilot study. These changes involved deleting three questions and replacing them with four new questions.

Twenty-four trainers were interviewed in this study using a semistructured interview guide (Appendix A). This sample size was consistent with the total sample size of other research projects reviewed for this study (Klingel-Dowd, 1998; Kremer-Hayon, 1991; Spear, 1988; Swanson & Falkman, 1997).

The trainers were asked to describe the process they used to acquire the knowledge they needed to develop and present a training program on a subject for which they had limited or no previous content expertise. Following the participant's description of their knowledge acquisition process, the researcher used probes to explore themes that were mentioned by participants in earlier interviews. Each interview was tape recorded and transcribed by a professional transcriptionist. The data were then analyzed and categorized using the constant comparative method to identify common themes and patterns. Interviews continued beyond the point of thematic saturation and the 20 interviews that had originally been planned because of

scheduling conflicts with highly recommended participants. The participants interviewed early in the data collection process were interviewed again to explore thematic areas that emerged in subsequent interviews. Final interpretation of the data collected and implications of the results began once thematic saturation had occurred and all of the interviews were completed.

According to Lincoln and Guba (1985) trustworthiness can measure validity and reliability in a qualitative study by establishing credibility, transferability, dependability, and confirmability. Member checks, referential adequacy, and peer reviews were used to ensure the credibility of the findings. Member checks consisted of providing each participant with a copy of their transcribed interviews and the researcher's interpretations. The participant then had the opportunity to clarify, correct, or enhance the transcript and the researcher's interpretations to ensure the participant's perspective was properly represented.

Referential adequacy was achieved by tape recording all interviews so that they could be examined later and compared with the written data. Peer reviews were conducted with four other researchers (Appendix B). One peer reviewer continued throughout the research and interview process. Each of the other three reviewers examined five randomly chosen transcripts. The reviewers analyzed, categorized, and coded the transcripts based upon the themes they identified. Themes, categories, and meanings were discussed. The themes identified by the researcher were comparable with the finding of the reviewers. Thick descriptions are provided to allow readers the opportunity to make decisions for themselves regarding the transferability of this study to their own situation (Creswell, 1998; Lincoln & Guba, 1985; Merriam & Associates, 2002).

According to Lincoln and Guba (1985), both dependability and confirmability can be determined through a "properly managed" audit trail so that an auditor could conduct an inquiry. To ensure dependability and confirmability, accurate files, including the researcher's journal, the

audiotapes of the interviews and discussions, transcripts, materials from the data analysis process, and the researcher's field notes will be maintained.

### Definition of Terms

In this study, the following definitions were used.

**Career Development** – The alignment of individual career goals, planning, and development with organizational career-management processes to achieve an optimal match of individual and organizational needs (McLagan & Suhadolnik, 1989).

**Central United States** – Generally comprising Montana, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Minnesota, Wisconsin, Illinois, Iowa, Missouri, Arkansas, and Louisiana.

**Constant Comparative Method** – A method of qualitative data analysis where each subsequent interview is compared with the previous interviews before additional data is collected. In the constant comparative method, “the formal analysis begins early in the study and is nearly completed by the end of data collection” (Bogdan & Biklen, 1982).

**Content Expertise** – A command of the knowledge necessary to be able to effectively pass on knowledge about a subject to others.

**Developer-Instructor** – A person whose primary function is to develop courseware and whose secondary function is teaching training programs (Bennett & Clasper, 1993).

**Expert** – Some who possess great knowledge, skill, and experience in a particular field or subject matter. Experts are also lifelong learners and continuously ask questions and add to their knowledge base (Benaim, 2002)

Human resource development (HRD) – The integrated use of training and development, organizational development, and career development to improve individual, group, and organizational effectiveness (McLagan & Suhadolnik, 1989).

Instructor-Developer – A person whose primary function is instructing in the classroom and whose secondary function is developing courseware for the courses he or she teaches (Bennett & Clasper, 1993).

Interactive Process of Self-directed Learning –The “organizing circumstance which postulates that self-directed learners, rather than preplanning their learning projects, tend to select a course from limited alternatives which occur fortuitously within their environment, and which structures their learning project” (Mocker & Spear, 1982, p. 4).

Knowledge – “Any positive or desired change or improvement in a person’s knowledge, understanding, awareness, comprehension, beliefs, ability to apply, ability to analyze and synthesize, ability to evaluate, judgment, perceptual skills, physical skills, competence or performance, response tendencies, habits, attitudes, emotional reactions, recall sensitivity, insight, confidence, patience, and self-control, and/or some other personality characteristic, inner behavior, or overt behavior” (Tough, 1979, p. 9).

Learning – Sustained, highly deliberate efforts to acquire knowledge of some matter or a skill of which you previously have no knowledge (Symonds, 1968; Tough, 1979).

Learning Processes – “the various possible interactions of a series of interdependent components which lead to the acquisition and/or application of new knowledge” (Danis, 1992, p. 48).

Linear Process of Self-directed Learning – Clearly deliberate, well-planned, and step-by-step series of episodes that indicate a linear pattern, which is characterized by: diagnosing

learning needs, establishing goals and objectives, locating resources, choosing and implementing learning strategies, and evaluating the learning (Knowles, 1975).

Member checks – A means of establishing credibility in a qualitative study by returning transcripts and interviewer interpretations to the participant for review, clarification, correction, and suggestions (Lincoln & Guba, 1985).

Organizational Effectiveness/Development – To assure healthy inter- and intra-unit relationships and help groups initiate and manage change (McLagan & Suhadolnik, 1989).

Peer reviews – The process of having a colleague scan some of the raw data from an interview to determine whether the researcher's findings are plausible based upon the data (Merriam & Associates, 2002).

Phenomenological Inquiry – a study method of qualitative research that focuses on the essence or structure of an experience that shows how complex meanings are built out of simple units of directed experience (Merriam & Associates, 2002).

Purposeful Sampling – A non-probabilistic method of sampling in which the researcher chooses particular subjects to include because they may facilitate the expansion of the developing theory by providing information-rich descriptions of their experience (Bogdan & Biklen, 1992).

Problem-Solving Ability – A process used to solve problems by identifying the problem, analyzing the data, developing a plan, developing an alternative plan, selecting a plan, implementing the plan, and evaluating the effectiveness of the plan (Curry, 1983).

Referential adequacy - A means of capturing episodes through the use of electronic means such as tape recorders, videotapes, or photographs, which can later be used to establish credibility in the data analysis portion of a qualitative inquiry (Lincoln & Guba, 1985).



Resource – Any object, person, or aspect of the environment that can be used for support or help in the process of learning (Houle, 1972).

Self-Directedness – An internal force that compels individuals to assimilate, synthesize, internalize, and critically reflect upon new information, given the situation in which someone finds themselves (Fisher, 1995).

Self-Directed Learning – “Self-directed learning is characterized by a process in which the learner has control over both the goals and the means for learning, regardless of whether or not the reason for learning is under the learner’s control” (Spear, 1988, pp. 199-200).

Subject Matter Expert – A person who has had extensive training or experience in a particular area and performs tasks which require a high degree of problem solving, data analysis, and synthesis, a specialist in a specific area (Bennett & Clasper, 1993).

Trainer – A generic term used to describe a range of instructional personnel in business, industry, and government who are involved in teaching (Bennett & Clasper, 1993).

Training – A means used by organizations to instill new skills, knowledge, or attitudes in employees to increase the employee’s value to the organization (Blomberg, 1989).

Training and Development – The process of identifying, assuring, and—through planned learning—helping develop the key competencies that enable individuals to perform current or future jobs (McLagan & Suhadolnik, 1989).

### Summary

This chapter provided the background for the phenomenological inquiry into the process trainers use to acquire the knowledge they need to develop training programs for which they have limited or no previous content expertise. With the rapid changes in society and the

economy, trainers are being asked to do more than they ever have in the past (Bernthal et al., 2004; Caffarella, 1994, 2002; Zielinski, 2001), which necessitates acquiring knowledge.

A brief review of the literature on roles and responsibilities of trainers, expertise through knowledge acquisition, self-directed learning, and program planning was provided. A list of definitions of terms used in the study and the research design methodology were also presented.

Merriam (1988) suggests that practical situations, like personal experience, often present research problems. It is those situations, combined with the investigator's background as a trainer in government and corporate settings and teacher in the college settings that contributed to this choice of topic.

“When we speak of the ‘function’ of the instructor, function is used in a specific technical sense, that of helping students in a professional, skilled manner to learn.”  
(Cantor, 1950, p. 80)

## Chapter 2

### Literature Review

The purpose of this study was to examine the nature of the process trainers use to acquire the knowledge necessary to develop and present of training programs for which they had limited or no previous content expertise. The literature covers in some detail planning training programs; however, very little literature in the adult education field discusses how trainers acquire the knowledge they need to develop effective training programs, especially when they aren't already familiar with the subject matter. Thus, this chapter presents a discussion of the following training-related issues in the literature, which are germane to this research: roles and responsibilities of the trainer, gaining expertise through knowledge acquisition, self-directed learning including its background and controversies, and program planning/training program development.

#### Roles and Responsibilities of the Trainer

“As the business of business becomes more complex and sophisticated, the importance of training is emphasized and the role of the instructor becomes more critical” (Birnbauer, 1993, p. 28.1). M. Galbraith (Personal communication, October 15, 1999) said essentially the same thing, when he was asked for the one piece of advice that he would give adult educators. He said, “Remember! Teaching isn't a harmless profession!” Unfortunately, for a role that is so critical and has such an impact on the lives of others, it is difficult to find consensus on the titles,

roles, responsibilities, or competencies of trainers. Houle (1980) provided some insight into why it is so difficult to define professions:

The first and most dominant characteristic [of professionalization] is that as many members as possible of a professionalizing vocation should be concerned with defining function or functions. It is difficult but necessary to seek constantly to understand the structural tenets of a practitioner's work—those which give it focus and form.

Nonexperts often have no trouble defining the central mission of a profession. To them it seems obvious, for example, that veterinarians provide health or custodial care for animals, architects design buildings, and hospital administrators administer hospitals.

But anybody who thinks about the realities of the professions knows that such definitions are too simple to be useful in dealing with the priorities and ethical decisions encountered even in routine practice. (p. 35)

A thorough search of the literature confirmed Houle's (1980) beliefs about the difficulties professions have with defining what they do. The first controversial area is the term used to describe those people who directly facilitate the learning of adults (Darkenwald and Merriam, 1982). The terms adult continuing education practitioner, adult educator, coach, facilitator, instructor, leader, mentor, program/staff developer, teacher, trainer, training specialist, and workplace learning and performance professionals all appear to be used interchangeably throughout the literature (Bernthal et al., 2004; Cadwell, 1995; Caffarella 1988, 1994; Darkenwald & Merriam, 1982; Galbraith & Zelenak, 1989; Houle, 1980; Knowles, 1975, 1980; McArdle, 1993; McCain, 1999; Nadler & Nadler, 1989; Pike, 1994). Regardless of the specific term used by the author, the information provided herein relates directly to "trainers," as they will be discussed in this study.

Another way of defining a profession is to consider the job functions of those working in the profession. However, consensus is also lacking on the roles, responsibilities, and competencies of trainers (Caffarella, 1988, 1994; Darkenwald & Merriam, 1982; Tobin, 2000; Zielinski, 2001), probably because over the years trainers roles have developed well beyond classroom instruction (Nadler & Nadler, 1989). Today, because of downsizing and budget cuts, many organizations, especially smaller ones, require trainers to handle tasks such as project management, vendor relations, contract administration/negotiation, succession planning, and internal consulting (McCain, 1999; Zielinski, 2001). These tasks are generally performed in addition to the trainer's normal duties of conducting needs assessments; analyzing, designing, developing, delivering, and evaluating training programs; counseling individuals on career planning; facilitating group and organizational development, and establishing good relationships with managers (Birnbrauer, 1993; Darkenwald & Merriam, 1982; Noe, 1999; Tobin, 2000).

The concept of training is not mentioned in most of the early literature. Instead, the literature focuses on the qualities, characteristics, and competencies of successful teachers (Cantor, 1950; Highet, 1950; Symonds, 1968). Cantor said, "The modern teacher must become a pedagogue who will help the student integrate his fragmentary experience, and help him see that 2 and 2, when put together, do not always equal 4 but may result in 0, or 1, or 22" (p. 83). Cantor believed that the teacher is the helper, not the master; the subject of the course is the student, not the knowledge, and the teacher must accept differences in students. He went on to say that regardless of the type of course, or method of instruction, the teacher's role is to understand the dynamics of human behavior; be concerned primarily with understanding the individual; keep the importance of the student's problems and feelings at the center of the teaching process, not his or her own; recognize that he or she can offer help only within the

subject of the course; and, most important of all, realize that constructive effort must come from the positive or active forces within the individual student.

According to Hiemstra and Sisco (1990), Overstreet (1941) was the first adult educator who tried to define the qualities of a competent instructor. He believed competent instructors should possess a personal desire to go on learning; expertise in the subject area; a sense of relationships and community; and the power to think and act in terms of real problems.

Knowles (1970, 1980, 1989) identified three sets of competencies for adult educators from an andragogical perspective. The first set of competencies, which he considers core competencies, is for learning facilitators; a second is for program developers; and a third set is for administrators. Interestingly, Knowles (1970, 1980, 1989) provides competencies for the three different roles as if they were separate, and in fact, thirty years ago, at the time of Knowles' original work, this may have been the case. Today, however, trainers are expected to be competent in all three (Bernthal et al., 2004). Knowles (1989) does, however, suggest that the competencies can be learned by reading printed materials, attending professional conferences, such as the American Association of Adult and Continuing Education and ASTD, and taking college courses, seminars and workshops, or even obtaining a graduate degree in adult education.

Other studies have attempted to clarify the roles and competencies of trainers. Grabowski (1976) suggested that competent adult educators should understand the motivation and participation patterns of adult learners; provide for the needs of adult learners; be knowledgeable in the theory and practice of adult learners; know how to use various methods and techniques of instruction; possess communication and listening skills; know how to locate and use educational materials; have an open mind and allow adults to pursue their own interests; continue his or her own education; and be able to evaluate and appraise a program.

Knox (1979) suggested that educators of adults should possess three core proficiencies regardless of organizational and role specifications. They are an understanding of the field of adult education; knowledge of the various aspects of adult development and learning; and the development of personal qualities, such as commitment to lifelong learning, the effectiveness of interpersonal relations, and the desire to improve practice through innovative strategies.

In the 1980s, ASTD conducted comprehensive studies of training professionals in an attempt to bring some standardization to the training and development profession (McLagan & Suhadolnik, 1989). The first study was conducted in 1983 and resulted in publication of *Models for Excellence* (McLagan, 1983). A second study on competencies and standards was conducted in 1987 and resulted in McLagan's *The Models* (1989b), *The Manager's Guide* (1989c), and *The Practitioner's Guide* (1989d). All four were published in *Models for HRD Practice* (1989a). As a result of the studies, McLagan and Suhadolnik (1989) defined 11 major functional roles of training and development professionals in the HRD field. The roles were researcher, marketer, organization change agent, needs analyst, program designer, HRD materials developer, instructor/facilitator, individual career development advisor, administrator, evaluator, and HRD manager.

In addition to the 11 major functional roles, 74 products, services, conditions, and important outputs of HRD work were identified. The outputs varied from data analysis interpretation to developing HRD Strategy and Policy (McLagan & Suhadolnik, 1989). Based on definitions and work outputs, seven of the functional roles related to the trainers who participated in this study. They were organization change agent, needs analyst, program designer, instructor/facilitator, marketer, HRD materials developer, and individual career development advisor (McLagan, 1989).

Nadler and Nadler (1989) also wrote about the roles and competencies of trainers. They began by emphasizing the importance of the trainer “since it is the role directly concerned with the design and delivery of learning” (p. 141). They then divided the training role into three separate functions: facilitator, designer, and developer, acknowledging that many times one person in an organization will do all three. Competencies are identified for each of the roles, but most of them are shared by all three roles. Their core competencies are adult learning, audio-visual, classroom administration, computers, consulting, evaluation, feedback, group process, instructional strategies, learning resources and strategies, organization, presentation, research, task analysis, use of models, use of materials designed by others, writing, and working with others.

Pike (1994) provides a quite different perspective on the competence of trainers using information from Howell’s (1982) book, *The Empathic Communicator*. According to Howell (1982), we go through four levels of competence: unconscious incompetence, conscious incompetence, conscious competence, and unconscious competence. Pike (1994) provides the following story to help explain the levels:

Howell’s (1982) model starts at the bottom of a stairway with Level 1—

Unconscious Incompetence: We’re not competent, but we don’t know it. Most of us, until the age of 16 or so, were unconsciously incompetent in terms of our ability to drive a car. We thought it would be a breeze to drive because our parents did it so effortlessly. How wrong we were! I’ll never forget my first time behind the wheel. I put the key in the ignition, depressed the clutch, gave the car some gas, put the car in reverse, and let up on the clutch. The car shuddered to a halt. In an instant, I moved to Level 2—

Conscience Incompetence. I was incompetent, and now I knew it. After a lot of practice,



I arrived at Level 3—Conscious Competence. I now could drive the car, but I was always tense about my abilities—or lack of them. It was difficult to relax. Finally I arrived at Level 4—Unconscious Competence. I no longer had to think about everything that drive a car involved because the act had become automatic. (p. 6)

Pike (1994) adds a fifth level to Howell's (1982) model—Conscious Unconscious Competence. According to Pike, at that level, we can not only run on autopilot, but we also can verbalize to others what we are doing, or teach. Many people arrive at Level 4 quickly, but Level 5 is much more difficult to reach. For example, in a college class one time, the professor said something to the class about the traits of a particular profession and one of the learners in the class (who was a member of that profession) told the professor that what he said was correct, but asked how the professor knew it? In other words, the learner asked the professor to explain how he knew what he knew? The professor thought about what the learner asked and then explained the thought process behind the statement he had made.

The ability to know something but not really know how you know it until you have to explain it to others, is the Conscious Unconscious Competence that Pike (1994) suggests trainers need to succeed. As Pike (1994) says, "In some training, Level 4 may be just fine. But enabling people to transfer what they know to someone else without [trainers] continually needing to be the focal point of the learning process is a major target of training" (p. 6).

Training organizations are being downsized, so McCain (1999) approached the roles of the trainer from the perspective of identifying SMEs to teach classes that would have normally been taught by corporate trainers. He developed a decision matrix for selecting trainers based upon management experience; technical and professional experience within the area; depth/breadth of experience within the organization; years of experience in the area and the

organization; depth of content knowledge; degrees in the field; internal reputation/credibility; industry recognition and knowledge; verbal and nonverbal communication and listening skills; professional image; need for structure and direction; and facilitation skills. Of interest, content expertise and facilitation skills comprise only about ten percent of the total points available for selection.

Tobin (2000), in examining how training organizations are changing, has identified five new roles that will help them succeed in the future: developing and delivering training courses and materials, teaching employees to identify their own learning needs, researching and publishing learning guides, coaching employees to identify and use learning resources, and teaching SMEs how to share their knowledge. The first role has already been accepted by most training organizations, but Tobin (2000) suggests that the remaining four are new roles created by the changes in organizations.

To keep pace with changes, ASTD commissioned the *ASTD 2004 Competency Study: Mapping the Future*, which provides a framework for the competencies that workplace learning and performance (WLP) professionals need today and will need in the future (Bernthal et al., 2004). The 2004 ASTD Competency Model includes three layers of knowledge and skill areas: competencies, areas of professional expertise, and roles. The competencies are divided into three clusters: interpersonal, business/management, and personal. Areas of expertise include: career planning and talent management; managing organizational knowledge; coaching; managing the learning function; facilitating organizational change; measuring and evaluating; delivering training; improving human performance, and designing learning.

In contrast to 11 major functional roles identified in the 1987 ASTD competency study (McLagan & Suhadolnik, 1989), the 2004 study identified four major roles for WLP

professionals: learning strategist, business partner, project manager, and professional specialist. According to Bernthal et al. (2004), it's no longer enough to be expert at learning and development theory and implementation. Today's WLP practitioners need to understand their organization's business goals and align learning and development strategies and performance interventions with them" (p. 8)

In *The Shape of Things to Come: Training Careers in the 21<sup>st</sup> Century*, Zielinski (2001) provides a realistic, albeit humorous, description of the type of individual needed to meet the demands of being a trainer in the 21<sup>st</sup> century:

Wanted: World-class multitasker and plate-spinner with proven track record of project management. Must be able to generalize and specialize simultaneously and seamlessly. Ability to recruit, lead, and go ego-to-ego with sometimes superior talent on technology-delivered learning and consulting project teams made up of internal SMEs and external contractors, keeping the whole unwieldy bunch on brutally tight deadlines. Consult credibly with line managers on performance challenges across functional boundaries; understand the difference between profit and cash.

Some experience with authoring, Web-based design, HTML important—in fact, second only to skill at identifying and cultivating affordable cutting-edge expertise in the independent contractor ranks. Should be able to differentiate between metadata and the rock group Megadeth, as well as between reusable learning objects and recyclable flip-chart paper.

Must have ability to construct cost-efficient “hybrid” learning models by deftly mixing and matching strengths of the classroom with synchronous Web-delivered learning, Webcasting, electronic job aids, knowledge databases, CD-ROM, and the like.

Background in instructional-systems design and experience in classroom training nice, but not necessary. Air-traffic controllers, EMTs, and film directors seeking radical career change encouraged to apply. Those hoping to burn some time before retirement by teaching generic communications or supervisory skills in the classroom encouraged to forget about it. (pp. 30-31)

Training adults is rarely a singularly focused profession, and the role of the trainer is hard to define. Rather than having a single function, the trainer is usually submerged in many other roles and responsibilities such as administrator, business partner, consultant, counselor, program developer, project manager, and supervisor (Bernthal et al., 2004; Caffarella, 1988; Darkenwald & Merriam, 1982; Fenwick, 2000; Galbraith & Zelenak, 1989; Tobin, 2000; Zielinski, 2001). Nadler and Nadler (1989) give the most insight into the problem trainers face in relation to this study. They were the only authors who included “preparing to give instruction” as one of the trainer’s roles and believed that “extensive preparation” is needed if the facilitator isn’t already familiar with the subject matter. Nadler and Nadler (1989) went on to suggest that when the facilitator is not also the designer or developer of the program, the facilitator should communicate with the designer and developer to gain a better understanding of the material and access any information that will assist in the development process. How expertise is gained and knowledge is acquired is an important part of being a trainer.

### Gaining Expertise Through Knowledge Acquisition

Trainers, because they no longer have a staff of specialists, are now expected to be multi-talented and are often asked to develop training programs on subjects in which they aren’t already knowledgeable (Bernthal, 2004; Zielinski, 2001). This means trainers must become experts in learning.

While it was difficult to find consensus on the roles and responsibilities of trainers, it was just the opposite when it came to information being shared by educators with expertise in the subject (Brookfield, 1990; Draves, 1984, 2000; Ennis et al., 1989; Galbraith, 1990; Houle, 1984; Knowles, 1970, 1980; Margolis & Bell, 1986; McArdle, 1993; Parish & Necessary, 1996; Spear & Mocker, 1984, 1989; Symonds, 1968; Watson, 1979). Wlodkowski (1993) suggests, “Expertise is the cornerstone of motivating instructors” (p. 17). Expertise for those who instruct adults boils down to three essential parts: (1) they know something beneficial for adults, (2) they know it well, and (3) they are prepared to convey or construct it with adults through an instructional process (Wlodkowski, 1999).

Examples of the need for expertise can be found throughout the literature. Sanford and Yeager (1942) suggested that a speaker “who demonstrates that he is master of his subject, and who, therefore, is an expert, tends to arouse the goodwill and respect of his audience” (p. 31). Symonds (1968) felt that the education of teachers might well follow the Platonic pattern, where the teacher “should be a master of the rules, principles, and theories of that which he expects to teach” (p. 43). Gagné (1970) believes that instructing is at the heart of the educational process and is extremely difficult to do well, and knowledge transfer cannot occur if the knowledge itself has not been initially mastered. “When people take on the role of teacher it implies that they have an adequate knowledge base in whatever content area they are teaching” (Caffarella, 1988, p. 103).

As Pike (1994) suggested, a person can’t teach what he or she hasn’t learned, and you must teach from a prepared life as well as from a prepared lesson. The most effective instructors on any topic generally are those who have experienced what they are teaching. Knowing the subject well enhances the instructor’s confidence, flexibility, and creativity (Wlodkowski, 1999).

The need for expertise in the subject may even be more important in training than it is academically because, as the literature indicate, most teachers of adults are not professional educators, and few have received training in education (Darkenwald & Merriam, 1982; Galbraith & Zelenak, 1989; Senge, 1990; Watkins, 1989). Even teachers of adults employed by educational institutions (adjunct faculty) are usually selected for their specialized knowledge or expertise instead of their ability to instruct (Darkenwald & Merriam, 1982; Symonds, 1968). The 1983 Learning Resources Network survey of adult educators highlighted the emphasis on expertise for adult educators but, at the same time, identified some shortfalls (Hartman, 1984).

At least 65 percent of the respondents held their highest degrees in something other than education. A full 43 percent had not taken a single academic credit course in the field of education. Richmond (1987) found that individuals holding continuing professional education positions had experienced similar lack of training in the field of adult education. Most people received their expertise through on-the-job training (57 percent) while only 12 percent were trained in adult education. (Galbraith & Zelenak, 1989, p. 125)

Hiemstra and Sisco (1990) agree that expertise is important but add that all of the content expertise the instructor might possess is of little use if the instructor isn't skilled at sharing it with others. Trainers then, need to have both content expertise and the ability to facilitate learning (Knowles, 1980, Margolis & Bell, 1986; Watson, 1979), and as Nadler and Nadler (1989) suggest, "When the instructor has only limited experience with the subject matter, extensive preparation is needed" (p. 145).

Wlodkowski (1999) suggested that expertise enhances the instructor's confidence, flexibility, creativity, and ability to respond more openly to questions. Asking the following

questions can help an instructor decide if he or she knows the subject well enough to instruct others.

1. Do I myself understand what I am going to teach? Can I explain it to myself in my own words?
2. Can I give more than one good example of what I am teaching?
3. Can I personally demonstrate the skill (if you are teaching a skill)?
4. Do I know the limits and consequences of what I am teaching?
5. Do I know how to bridge what I am teaching to the world of the learners—their knowledge, experience, interests, and concerns?
6. Do I know what I don't know? Where are the boundaries of my own knowledge and skill? How far am I from the cutting edge of my discipline? (Wlodkowski, 1999, pp. 28-29)

An answer of “no,” or “I don't know” to any of Wlodkowski's questions indicates the need to learn, and thus provides the basis for this study. McTeer (1972) suggested that:

*there are specific motivations involved whenever an individual moves out of or into any specified situation or setting, for self-initiated movement implies motivation.*

Such an activating influence (motivation) would take the individual through a series of settings, in order to achieve a goal or a satisfaction in another setting. (pp. 110-111, emphasis in original)

Much learning is profoundly influenced by the specific situations in which people find themselves (Houle, 1972; Kidd, 1978; Lindeman, 1926; Tough, 1979). As Houle (1980) explained, “People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems” (1980, p. 44). Gagné (1970)

also suggests that the knowledge acquisition process consists of an initial triggering situation, which is followed by four phases: apprehending, acquisition, storage, and retrieval.

Apprehending and acquisition result in learning; storage and retrieval result in remembering and performance.

Whenever someone confronts the situation of having to acquire new knowledge, especially “one with which he or she has no familiarity, there is the problem of where to begin in attempting to learn it” (Candy, 1991, p. 343). According to Soper (1949), Booker T. Washington, the eminent African American adult educator (Moreland & Goldstein, 1985; Peterson, 1996, 2002), told the following story about where to begin when preparing to present.

A ship lost at sea for many days suddenly sighted a friendly vessel. From the mast of the unfortunate vessel was seen the signal: “Water, water; we die of thirst!” The answer from the friendly vessel at once came back: “Cast down your bucket where you are.” A second time the signal, ‘Water, water, send us water!’ ran up from the distressed vessel, and was answered: “Cast down your bucket where you are.” And a third and fourth signal for water was answered: “Cast down your bucket where you are.” The captain of the distressed vessel, at last heeding the injunction, cast down his bucket, and it came up full of fresh, sparkling water from the mouth of the Amazon River. (p. 14)

Where to begin the knowledge acquisition process seems to be an overwhelming task, but the answer is easier than it seems, begin where you are. “Begin with what you are and what you already know” (Soper, 1949, p. 14).

As Washington suggested, the first step in the process of acquiring knowledge is to assess one’s knowledge of the subject (Boyatzis et al., 1995; Grice & Skinner, 1998; Verderber, 1997; Wlodkowski, 1999). This has a two-fold purpose; first, it provides the trainer with the



opportunity to consciously assess how much he or she already knows about the subject. Second, it helps him or her realize how much he or she doesn't know about the subject. These two form the foundation for acquiring the knowledge to develop a training program (Boyatzis et al., 1995; Verderber, 1997; Wlodkowski, 1999).

Knowles (1970) provided a process to help learners diagnose their learning needs, a process that would be useful for trainers in assessing the gaps in any subject: 1) developing a model of desired behaviors or required competencies; 2) assessing the present level of performance in each of the behaviors or competencies; 3) and assessing gaps between the model and the present performance.

Boyatzis et al. (1995), provided a similar process but integrated diagnosis with the knowledge acquisition process suggesting that learning occurs when individuals articulate where they are with regard to a particular characteristic (The Real); and where they would like to be with regard to that same characteristic (The Ideal), and then perceive a discrepancy between the two, which they convert into a goal. Then they translate the goal into a plan to acquire the knowledge. Action and feedback on progress occur, providing an ongoing assessment of the Real and Ideal states, which begins the cycle again. Boyatzis et al. (1995) provided the only example found in the literature of the integration of diagnosis with the knowledge acquisition process, suggesting that once learning needs have been identified, the knowledge acquisition process begins.

Danis (1992) offered the most comprehensive framework for knowledge acquisition. The framework is based the writings of various adult education and self-directed learning scholars. Her process consists of several distinct, but interrelated stages.

1. REACTING TO A TRIGGERING EVENT/SITUATION that becomes the starting point of the learning process (Spear, 1988). GOAL SETTING (Martin, 1984; Zimmerman & Martinez Pons, 1986), if present, is assumed to be less frequent in this particular mode of learning (Danis & Tremblay, 1985; Spear, 1988).
2. SEEKING AND SELECTING the specific knowledge/information to be acquired (Martin, 1984; Zimmerman & Martinez Pons, 1986) and the available sources/resources (Zimmerman & Martinez Pons, 1986).
3. ORGANIZING AND STRUCTURING both the knowledge to be acquired (Zimmerman & Martinez Pons, 1986) and the strategies to be used (Hrimech, 1990). Detailed PRE-PLANNING of the learning process does not seem to correspond to self-regulated learning (Spear & Mocker, 1984; Danis & Tremblay, 1985), even though the learners do seem to proceed with deliberateness (Spear & Mocker, 1984) and purpose (Penland, 1988).
4. ACQUIRING AND INTEGRATING the new knowledge (Smith, 1982; Zimmerman & Martinez Pons, 1986).
5. ASSESSING THE QUALITY of both the learning outcome (Martin, 1984; Brookfield, 1988; Caffarella & O'Donnell, 1988b) and the learning strategies used (Hrimech, 1990). This assessment may be carried out during and after the learning processes (Caffarella & O'Donnell, 1988b), either by the learner (Zimmerman & Martinez Pons, 1986; Caffarella & O'Donnell, 1988b) or with the help of others (for example, peers or experts) (Zimmerman & Martinez Pons, 1986).
6. APPLYING the new knowledge (Baskett, 1986; Jones et al., 1987). (p. 53)

In addition to the adult education literature, HRD and training literature were reviewed, but very few examples of the knowledge acquisition process could be found. Most of the HRD and training literature focuses on planning and presenting training programs by trainers who already possess content expertise; therefore, the only examples were offered to help trainers understand how learners learn. With that assimilation, five steps can be used to consider the learners' needs when developing training (McLagan, 1978). The steps are realizing the need to learn; scanning information and resources; deciding the appropriate information to use; processing the information to gain understanding and knowledge; and consciously applying, or adjusting, the new knowledge to meet real world needs. McLagan's (1978) steps could easily be used by a trainer in pursuit of content expertise.

The only other information on knowledge acquisition was also presented to help trainers understand learners' needs. Tobin's (2000) model offers four stages of learning for knowledge acquisition: absorbing of data, filtering of data that results in information, applying the knowledge learned from the information, and wisdom that is achieved through continuous use of the knowledge in different situations.

Finally, Hambrick (1991) provided the stages people go through during the knowledge acquisition process, which is similar to the stages of change (Schmidt, Kiemle, & Beroine, 1996). Knowledge of these stages could help trainers understand the emotions they may face during the knowledge acquisition process. According to Hambrick (1991), learning something new involves excitement about something new, apprehension and reluctance, an awkward period, beginning to get it, relative comfort—a plateau, a decision to move beyond the first plateau, repetition in milder form of the first four stages, high degree of confidence and feeling of mastery, and recognition of the need for continuous learning.

Interestingly, when Houle (1992) reviewed the adult education literature, he found that most of the research on the processes for acquiring knowledge covered longer-range forms of personal planning and control over the learning experience, which may explain the lack of information on the process trainers use to acquire knowledge. Most programs that trainers develop and present are in response to issues the organization is experiencing; therefore, trainers need to achieve content expertise in a relatively short time, which relates to Houle's (1980) concept of concentrated impact. Regardless of the duration of the knowledge acquisition process, it begins with the trainer deciding what he/she needs to learn, whether he or she will plan the learning him- or herself, and the resources to be used in the process. If the trainer decides to plan the learning personally, then he or she is "responsible for countless detailed decisions and arrangements" (Tough, 1979, p. 5).

### Self-directed Learning

A. Lawrence Lowell, former president of Harvard University, said,

There is only one thing which will really train the human mind, and this is the voluntary use of the mind by the man himself. You may aid him, you may guide him, you may suggest to him, and above all, you may inspire him; but the only thing worth having is that which he gets by his own exertions; and what he gets is proportionate to the effort he puts into it. (Reilly, 1952, p. 89)

Lowell's comments reflect the essence of self-directed learning. Before education became formal, self-education was commonly used to adapt to life's situations. As "Plato and Aristotle believed, man, whatever else he may be, is primarily a practical being, whose mind is given him to aid in adapting him to this world's life" (Symonds, 1968, p. 38).

The concept of self-directed learning has a long and rich history (Candy, 1991; Merriam & Caffarella, 1991; Merriam & Brockett, 1997). It has been an important tool in the lives of scholars throughout history. Kulich (1970), for instance, provides examples of self-directed learning in such historical figures as Socrates, Alexander the Great, Caesar, and Descartes (Merriam & Brockett, 1997).

Self-directed learning is also deeply imbedded in the history of America. Long (1991) believed that the social conditions of colonial America, combined with a lack of formal educational institutions, led many persons to learn on their own. Many examples of accomplished self-educated people are detailed in Jarvis' (2001b) *Twentieth Century Thinkers in Adult and Continuing Education Movement*, Moreland and Goldstein's (1985) *Pioneers in Adult Education* and Long's (1991) *Early Innovators in Adult Education*, and Peterson's (1996) *Freedom Road: Adult Education of African Americans*. Each of the people discussed in these books, from Benjamin Franklin (Grattan, 1955; Kett, 1994; Long, 1991; Moreland & Goldstein, 1985; Stubblefield & Keane, 1994) to Robert M. Hutchins (Jarvis 2001b, Long, 1991, Moreland & Goldstein, 1985) were self-directed learners.

According to Grattan (1955), Benjamin Franklin was an excellent example of the self-educated intellectual. He established the Junto, created opportunities for the self-education of others, and started libraries. Grattan went on to say the founding fathers were also personally distinguished by a high capacity for continuing self-education, stating that self-education was "by far the best form of adult education" (pp. 144-145). Elias and Merriam (1995) noted that Thomas Jefferson also stressed "the importance of self-education" (p. 18).

Sequoyah and Booker T. Washington are two other examples of dedicated self-directed learners. Sequoyah noticed that the white man read from books, which he called talking leaves,

and created something similar for his people. He developed a method for writing Cherokee that was so efficient that it could be learned in the span of three to four days (Moreland & Goldstein, 1985). Booker T. Washington was another adult educator who saw the need to help his people learn. He created the “Movable School” to provide the African Americans with a way to learn outside the classroom (Moreland & Goldstein, 1985; Potts, 1996).

Elizabeth Peterson (1996, 2002) provided further insight into the history of adult education by highlighting the contributions of other African American intellectuals who influenced the development of adult education. Everyone discussed in her book could be considered a self-directed learner, and each spoke of what it was like to become educated in a society that didn’t allow blacks that opportunity. The words of Marcus Garvey in 1918 emphasized the significance of self-education to African Americans when he asserted, “only by doing for self could the race be successful” (Colin, 1996, p. 45). Since very few African Americans at the time had access to education, they had to be self-directing if they wanted an education. Peterson (1996) emphasized this in the opening of her book by stating:

Few people who were not right in the midst of the scenes can form an exact idea of the intense desire which the people of my race showed for an education...Few were too young, and none too old, to make the attempt to learn...African Americans truly believed that education was the road to freedom (p. 1).

In 1830, Craik’s *Pursuit of Knowledge Under Difficulties* focused on the self-directed learning behaviors of many people. “Craik’s volume consisted of hundreds of biographical sketches of individuals who were persistent in their quest for literary and/or scientific knowledge despite discouraging circumstances” (Kett, 1994, p. 86). Through a variety of examples, Craik demonstrated the practicability of self-directed learning, the most effective methods for self-

instruction, and the potency of a determined self-directed learner in overcoming barriers to learning (Brockett & Hiemstra, 1991). Bates (1866) also spoke of self-education in his *Lectures on Mental and Moral Cultures*, saying, “The nation is filled with successful, practical men who outstripped learned men in government and business and whose education consisted mainly of learning from experience” (cited in Kett, 1994, pp. 83-84).

The pioneers of adult education in America gave insight into self-directed learning in the literature. The first appearance of self-directed learning in conjunction with adult learning appeared in Eduard Lindeman’s (1926) *The Meaning of Adult Education* (Brookfield, 1984; Hiemstra, 2002; Knowles, 1970). Lindeman wrote:

The approach to adult education will be via the route of *situations*, not subjects.... Every adult person finds himself in specific situations with respect to his work, his recreation, his family life, his community-life, et cetera—situations which call for adjustments. Adult education begins at this point. Subject matter is brought into the situation [and] put to work, when needed (pp. 6-9, emphasis in original).... Since environments are never static, new situations are forever arising, and each new situation confronted makes fresh demands upon intelligence (pp. 25-26).

Toffler (1970) shared Lindeman’s belief that situations drove the need for learning but from a more modern perspective. He said that “the massive injection of speed and novelty into the fabric of society will force us to cope at a progressively faster rate with situations that are, for us, decidedly unfamiliar, ‘first-time’ situations, strange, irregular, and unpredictable” (p. 217).

Knowles (1980) also wrote about situations driving the need to learn:

Adults tend to have a perspective of immediacy of application toward most of their learning. They engage in learning largely in response to pressures they feel from their current life situations. To adults, education is a process of improving their ability to cope with life problems they face now. They tend, therefore, to enter an educational activity in a problem-centered or performance-centered frame of mind. (p. 53)

Referring to examples of self-directed learning in more contemporary times, “a study by Gibbons and others (1980), using a content analysis of their biographies, described the self-directed learning efforts of Frank Lloyd Wright, Amelia Earhart, Harry Truman, and Malcolm X” (Merriam & Brockett, 1997, p. 138). Each of these individuals made important contributions to their field of expertise despite a lack of formal training beyond high school.

Although self-directed learning has always been the primary mode of learning through the ages, systematic studies of the subject did not occur until the later half of the twentieth century (Brookfield, 1984; Caffarella & O’Donnell, 1988a; Caffarella & Merriam, 2000; Tough, 1971). Houle (1961) is credited with starting the serious study of self-direction in adult learning with the publication of his book *The Inquiring Mind* (Candy, 1991, 1992; Merriam & Brockett, 1997; Merriam & Caffarella, 1991). In the book, Houle (1961) spoke of self-education, or being self-taught, and explored the question of the nature of the learning orientations of adults. He presented the results of a study he conducted with 22 adult learners from which he developed a typology of learning orientations. He summarized that people are generally goal-oriented, activity-oriented, or learning-oriented learners.

Goal-oriented learners are those who use education as a means of accomplishing fairly clear-cut objectives; their continuing education begins with the realization of a need or the



identification of an interest (Houle, 1961). Activity-oriented learners “are those who take part because they find in the circumstances of learning a meaning which has no necessary connection, and often no connection at all, with the content or the announced purpose of the activity” (Houle, 1993, pp. 15-16). The learning-oriented learner most typifies the self-directed learner. Learning-oriented learners are those who “seek knowledge for its own sake” (Houle, 1993, p. 16).

Griffith (2001), in commenting upon the significance of Houle’s work, wrote, “Houle’s students have refined the typology to eight major orientations, but it is fair to say that there have been no conceptual advances made in the approach to orientations since Houle proposed his framework” (p. 133). Malcolm Knowles (1994), who was one of Houle’s graduate students said that “Houle served as a role model for all of us in adult education... and the improvement in our literature is at least in part a reflection of his influence” (cited in Griffith, 2001, p. 139). Long states that Houle’s “brief report of 87 pages has stimulated a volume of work at least to the tenth power of the original” (Houle, 1993, p. v).

Bergevin et al. (1963) discussed the need for “all persons participating in adult education to learn something about their responsibilities as learners, *to learn how to learn* in a cooperative and mutually supportive manner, identify needs, and plan and conduct their own learning activities” (p. 6, emphasis in original). They called this “active participation” and said it takes place when a participant takes the role of leader, resource person, or group participant.

Verner (1964) suggested “research into self-direction might be a fruitful area of investigation for adult educators” (p. 31). Johnstone and Rivera (1965) released their seminal work *Volunteers for Learning*, that provided the results of their national survey on adult learning in which they found that an estimated nine million adults were active in learning on their own

and that self-instruction was probably the most overlooked avenue of activity in the field of adult education (Brockett & Hiemstra, 1991; Candy, 1991; Cross, 1981). Rogers (1969) conveyed, “If we are to have citizens who can live effectively in this kaleidoscopically changing world, we must be willing for them to become self-starting, self-initiating learners” (p. 126).

Rogers also spoke of the concept of self-directedness in his view of learning, saying

*It has a quality of personal involvement*—the whole person in both his feeling and cognitive aspects being *in* the event. *It is self-initiated*. Even when the impetus of stimulus comes from the outside, the sense of discovery, of reaching out, of grasping and comprehending, come from within. *It is pervasive*. It makes a difference in the behavior, attitudes, perhaps even the personality of the learner. *It is evaluated by the learner*. He knows whether it is meeting his need, whether it leads toward what he *wants* to know, whether it illuminates the dark area of ignorance he is experiencing. The locus of evaluation, we might say, resides definitely in the learner. *Its essence is meaning*. When such learning takes place, the element of meaning to the learner is built into the whole experience. (p. 5, emphasis in original)

It is Allen Tough (1971), one of Houle’s graduate students, who is credited with having “sparked the revolution” and “whose contributions... can hardly be overestimated who has been one of the mainstays in the field” (Candy, 1991, p. 25). He provided the first comprehensive description of self-directed learning as a form of study, including the key elements of self-directed learning (Merriam & Caffarella, 1999). His *Adult’s Learning Projects* (1971) based on the findings of several studies he conducted in Ontario, Canada, looked at the frequency and nature of self-planned learning activities among a sample of sixty-six adults (Merriam & Brockett, 1997) and “clearly established self-directed learning as a major adult learning mode

and loosed a stream of interest that was to become a flood of popular research productivity” (Spear, 1992, p. 122). As Candy (1991) stated, “Tough’s work has managed to inspire generations of graduate students and there are now hundreds of masters’ and doctoral theses and dissertations, journal articles, research reports, and conference papers on various aspects of self-directed learning” (pp. 25-26).

Tough (1971) found that learners prefer to assume considerable responsibility for planning and directing their learning activities if given the choice. He described self-directed learning as self-teaching or self-planned learning, but as his work progressed, he described it in terms of learning projects. A learning project was “a series of related episodes, adding up to at least seven hours. In each episode, more than half of the person’s total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself” (Tough, 1979, p. 6). Tough (1979) also found that it was common for some people to spend 700 hours a year at learning projects, with some spending less than 100 hours and others spending more than 2,000 hours.

The motivation behind the learning projects included the need to make a good decision; to make something; to do something related to job, home, family, sport, or hobby; or for curiosity or enjoyment. A smaller number of learning projects were motivated by the need to complete a certificate or degree program. The emphasis for all learning projects was on the anticipated use or application of what was learned (Tough, 1971).

Even though Tough (1971) discovered that about 70% of all learning projects are planned and carried out by the learner, that doesn’t mean that they learn in isolation. He said that most self-planned learning involves more human interaction than does a classroom learning experience. The learner seeks help and subject matter from a variety of acquaintances, experts,

and printed resources. He found that the average adult learner received information, advice, encouragement, and other help from ten people; no one got help from fewer than four persons (Cross, 1981).

“The major finding of Tough’s study was that over two-thirds of all learning activities were planned, implemented, and evaluated primarily by the learners themselves” (Merriam & Brockett, 1997, p. 138). Cross (1981) even concluded, “there is sufficiently high agreement to draw the conclusion that... participation in self-directed learning is almost universal. Studies report that from 79 percent (Penland, 1977) to 100 percent (Coolican, 1974, 1975) of all adults conduct at least one learning project each year” (p. 63).

In a review of Tough’s work, Kasworm (1992) said that his work was the “touchstone,” and the basis for characterizing the understanding of self-directed learning. “Tough’s pioneering research provided the language, the concepts, and most importantly the descriptive terms for key elements and processes of self-planned learning.” (p. 56). Houle (1993) agrees with Kasworm. In the afterword of the third edition of *The Inquiring Mind*, he identified Allen Tough as the most prominent investigator of self-directed learning in the field of adult education.

After Tough’s (1971) work, Knowles (1973) turned his own attention to self-education. He used the term “self-directed learning” for the first time and provided a list of the skills necessary for self-directed learning. The skills consisted of the ability to develop and be in touch with curiosity; to perceive one’s self objectively and accept feedback; to diagnose one’s learning needs in regard to performing life roles; to formulate learning objectives; to identify human, material, and experiential resources; to design a plan of strategies for making use of appropriate learning resources; to carry out a learning plan systematically and sequentially; and to validate the achievement of learning objectives.

In 1975, Knowles published *Self-directed Learning: A Guide for Learners and Teachers*, which provided the assumptions and definitions that guided much subsequent research on self-directed learning (Hiemstra, 1994). Knowles' (1975) suggested that self-directed learning was “survival...survival as an individual.... It's basic human competence—the ability to learn on one's own—that has become a prerequisite for living” (pp. 16-17).

Knowles (1975), in discussing individuals who developed self-directed learning skills, said that these individuals take the initiative in learning, learn more things, and learn better than reactive learners. He also suggested that taking the initiative in learning is more in tune with the natural processes of psychological development; and that many recent developments in education, i.e., distance education programs, online classes, and nontraditional study programs, put a heavy responsibility on learners taking the initiative in their own learning.

Other adult educators and authors have shared Knowles' (1975) belief that individuals take the initiative for their own learning. Septima Poinsette Clark spoke of it in her 1975 annual Christmas message when she said, “The greatest evil in our country today is not racism but ignorance. I believe unconditionally in the ability of people to respond when they are told the truth. We need to be taught to study rather than to believe, to inquire rather than affirm” (Easter, 2002, p. 115). Guglielmino and Guglielmino (1988) reinforced the need for learning how to learn and development of self-directed learning skills by saying:

In a world where change is a constant, self-directed learning is a necessity. This is especially true in business and industry, where profitability depends on maintaining productivity and preventing obsolescence. As John Naisbitt toured the country giving speeches after the release of *Megatrends* (1982), he was often asked what subject areas one should study to insure successful employment in the Information Age.... [He said

that] in a world that is constantly changing, there is no one subject or set of subjects that will serve you for the foreseeable future, let alone for the rest of your life. The most important skill to acquire now is learning how to learn. (p. 125)

As part of his 1975 work, Knowles provided several tools for acquiring knowledge, including a self-assessment exercise and a list of the competencies necessary for the successful completion of a self-directed learning project. Meyer (2002) used Knowles' (1975) competencies, as the basis for her online self-assessment questionnaire, *Is Online Learning for You?* She posted the questionnaire on the college web page to assist learners in deciding whether or not they should take an online class. According to K. Meyer (personal interview, March 18, 2004), many colleges have used the questionnaire to help their students determine if they have the skills needed to succeed in online classes.

Knowles (1980) expanded upon his assumptions about self-directed learning, further emphasizing the concept of self-directedness instead of merely speaking about the self-directed human being, and presented them in opposition to the assumptions of pedagogy. Of particular interest was how Knowles (1968, 1970, 1980; Knowles & Associates, 1984) changed his views of andragogy over the years and how the titles of the books reflected his changing views (Jarvis, 2001a).

1968: *Androgogy, Not Pedagogy!*

Knowles (1990) later admitted to misspelling andragogy (p. 51). He claimed that adult education had been hamstrung by the concepts and methods of the traditional education of children.

1970: *The Modern Practice of Adult Education: Andragogy versus Pedagogy*.

Suggested that there are two opposing fields: andragogy and pedagogy.

Andragogy is the art and science of helping adults learn, and pedagogy is the art and science of teaching children.

1980: *The Modern Practice of Adult Education: From Pedagogy to Andragogy*.

Suggested some pedagogical assumptions are realistic for adults and some andragogical assumptions are realistic for children in some situations.

1984: *Andragogy in Action*.

Shifted his position so the child – adult dichotomy was less significant and stated that pedagogy is a content model; whereas, andragogy is a process model in the design and operation of educational programming.

In the conclusion of his chapter on Knowles, Jarvis (2001a) explained these changes [in Knowles view on andragogy] in the following manner:

A frequent criticism of Knowles' writing is that he never sought to fully develop his ideas and that he tended to be descriptive rather than analytical or critical... However, the frequent exposition of his position led to profound debates within the field of study of adult education, which have resulted in an enriched academic understanding of the process of the education of adults. When a debate convinced him that elements of his position were untenable, then with characteristic openness and honesty he always responded by changing his position, although never changing his value system. This openness and humanity characterize both his writing and his person...

As a teacher, writer and leader in the field, Knowles has been an innovator, responding to the needs of the field as he perceived them and, as such, he has been a key

figure in the growth and practice of adult education throughout the Western world this century. Yet above all, it would be perhaps fair to say that both his theory and practice have embodied his own value system and that was contained within his formulations of andragogy. (pp. 156-157)

Lindeman (1926), Houle (1961), Tough (1971), and Knowles (1975) provided the basis for the volumes of literature on self-directed learning that would follow. Two areas in the literature have been the source of continuing discussions over the years. The first is the different definitions that have been given to self-directed learning. The other is whether or not self-directed learners follow a linear process when they undertake a learning project.

There have been myriad definitions for self-directed learning over the years. In *What's in a Name? The Language of Self-Directed Learning*, Gerstner (1992) listed 13 different authors' definitions. It has been recognized as an instructional method, a personality attribute of the learner, and as a process for learning. To further confuse the issue, self-directed learning has been given numerous labels throughout the literature, including "self-planned learning," "inquiry method," "independent learning," "self-education," "self-instruction," "self-directedness," "self-directed in learning," "self-teaching," "self-study," "autonomous learning," "individualized instruction," "student-centered learning," "prescriptive learning," and even "computer-based training" (Gerstner, 1992; Knowles, 1975; LeJuene, 2001; Piskurich, 1993a).

Bonham (1991) said that, "While there are many definitions of self-directed learning, the most useful are the ones that deal with the circumstances of learning" (p. 53). Brockett and Hiemstra (1991) suggested that individuals' views of self-directed learning have changed over time; therefore, when considering definitions, it is not only necessary to understand who has offered a particular definition, but when it was offered. Based upon Brockett and Hiemstra's



(1991) recommendation, this review will look at the definitions of self-directed learning as they have evolved in the adult education literature over the years.

Houle (1961) never really used the term self-directed learning; instead, it was his typology of the learning-oriented learner who displayed the characteristics of the self-directed learner. Rogers (1969), like Houle, didn't use the label self-directed learning but talked instead about significant, meaningful, and experiential learning.

Some of the most prominent definitions discussed in the literature started appearing after the release of Houle (1961), Rogers (1969), and Tough's (1971) work, but their influence can be seen in the definitions of those who followed. Knowles (1975), who actually used the term, was the first to provide a definition for self-directed learning. He defined self-directed learning as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p.18). Knowles (1975), like Tough (1971) stressed that self-directed learning is not an isolated process and that it usually takes place in association with various kinds of helpers, such as teachers, tutors, mentors, resource people, and peers.

Guglielmino (1977) provided a definition based upon outcome in her doctoral research into self-directedness. Her study indicated that a highly self-directed learner:

...is one who exhibits initiative, independence, and persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenges, not obstacles; one who is capable of self-discipline and has a high degree of curiosity; one who has a strong desire to learn or change and self-confident; one who is able to use basic study skills, organize his or her time and set an appropriate pace for learning, and to

develop a plan for completing work; one who enjoys learning and has a tendency to be goal-oriented. (p. 73)

Houle (1980) provided a definition for self-directed learning as it relates to continuing professional education but labeled it self-directed study. He said, “When an individual or a group identifies a learning goal and sets out to achieve it by independent study, using any resources available, self-directed study occurs” (p. 211). Cross (1981), defined self-directed learning as “deliberate learning in which the person’s primary intention is to ‘gain certain definite knowledge or skills’” (pp. 186-187). More important than her definition was that she recognized that formal learning constitutes only a small portion of most adult learning.

Mocker and Spear (1982) provided a different approach in defining self-directed learning, saying it is “characterized by a process in which the learner has control over both the goals and the means for learning” (p. 4). Spear (1988) added that the definition “doesn’t mean that the reasons for learning must be controlled by the learner, but it does mean that once the decision is made to learn something that the learner controls what will be learned and how it will be learned” (pp. 199-200). Bonham’s (1991) definition was very similar to Mocker and Spear’s, but she defined it from the learner’s perspective. She said, “When persons choose their own learning goals, their own learning methods, and the content and process resources they will use, they are being self-directed learners” (p. 53).

Brookfield (1988) never really provided a definition for self-directed learning, but he did suggest that:

...any act of self-directed learning must be seen as a complex configuration of differing domains, forms, and methods: Most efforts we undertake to explore an area of knowledge, to acquire certain skills, to become more insightful, involve us in a

complicated and dynamic interconnection of reflection, action, individually planned activities, self-directed decision, decisions arrived at collaboratively, decisions imposed upon us from without and so on. (p. 17)

Candy (1991) provided another model that has increased the understanding of self-directed learning. He distinguished between the method of self-directed learning and the goal of self-directed learning. He further divided self-direction into two domains: learner control, in which even though the learner maintains primary ownership of the learning, there is still some teacher control, even if it is only in the learner's mind; and autodidaxy, in which the learner may not even be conscious that he or she is learning. Candy's (1991) view was based upon a critical analysis of the term 'self-direction' through a review of literature and synthesis of research findings.

...the term self-direction actually embraces dimensions of process and product, and that it refers to four distinct (but related) phenomena: "self-direction" as a personal attribute (personal autonomy); "self-direction" as the willingness and capacity to conduct one's own education (self-management); "self-direction" as a mode of organizing instruction in formal settings (learner control); "self-direction" as the individual, noninstitutional pursuit of learning opportunities in the "natural societal setting" (autodidaxy). (pp. 22-23)

Brockett and Hiemstra (1991) shared how their view of self-directed learning has changed over the years. Their earlier thinking about the concept provided two definitions.

Self-planned learning – a learning activity that is self-directed, self-initiated, and frequently carried out alone (Hiemstra, 1976a, p. 39).

Broadly defined, self-directed learning refers to activities where primary responsibility for planning, carrying out, and evaluating a learning endeavor is assumed by the individual learner (Brockett, 1983b, p. 16). (p. 138)

They went on to say that it was their belief that they needed to move away from the term self-directed learning and adopt the term self-direction in learning. In their view, self-direction in learning refers to two distinct but related dimensions. The first of these dimensions was a process in which a learner assumes primary responsibility for planning, implementing, and evaluating the learning process. The second dimension referred to learner self-direction and centers on the learner's desire or preference for assuming responsibility for learning. They also provided their Personal Responsibility Orientation (PRO) model, which distinguished between instruction method processes (self-directed learning) and personality characteristics (learner self-direction) (Brockett & Hiemstra, 1991).

Pilling-Cormick (1996) limited the definition of self-directed learning to the processes when she defined it as:

...a process where students have the opportunity to play an active role in developing a system of meanings to interpret events, ideas or circumstances. They determine their priorities; choose methods, and various available resources to carry out the learning. This process reflects both characteristics of the learning and facilitating processes and the influence of control. (p. 10)

Because this research considers the knowledge acquisition process used by trainers, a search was done to find a definition for self-directed learning in the HRD and training literature. Piskurich (1993a) defined self-directed learning for the HRD field as “a training design in which trainees work at their own pace, without the aid of an instructor, to master predetermined

material” (1993a, p. 22.2). He said that self-directed learning covers a range of activities, from reading a book to multimedia programs, and that it occurs in learning centers, on the job, after work, at the local YMCA, and “even in the classroom, though the last is usually an unintentional occurrence” (Piskurich, 1993a, p. 22.2).

Noe (1999) suggested, “self-directed learning involves having employees take responsibility for all aspects of learning—when it is conducted and who will be involved” (p. 168). Probably more important for members of the HRD field was Noe’s (1999) prediction that self-directed learning is likely to become more common in the future as companies seek to train staff flexibly, take advantage of technology, and encourage employees to be proactive in their learning rather than driven by the employer. This appears to be coming true as more and more employers are downsizing their training departments and increasing the use of computer-based training programs.

Long (2004) also provided a definition of self-directed learning applicable to the HRD field. He reports:

Self-directed learning is a purposive mental process, usually accompanied and supported by behavioral activities involved in the identification and searching out of information. The learner consciously accepts the responsibility to make decisions about goals and effort, and is, hence, one's own learning change agent. (p. 1)

*All Learning is Self-Directed* (Tobin, 2000) provided another description of self-directed learning from a training perspective. In it, Tobin asserts that self-directed learning suggests:

...you are deciding for yourself what you will learn and how you will learn it.

You are directing your own learning activities. You are in charge. No one tells you what you must learn or decides which method is the best one for you to use. No one dictates

when and where you must be in class. No one decides what is important for you to learn or what is not important... (pp. 12-13)

Merriam and Caffarella (1999) suggested that self-directed learning refers to “a form of study in which the learner chooses to assume the primary responsibility for planning, carrying out, and evaluating their own learning experiences” (p. 293). Brockett and Hiemstra (1991) believed that definitions need to be viewed in terms of “who” and “when,” “to see how they have changed over time” (p. 27). Merriam and Caffarella’s (1999) definition has remained consistent with their 1991 definition, both in wording and over time. Time is also an issue when you compare Merriam and Caffarella’s 1999 definition with Knowles’ 1975 definition. Even though almost 25 years separate the two and thousands of pages of research have been written, the basics of self-directed learning haven’t changed and can be seen in both.

Given the various definitions of different authors, a concise, universally accepted definition of self-directed learning continues to be elusive (Gerstner, 1992). However, they all include the personality of the learner, the circumstances that present both the learning opportunity and those that occur throughout the process, the control of the what and the how something is learned, and most importantly, the learner’s own evaluation of the outcome.

The differing definitions of self-directed learning provide insight into one of the controversies over self-directed learning. A second controversy has been over whether or not learners follow a linear process as they pursue their learning projects. In the first edition of *Learning in Adulthood*, Merriam and Caffarella (1991) said the process of self-directed learning is, in part, a linear process (Knowles, 1975; Tough, 1979) and, in addition, what they labeled as “alternative descriptions of the process” (Berger, 1990; Danis & Tremblay, 1988; Mocker & Spear, 1982; Spear & Mocker, 1984; Spear, 1988). However, in their second edition of *Learning*

*in Adulthood* (1999), they changed from linear and alternative processes of self-directed learning to discuss the three types of models in the literature: linear, interactive, and instructional. Given the purpose of this study, this review will focus on the linear and interactive processes.

The earlier models of self-directed learning described it as a linear process, which was defined as a deliberate, well-planned, and step-by-step series of episodes that indicate a linear pattern (Merriam & Caffarella, 1992). Tough (1971, 1979) presented a 13-step process, and Knowles (1975) provided five steps for his process. This was probably because their work in the earlier years was written based upon their teaching backgrounds. Tough (1971) continued the work of Houle (1961) for his dissertation, which was written on “self-teaching,” and Knowles’ (1975) emphasis was on andragogy, “the art and science of helping adults learn” (p. 19).

Tough’s (1971, 1979) 13 steps are key decision points for choosing what, where and how to learn. The 13 steps are 1) deciding what detailed knowledge and skill to learn; 2) deciding the activities, materials, resources, and equipment for learning; 3) deciding where to learn; 4) setting specific deadlines or intermediate goals; 5) deciding when to learn; 6) deciding the pace at which to proceed during a learning episode; 7) estimating the current level of one’s knowledge and skill or one’s progress in gaining the desired knowledge and skill; 8) detecting any blocks and inefficiencies that hinder learning; 9) obtaining or reaching desired resources or equipment; 10) preparing a room or other physical conditions for learning; 11) obtaining the money necessary; 12) finding time for learning; and 13) increasing motivation and dealing with motivational blocks.

Knowles (1975) presents a process very similar to Tough’s (1979). The steps are diagnosing the learning need; formulating learning goals; identifying human and material resources; choosing and implementing a learning strategy; and evaluating the learning outcomes.

In reviewing the Tough (1971, 1979) and Knowles' (1975) steps, they appear to emulate the program planning process used by teachers, corporate planners, or program managers more than a process used by learners. They follow the pattern of a traditional problem-solving process model, which consists of identifying the problem, gathering data about the problem, determining possible solutions/plans, identifying resources, developing a plan, developing an alternative plan, implementing the solution/plan, and evaluating the plan through follow-up (Virga, 1987).

Tough (1979) and Knowles' (1975) work may have been very linear, but they laid the foundation for the research that followed, which resulted in alternative explanations of the processes learners use to acquire knowledge. Self-directed learning models developed in the 1980s and 1990s are less linear and more interactive (Merriam, 2001b). According to Merriam and Caffarella (1999), the alternative or interactive models are so labeled because they emphasize two or more factors (environment, personality, cognitive processes, and the context of the learning situation), which collectively interact to create the self-directed learning process.

Mocker and Spear (1982) were the first to provide an alternative explanation of the self-directed learning process. They created a 2 X 2 matrix (Figure 2.1), based on learner versus institutional control over the objectives (purposes) and means (processes) of learning.

		WHAT	
		Institution	Learner
HOW	Institution	Formal	NonFormal
	Learner	Informal	Self-Directed

Figure 2.1: Mocker and Spear's 2 X 2 Matrix



Mocker and Spear (1982) identify four categories comprising lifelong learning:

1. FORMAL, where "learners have no control over the objectives or means of their learning;"
2. NONFORMAL, where "learners control the objectives but not the means;"
3. INFORMAL, where "learners control the means but not the objectives;" and
4. SELF-DIRECTED, where "learners control both the objectives and the means" (p. 4).

Merriam and Caffarella (1999) speak about these same four categories; however, they label them as settings or contexts, and they combine informal and self-directed learning as a hybrid. Marsick and Watkins (2001) also view self-directed learning as informal learning, stating that it is "usually intentional, but not highly structured" (p. 25).

Mocker and Spear's 1982 work led to *The Organizing Circumstance: Environmental Determinants in Self-Directed Learning* (Spear & Mocker, 1984), for which they conducted a study of seventy-eight adults with less than a high school education and addressed the situation that triggers or precedes the act of engaging in self-directed learning. They argue that it is the individual's response to the environment and life experiences that sets the stage for self-directed learning to occur (Smith, 2004; West, 1992). They found that self-directed learners, rather than preplanning their learning projects, tend to select a course from limited alternatives, which happen to occur in their environment (Smith, 2004; West, 1992). They called this the "Organizing Circumstance," and explained it as the triggering event for a learning project that stems from a change in life circumstances; the changed circumstance provides an opportunity for learning; the structure, method, resources, and conditions for learning are directed by the circumstances; and learning sequences progress as the circumstances created in one episode become the circumstances for the next logical step (Spear & Mocker, 1984).

Spear and Mocker's (1984) research also found that four major patterns established categories related to the circumstances affecting the learning process. The categories are as follows:

#### Type I – Single Event/Anticipated Learning

This category refers to situations where an adult enters into a learning activity perceived to be required, where he or she has little understanding of what needs to be learned or how to learn it. The learner, thus, enters with the expectation that the "means for learning will be contained within the situation and available to them" (Spear & Mocker, 1984, p. 5).

#### Type II—Single Event/Unanticipated Learning

This category is similar to the Type I category in that tasks are performed by individuals on a frequent and repeated basis. However, within this category, individuals do not view themselves as engaged in a learning process.

#### Type III – Series of Events/Related Learning

Some self-directed learning projects are a series of episodes that, on the surface, seem to be a linear progression toward a future goal. In actuality, the series of events build upon previous events. However, this progression is not deliberate on the part of the learner. In fact, such learners are usually unable to foresee the "logical" progression from episode to episode.

#### Type IV – Series of Events/Unrelated Learning

These situations develop over a longer period than Type III situations but are the accumulation of various unrelated learning experiences. According to Spear and Mocker (1984), this category "is both a cumulative and culminating circumstance uniting previously unrelated sets or series of circumstances" (p. 7).

Spear and Mocker (1984) concluded that:

Because self-directed learning occurs in a natural environment dominated by chance elements and is in contrast to the artificial and controlled elements, which characterize formal instructional environments, it seems useful to investigate the possibly differing effects of the natural environments on the learning process. This is opposed to seeking to understand self-directed learning by imposing what is known about formal learning upon it. (p. 9)

According to Brockett and Hiemstra (1991), the issues Spear and Mocker (1984) raised challenged the linear view presented by Tough (1971) and Knowles (1975), providing valuable directions for future inquiry. Spear (1988) continued his work with *Beyond the Organizing Circumstance: A Search for Methodology for the Study of Self-Directed Learning*, Spear studied ten training and development personnel from the viewpoint of Bandura's (1977) social learning theory and focused on three areas: knowledge, action, and environment. The research further suggested seven elements for analyzing self-directed learning using social learning theory:

#### Knowledge

1. Residual knowledge K(r): knowledge the learner brings to the project as a residue from prior knowledge
2. Acquired knowledge K(a): knowledge acquired as part of the learning project

#### Action

1. Directed action A(d): action directed toward a known or specific end
2. Exploratory action A(e): action that the learner chooses without knowing what the outcomes may be or with certainty that any useful outcome will ensue

3. Fortuitous action A(f): action that the learner takes for reasons not related to the learning project

#### Environment

1. Consistent environment E(c): includes both human and material elements that are regularly in place and generally accessible
2. Fortuitous environment E(f): provided for chance encounters that could not be expected or foreseen and yet affect the learner and the project (Spear, 1988, pp. 212-213).

Spear (1988) concluded from the analysis that self-directed learning projects tend to happen in clusters more often than in a linear model and that something happening in one cluster may not have any meaning at all when it is experienced but may gain meaning when something happens in another cluster.

Further, Danis and Tremblay (1988) conducted a study of ten long-time, self-taught, adult learners. The average time spent on learning projects by the participants was 14.9 years; all were socially recognized as experts in their field of learning; all had less than fifteen years of formal schooling (average of 11.9 years); and none had acquired the corresponding knowledge in school or at work. They concluded that the literature on the learning process indicated that each learning activity follows specific steps in a sequential and uni-directional order; however, their study indicated that although the participants followed qualitatively different steps, they did not seem to occur in any “regular, linear order” (Danis & Tremblay, 1988, p. 178).

Berger (1990) found further evidence of the lack of a preplanning process in self-directed learning when she studied 20 Caucasian males without formal degrees for her dissertation: *A Qualitative Study of the Process of Self-Directed Learning*. She found that they constantly

redefined their projects, changed course, and followed new paths of interest as they proceeded (Merriam & Caffarella, 1999, p. 297).

Cavaliere (1990) provided an interactive model from an interesting research perspective. She did a case study of the Wright Brother's pursuit of flight, saying that, "in spirit of the belief of flight was possible, the Wright Brothers planned, developed and completed one of the most vivid examples of a self-planned, self-directed adult learning project" (p. 221). According to Cavaliere, it met the definitive variables that characterized it as a learning project because it was a highly deliberate effort to gain knowledge and skill; included affective changes as well as the development of cognitive and psychomotor skills; the goals, learning decisions, location and use of resources, rate of progress and method of evaluation were determined by the learner(s); and there was no affiliation or assistance from a formal education system or institution.

Cavaliere (1990) identified five specific stages of the Wright Brothers' learning project: inquiring, modeling, experimenting and practicing, theorizing, and perfecting and actualizing. Within each stage, four cognitive processes repeat: goal setting, focusing, persevering, and reformulation. Throughout her research, Cavaliere (1990) cites Spear and Mocker's (1984), i.e., triggering event, organizing circumstance, structured from limited resources, and non-linear pattern of behavior and then provides examples of what the Wright Brothers did to demonstrate the principles.

Brockett and Hiemstra (1991) provided both an interactive model and a conceptual framework for understanding self-direction in adult learning with their PRO. Self-direction in learning is a term they said comprised both instructional method processes (self-directed learning) and personality characteristics of the learner (learner self-direction). The PRO model was based on the idea that individuals are responsible for their own learning experiences.

Brockett and Hiemstra (1991) stressed the importance of understanding the social context and situational factors in which the learning takes place. Danis (1992) proposed a framework based on the notion of self-regulated learning processes. She defined “learning processes” within the framework as “the various possible interactions of a series of interdependent components which lead to the acquisition and/or application of new knowledge” (p. 48). The framework was a synthesis of existing research in self-directed learning, self-instruction, and learning and study strategies. The framework’s components were “the self-regulated learning STRATEGIES, the PHASES of the self-regulated learning processes, the LEARNING CONTENT, the LEARNER, and the CONTEXT” (Danis, 1992, p. 49, emphasis in original).

Tobin (2000) provided the most recent interactive model (Figure 2.2); however, his model is almost identical to Mocker and Spear’s (1982) work. He, too, used a 2X2 matrix, but used company instead of institution and employee instead of learner. Criteria for each of his quadrants were based upon who determines what must be learned; who selects learning methods, materials, and schedules; and who measures the results of the learning activities.

	OTHER-DIRECTED	SELF-DIRECTED
Independent	Quadrant III Independent, Other-Directed	Quadrant IV Independent, Self-Directed
Dependent	Quadrant II Dependent, Other Directed Learning	Quadrant I Dependent, Self-Directed Learning

Figure 2.2: Tobin’s Four Types of Learning

Quadrant I (Dependent, Self-Directed Learning) – Learning topics are selected by the employee, but the employee is dependent on the company or another source to determine learning methods, materials, and schedules.

Quadrant II (Dependent, Other Directed Learning) – Learning topics, methods, materials, and schedule are selected by the company, which also provides instruction. Employee is tested at end of program to prove mastery of the learning content.

Quadrant III (Independent, Other-Directed) – Learning topics, methods, and materials selected by the company. Employee may have some choice as to method and schedule but must prove mastery of the learning content.

Quadrant IV (Independent, Self-Directed) – Learning topics, methods, materials, and schedule are selected by the employee. Employee is solely responsible for what is learned.

In summary, examples of self-directed learning can be found throughout history, but it has only been researched for the past thirty to forty years. Research has indicated that self-directed learning was first seen as a linear process, but over time it proved to be an interactive process between the individual and life's situations and experiences. Since Houle (1961) is credited with starting the flood of research in the area of self-directed learning, therefore, his words are appropriate to close the review of the literature for this subject. "In the largest sense, all adult education is self-directed" (Houle, 1992, p. 299).

#### Program Planning/Training Program Development

Teaching is often spoken of as an art and a craft (Highet, 1950; Houle, 1972; Knowles, 1984), and Houle (1972) believed that "any learning or teaching design is similar to the plans made by an architect" (p. 33). The design and development of the content and instructional strategies are at the heart of any training course, lay the foundation for what is to come, and are

critical to success (McCain, 1999; Pike, 1989). Therefore, effective trainers must design learning experiences that help learners become motivated to change; effectively handle information; develop knowledge, skills, values, attitudes, and creative ideas; and be able to transfer and apply the new learning in their own environment (McCain, 1999; McLagan, 1978; Pike, 1989).

Preparation is the key to developing successful training programs, and program planning provides the process for preparation (Pike, 1989). Program planning is a complex decision-making process that generally involves assessing needs, setting objectives, determining resources, planning learning activities, applying instructional methods, and evaluating outcomes (Caffarella, 1988; Darkenwald & Merriam, 1982; Houle, 1972; McCain, 1999; Sork, 1988). Darkenwald and Merriam (1982) suggested that program development in adult education is distinctive because roles and tasks that are typically separate and distinct in preparatory education are blended in adult education. Program development incorporates major elements of the functions of instruction, administration, and often counseling too.

According to Caffarella (1994), planning programs for adult learners is both an organized and a haphazard endeavor. On the surface, the planning process appears to be fairly logical, progressing from one step to the next; however, “for those who actually develop and coordinate programs, the process seems to be more a mass of decisions, details, and deadlines than precise and clear steps of what should be done, when, where, by whom, and how” (p. 1).

Various program-planning models are presented in the literature (Bergevin et al., 1963; Caffarella, 1994, 2002; Galbraith, 1990; Houle, 1972; Knowles, 1980; Kowalski, 1988; McArdle, 1993; McCain, 1999; Pike, 1989; Sork, 2000; Sork & Buskey, 1986; Sork &



Caffarella, 1989). Most models are based upon either a linear, nonlinear, or interactive framework.

The linear models consist of a series of steps that are followed sequentially to develop programs. Bergevin et al. (1963) offered one of the first linear program planning models developed specifically for adult education. The model consists of identifying a common interest or need for those who will participate; developing topics; setting goals for the learning activity; selecting appropriate resources; selecting appropriate educational techniques and sub-techniques; and outlining each session and the various responsibilities to be carried out.

Knowles (1970, 1980, 1990) also presented various linear models with his theory of andragogy. According to Jarvis (2001a), Knowles changed his models over the years as his views of andragogy changed, but the basic sequential steps remained the same. The steps included establishing a climate conducive to adult learning; establishing an organizational structure for participative planning; diagnosing the needs for learning; formulating an objective for learning; designing a pattern of learning activities/experiences; implementing/managing the learning strategy/plan; and evaluating/re-diagnosing of the learning outcome.

The primary value of linear models is that they provide logical, uncomplicated paths that are easier for planners to manage (Kowalski, 1988). They also provide planners with a degree of security that the nonlinear and interactive models do not provide, which probably explains why they are the most common models found in the literature. Caffarella (1994) suggested that linear models are helpful for new planners but soon lose their appeal because they fail to represent the day-to-day working reality of most program planners.

The second type of model found in the literature is the nonlinear. These models usually have evaluation at their center, surrounded by assessing needs, forming objectives and

curriculum, building the budget, marketing the program, securing resources, and developing a mission (Kowalski, 1988). Unlike the linear models where steps are performed sequentially, with nonlinear models, several steps can be completed simultaneously. This can be an advantage or disadvantage, depending upon one's perspective. Murk and Galbraith (1986) advocated the advantages of nonlinear models; they allow the situation to determine the starting point for planning and don't require the planner to return to the initial step to recycle the planning process. On the negative side, nonlinear models are usually more difficult to use and require more resources, especially human resources, since several activities occur at once. This keeps the nonlinear models from being used as often as linear models (Kowalski, 1988).

Over the years, adult educators have criticized the earlier linear and nonlinear program planning models for over simplicity (Caffarella, 1994; Cervero & Wilson, 1994a; Long, 1983; Kowalski, 1988; Sork, 2000). The earlier models failed to "address the historical and broader social, psychological, and technological variables in program planning" (Long, 1983, p. 19). In response to the criticisms, interactive program planning models started to appear. The interactive models allow program planners to address a number of the components simultaneously, to rearrange the components to suit the demands of different situations, and/or to delete unneeded parts of the process in a way that linear and nonlinear models do not (Caffarella, 2002).

Houle (1972) provided the first interactive model, which he described as a fundamental framework consisting of a system of interacting elements. When the model is applied to a situation, "one may begin with any component and proceed to the others in any order" (Houle, 1972, p. 47). In the framework, an educational activity is identified, a decision is made to proceed, objectives are identified and refined, a suitable format is designed, the format is fitted

into larger patterns of life, the plan is put into effect, and the results are measured and appraised. The model also included subcategories in the critical areas of the design format that allowed the model to be adapted for varying situations. Sork (2000) pointed out that the diagram Houle (1972) used to summarize the elements of his framework suggested that they were sequential steps, but Houle maintained throughout the text that they were interactive.

Caffarella (1994) presented her first interactive model. It consisted of 11 components: establishing a basis for the planning process; identifying program ideas; sorting and prioritizing program ideas; developing program objectives; preparing for the transfer of learning; formulating evaluation plans; determining formats, schedules, and staff needs; preparing budgets and marketing plans; designing instructional plans; coordinating facilities and on-site events; and communicating the value of the program. The model had a number of different formats, which could be used to meet the needs of the situation, but all of the formats were presented as sequential, or decision tree format. The linear and nonlinear influence of the earlier models could still be seen in Caffarella's (1994) formats.

In 2002, Caffarella offered an updated version of her interactive program planning model as a guide, instead of a blueprint for planning, and shifted from the sequential and decision tree formats to a free flowing design. Caffarella (2002) suggested, "The updated model provides a map of the terrain of the planning process, but the map often changes in contour, content, and size" (p. 21). The model consisted of 12 components that could be used in any order or combination based upon the planning situation and incorporates some of the socio-political and ethical dimensions of program planning brought forward by Cervero and Wilson (1994a, 1994b, 1998), Mabry and Wilson (2001), and Sork (1996, 2000). To the address these dimensions, Caffarella (2002) added discerning the context, building a solid base of support, making

recommendations, and communicating results. According to Caffarella (2002), the model is interactive because it's flexible; has no real beginnings or endings; activities are negotiated between the people involved; and it allows planners to take culture into account.

Sixteen years after his first work in program planning, Sork (2000) shifted from providing program-planning steps to what he considered to be the basic elements of program planning. "Each element represents a cluster of possible questions, decisions, and action involved in planning programs" (Sork, 2000, pp. 180-181). The model had formative evaluation at its center surrounded by analyzing the context and learner community, justifying and focusing planning, clarifying intentions, preparing an instructional plan, preparing an administrative plan, and developing a summative evaluation plan. Sork (2000) suggested that "one of the advantages of viewing the elements as clusters of possible questions, decisions, and actions is that planners can substitute any cohesive set of elements that they find more compatible with their context or style" (p. 181).

A review of the HRD and training literature on developing training programs resulted in much less consistency in program planning models than in the adult education literature. Most of the models encompassed some version of a linear, step-wise process. McLagan (1978) provided the simplest of the models reviewed, which involved analyzing group needs, finding information, organizing information, presenting information, and facilitating learning. In McLagan's (1978) model, she merely listed the steps without providing any further information on how to use the model. In contrast, Abella (1986) recommended a ten-step model, provided extensive information on how to use the model, and gave questions to help planners maneuver through the process. The model consisted of gathering information on training needs; preparing the program specifications document; conducting the design meeting; preparing the design

document; preparing the materials list and project plan; gathering information for program materials; writing materials; reviewing materials against the design document; conducting the materials test; and holding the pilot program.

Nadler and Nadler (1989) offered the most comprehensive and confusing of the models found in the HRD and training literature, because they separated the steps based upon the roles of the designer of learning programs, developer of instructional strategies, and facilitator, instead of merely providing a model. In actuality, most trainers perform all three functions (Bernthal, 2004; Caffarella, 1994, 2002; Zielinski, 2001).

Piskurich (1993a) provided a model for developing training programs oriented toward self-directed learning. The model was similar to most of the other linear formats and included training needs assessment; analysis of the trainee, job, facilitator, and format; implementation of analysis (the final design decision); development of objectives, content, and media; trainee evaluations; package review and piloting; preparation; implementation; and system evaluation.

McCain (1999) also provided a linear model that he developed as training organizations began to downsize. It was primarily designed for SMEs who have been asked to develop a training program without previous training experience. The steps of the model were to secure needs analysis data; consider cultural adaptability; identify target audience (understand audience profile, determine class mix and size); align course content to the needs analysis; develop course theme, goals, and a high-level outline; consider flow/format for the modules; identify initial instructional strategies; identify SMEs and customers for design review; determine prerequisites; identify preferred delivery mechanism; consider media; and consider evaluation.

Interestingly, McCain's (1999) model was the only example found in the literature that considered culture as a step in the planning process. Sork (2000) did include analyzing the

learner context and community as a step, but emphasized the organizational and social settings, sociopolitical environment, economic values and priorities, among other things, more than the culture of the learners. Caffarella (2002) also suggested that one of the ways her interactive model differed from her own previous model and those of other authors was that “differences among cultures are taken into account in the planning process” (p. 20), but “cultural considerations” were not an element of the actual model. Other authors (Pratt & Nesbitt, 2000; Wlodkowski, 1999; Wlodkowski & Ginsberg, 1995) have addressed the aspect of culture, but they focused more upon instructional planning and teaching than program planning.

Program planning processes in the adult education literature have evolved considerably over the past forty years. It has gone from a series of steps as identified by Sork and Buskey (1986) in a comprehensive analysis of ninety-six publications to current research that emphasizes the socio-political and ethical dimensions of program planning and the negotiation of power and interests encountered during the planning process (Mabry & Wilson, 2001). Unfortunately, similar evolution is lacking in the HRD and training literature, and the stepwise, linear models found in sixties-era adult education literature (Bergevin et al., 1963) are still prevalent today (Blair, 2002; McCain, 1999; Meyer, P., 2002).

Carrying out the program planning process can be a valuable and rewarding learning experience for adult educators, because careful planning involves seeking information, considering alternatives, and making decisions. Through the program planning process adult educators can learn a great deal about resources, techniques, and the topic under consideration (Bergevin et al., 1963). Houle (1972) stressed the importance of program planning best when he said, “the entire career of the educator is judged by some balancing out of the relative successes and failures of all the programs he designs and conducts” (p. 34).

## Summary

Clearly, the literature on the roles and responsibilities of trainers, gaining experience through knowledge acquisition, self-directed learning, and program planning/training program development has been written for the trainer who already possesses the knowledge they need to develop training programs. With the exception of Spear's (1988) study and Wlodkowski's (1999) questions for determining if someone knows something well enough to instruct others, information about the knowledge acquisition process trainers use to prepare to develop and present training programs is lacking in the adult education, HRD, and training literature. Additionally, there is nothing in the literature that links the roles and responsibilities of trainers, self-directed learning, or program planning with the knowledge acquisition process trainers' use.

## Chapter 3

### Methodology

The methodology used in this research study is described in this chapter. The rationale for selecting a qualitative research paradigm, the characteristics of qualitative research, the quality indicators in qualitative research, the researcher's role, the sample selection process, a description of the pilot study, the data collection method, and the analytical process will be explained.

#### *Rationale for Selecting a Qualitative Research Paradigm, Selection Methodology*

To understand a phenomenon, uncover the meaning of a situation, or delineate a process, a qualitative design is most appropriate because it generally interprets phenomena rich with detail to provide in-depth insights into participant experiences (Creswell, 1998; Krathwohl, 1998; Leedy, 1993; Marshall & Rossman, 1999; Merriam & Associates, 2002; Patton, 1990). Strauss and Corbin (1990) claim that qualitative methods can be used to better understand any phenomenon about which little is yet known. Further, qualitative research is valuable for gaining a better understanding of processes (Marshall & Rossman, 1999; Patton, 1990). Because this study examines the phenomenon of the process trainers use to acquire knowledge and the literature review revealed that little is known about this process, a qualitative paradigm was used in this study.

Various authors have provided their own labels for the different types of qualitative designs or strategies (Bogdan & Biklen, 1982, 1992; Creswell, 1998; Denzin & Lincoln, 2000; Krathwohl, 1998; Patton, 1990; Strauss & Corbin, 1990; Tesch, 1990). Merriam & Associates (2002) identified eight common types of qualitative design: basic interpretive, phenomenology,



grounded theory, case study, ethnography, narrative analysis, critical, and postmodern-poststructural.

The phenomenological inquiry paradigm was selected as the basis for this research for several reasons. First, the phenomenological approach is grounded in the Verstehen doctrine. “Verstehen” is a German word that means “understanding” and refers to human’s unique capacity to make sense of the world. The Verstehen doctrine asserts that human beings can and must be understood in a manner different from other objects because they have purpose and emotion (Bogdan & Beklin, 1992; Patton, 1990). Second, researchers in a phenomenological study attempt to understand the meaning of events and interactions of several individuals in particular situations (Bogdan & Biklen, 1992; Creswell, 1998). Third, according to Patton (1990), in this type of research, “...[t]he experiences of different people are bracketed, analyzed, and compared to identify the essences of the phenomenon... and the essence becomes the defining characteristic of a purely phenomenological study” (p. 70).

#### *Characteristics of Qualitative Research*

The qualitative researcher’s goal is to better understand human behavior and experience through the eyes of the person(s) involved (Bogdan & Beklin, 1990). Several authors have identified the characteristics of qualitative research that help researchers meet their goal. The following is a compilation of the characteristics identified by Bogdan and Biklen (1982, 1992), Creswell (1998), Hoepfl (1997), Leedy (1993), Lincoln and Guba (1985), Merriam and Associates (2002), and Patton (1990).

1. Qualitative research begins with a single focus and uses the natural setting as the source of data. It has an emergent (as opposed to predetermined) design, and researchers focus on this emerging process.

2. Qualitative researchers use a tradition of inquiry, acting as the human instrument of data collection, to observe, describe, and interpret settings as they are, while at the same time maintaining empathic neutrality.
3. Qualitative researchers are concerned with process rather than simply outcomes or products and use purposive sampling and rigorous data collection procedures in an effort to discover and understand the meaning people have constructed for their world and their experiences.
4. Qualitative researchers collect data and analyze it inductively at the same time. This is an important factor in the dynamic nature of the research.
5. Qualitative research is interpretive, resulting in a negotiated outcome that is developed both by the individuals who experience the phenomena and the researcher who is reporting his or her findings.
6. Qualitative research reports are richly descriptive, clear, engaging, and full of unexpected ideas. They are written clearly and persuasively and incorporate expressive language with the presence of voice in the text so the reader experiences “being there.”
7. Qualitative research is judged using special criteria for trustworthiness.

The authors suggest that not all of characteristics may be present in all qualitative studies.

However most of them are present to some degree.

#### *Quality Indicators in Qualitative Research*

Just as there is much debate over quantitative versus qualitative research methodology, there is also “debate and discussion in the literature and at conferences as to how to think about validity and reliability in qualitative research” (Merriam & Associates, 2002, p. 24). Whether

the study uses quantitative or qualitative methodology, the reader reviewing the study wants to know if the study was conducted in a rigorous manner and if the results can be trusted (Merriam & Associates, 2002). Therefore, the basic question of rigor and trustworthiness in a qualitative study is: How can an inquirer persuade his or her audiences that the findings of an inquiry are worth paying attention to, worth taking account of (Creswell, 1998; Krathwohl, 1998; Lincoln & Guba, 1985; Merriam & Associates, 2002)?

In a broad sense, trustworthy qualitative research, like quantitative research, needs to be based on the use of acceptable research procedures to systematically collect data, allowing the procedures and findings to be open to systematic critical analysis. Strauss and Corbin (1990) believe that the research procedures of ‘good science’ should be maintained, but note that “they require redefinition in order to fit the realities of qualitative research” (pp. 249-250). Lincoln and Guba (1985) also asserted that because of the distinctive nature of the qualitative paradigm, evaluation of the research requires different criteria. They used four criteria: credibility, transferability, dependability, and confirmability to evaluate rigor and trustworthiness in a qualitative study. Lincoln and Guba (1985) also suggested that these terms are the qualitative researcher’s equivalents for the conventional terms internal validity, external validity, reliability, and objectivity. The following section discusses the manner in which trustworthiness was established for this study.

### *Credibility*

Credibility or internal validity refers to how truthful particular findings are and depends upon the richness of the information gathered and on the analytical abilities of the researcher (Creswell, 1998; Krathwohl, 1998; Lincoln & Guba, 1985; Patton, 1990). A variety of strategies improve the chances that findings and interpretations of a qualitative study will be credible

(Creswell, 1998; Krathwohl, 1998; Lincoln & Guba, 1985; Merriam & Associates, 2002; Patton, 1990). Three of these strategies, referential adequacy, member checks, and peer reviews, were used for this study.

Referential adequacy was established by tape-recording all interviews. The recordings were later examined and compared to the written data for accuracy.

Member checks were accomplished by providing each participant with a copy of the transcript of their interview and the researcher's interpretations for review, clarification, correction, and suggestions. This ensured that the participant's voice was being accurately presented and resulted in what Lincoln and Guba (1985) described as a negotiated outcome, which is a process where both the facts and the interpretations of the data are subjected to the scrutiny of the participants.

Peer reviews were conducted with four individuals (Appendix B), who were experienced in research. The researcher met with the peer reviewers to discuss the study and verify the integrity of the data analysis process, the accuracy of the data presentation and logic of the findings, the implications, and the research recommendations.

### *Transferability*

Transferability, or external validity, refers to how applicable or generalizable the research findings are to another setting or group. In qualitative research, the presentation of "solid descriptive data," or "thick description" improves transferability (Patton, 1990, p. 375). The transferability from one study to other situations also depends upon the degree of similarity between the original situation and the situation to which it is transferred. The researcher cannot specify the transferability of findings; he or she can only provide sufficient information so that others can determine whether the findings are transferable to the new situation (Lincoln & Guba,

1985). “Thick descriptions” were used extensively in the presentation of data to enable readers of the study to determine transferability to their own situation.

### *Dependability and Confirmability*

Dependability or reliability refers to the consistency and replicability of the study. “Replication of a qualitative study will not yield the same results, there can be numerous interpretations of the same data...the important question for qualitative researchers is *whether the results are consistent with the data collected*” (Merriam & Associates, 2002, p. 27, emphasis in original). Confirmability or objectivity refers to how neutral the findings are, how well they reflect the subjects and the inquiry, and that they are not a product of the researcher's biases and prejudices.

According to Lincoln and Guba (1985), both dependability and confirmability can be determined through a "properly managed" audit trail so that an auditor could conduct an inquiry. To ensure dependability and confirmability, accurate files, including the researcher's journal, the audiotapes of the interviews and discussions, transcripts, materials from the data analysis process, and the researcher's field notes will be maintained.

### *The Role of the Qualitative Researcher*

In a qualitative study, the researcher is the primary instrument for gathering and analyzing data, and generally certain attributes are especially important to successful qualitative research. These attributes include such traits as a tolerance for ambiguity, “theoretical sensitivity,” and good communication skills (Lincoln & Guba, 1985; Merriam, 1988; Merriam, 2001a; Merriam & Associates, 2002; Patton, 1990). Tolerance for ambiguity is needed because throughout the qualitative study process, from designing the study, to data collection, to data

analysis, there is no set procedure or protocol that allows the researcher to follow a step-by-step process (Patton, 1990)

The second attribute, “theoretical sensitivity” refers to having insight; understanding the context and all variables in it, including physical setting, people, overt and covert agendas, verbal and non-verbal behavior; the ability to give meaning to the data; the capacity to understand; and the capacity to sort the pertinent from the extraneous (Merriam, 2001a; Merriam & Associates, 2002; Strauss & Corbin, 1990). Theoretical sensitivity comes from a number of sources, including the literature, professional experiences, and personal experiences.

Having a rich background in the literature sensitizes the researcher to what is going on with the phenomenon they are studying (Strauss & Corbin, 1990). Professional experience is relevant if the researcher has personally experienced the phenomenon being studied. Such experience gives an understanding of how things work in the field being studied, and why, and what happens under certain circumstances. Thus, the researcher understands events and actions more quickly than someone without the professional experience (Strauss & Corbin, 1990). Personal experience is also relevant if the researcher has experienced a similar phenomenon. So, the researcher can reflect upon the experience to gain a better understanding of what the subject is experiencing. The researcher’s ability to compare one situation to the other or critically reflect on the phenomenon will increase understanding.

Strauss and Corbin (1990) acknowledge that it is difficult for the researcher to use knowledge of the literature and professional and personal experiences in a study and still remain sufficiently free of bias. Therefore, they suggest three things to help maintain a balance between what the researcher creates and what is real: periodically stepping back and asking what is really going on here, maintaining an attitude of skepticism, and following research procedures.

The third attribute theoretical sensitivity is the ability to communicate effectively, to empathize, establish rapport, to ask good questions that elicit richly descriptive interview responses, and to listen effectively (Merriam, 1988). Patton (1990) adds to this sensitivity the ability “to write descriptively, practice the disciplined recording of field notes; knowing how to separate detail from trivia in order to achieve the former without being overwhelmed by the latter; and using rigorous methods to validate observations” (p. 201).

In summary, Creswell (1998) suggests that qualitative inquiry is for researchers who are willing to commit extensive time in the field; engage in the complex, time-consuming process of data analysis—the ambitious task of sorting through large amounts of data and reducing them to a few themes or categories. Qualitative researchers must also be able to write long passages, because the evidence must substantiate claims and the writer must show multiple perspectives, and participate in a form of research that does not have firm guidelines or specific procedures and is evolving and changing constantly.

#### *Purpose of the Study*

The purpose of this study was to examine the nature of the process trainers use to acquire the knowledge necessary to develop and present training programs for which they had limited or no previous content expertise.

#### *Research Questions*

The following research questions will guide this study

1. What is the nature of the process trainers use to acquire the knowledge they need to develop training programs when they don't already possess sufficient knowledge about the subject?

2. Are there common factors that facilitate the acquisition of the knowledge trainers need to develop training programs on subjects in which they are not already knowledgeable? If so, what are they? And,
3. If these common factors exist, how do they exert their influence on trainer's acquisition of knowledge?

### *Data Collection*

#### *Interviewing*

Merriam and Associates (2002) point out that if a researcher is most interested in the phenomenon someone experienced; then interviewing people who have had the same experience will yield the most relevant information. Interviewing provides a way to explore others' feelings, motivations, claims, concerns, and reconstructions of past situations (Lincoln & Guba, 1985). Because phenomenological inquiry should provide insight into the experiences of the participants and we cannot observe behaviors that took place in the past (Merriam & Associates, 2002; Patton, 1990), interviews were used to collect data for this study.

Bogdan and Biklen (1982) characterize the interview as "...a purposeful conversation between two people ...that is directed by one in order to get information" (p. 135). Through the use of a conversational style of interviewing, the participant's perspective of the experience(s) should unfold as the participant views it, not as a researcher would view it (Marshall & Rossman, 1999). Patton (1990) asserts, "*The quality of the information obtained during an interview is largely dependent on the interviewer*" (p. 279, emphasis in original). Consequently, it is essential for the researcher to provide an environment in which the participant feels free to express an understanding of the experience in his or her own terms.



While interviewing, researchers need to listen actively remaining aware of both the verbal and nonverbal cues of the participant. By doing so, they can process the information as it is being collected and simultaneously adjust the interview to obtain the highest quality and quantity data possible. Listening actively also allows the researcher to be responsive, adaptive, and summarize the participant's responses on the spot, so he or she can immediately feed them back to the participant for clarification, correction, and amplification (Lincoln & Guba, 1985).

### *Interview Guide*

A semistructured interview guide (Appendix A) was used for this study. According to Lincoln and Guba (1985), "a structured interview is used when the interviewer *knows what he or she does not know*...and the unstructured interview is the "mode of choice when the interviewer *does not know what he or she does not know* and therefore must rely on the respondents to tell him or her" (p. 269, emphasis in original). Most interviews fall somewhere in between, hence the semistructured interview (Merriam & Associates, 2002). It is a variation of Patton's (1990) "generalized interview guide" and serves as a checklist for the interviewer to insure basically the same information is obtained from each person, while at the same time allowing other topics to emerge that are specific to each participant. The guide also provides the interviewer with the freedom to probe and explore within predetermined inquiry areas.

In this approach to interviewing, the goal is to establish an atmosphere that promotes an interactive relationship between the interviewer and participant, while maintaining focus on the topics under discussion (Patton, 1990). Open-ended questions were used in this study in order to broaden the range of responses of the participants and "minimize the imposition of predetermined responses when gathering data" (Patton, 1990, p. 295). As the interviewing progressed, additional questions were asked to expand upon the information that emerged.

### *Interview Location*

Prior to the interviews, each participant was sent a package containing a cover letter (Appendix D), preliminary information on the purpose of the study, general areas to be discussed during the interview (Appendix E), a short demographic information sheet that was to be completed beforehand (Appendix F), and the Institutional Review Board (IRB) information and release form (Appendix G). Sending out the information before the interview provided the participants with the opportunity to reflect on experiences related to their career and development of training programs. Several of the participants indicated that having the preliminary information made them feel more comfortable about participating in the study.

The interviews took place at quiet locations convenient to the participant. Interviews were conducted in the participant's office, home-based office, or a university conference room. The interviews were conducted at times that were mutually convenient to the researcher and the participant. In several cases, however, the participant's busy schedule created scheduling conflicts. In those cases, the interview date and time was changed to make it convenient for the participant. A two to three-hour block of time was set aside for each interview. The interviews actually took 90 minutes to three hours. Each participant signed the Kansas State University Informed Consent Form (Appendix G) before the interview.

### *Recording Data*

Interviews in this study were tape recorded (digitally and on tape) with the permission of the participant and transcribed by a professional transcriptionist. Researchers/authors disagree about the use of electronic recording devices during the interview process. Bogdan and Biklen (1992) recommend the use of a tape recorder whenever the "study involves extensive interviewing or when interviewing is the major technique in the study" (p. 128), and Patton

(1990) says that a tape recorder is "indispensable" (p. 348). Lincoln and Guba (1985), however, "do not recommend recording except for unusual reasons" (p. 241). Lincoln and Guba's view is interesting because they also present tape recording as a means of ensuring credibility through referential adequacy. Some of their resistance appears to stem from their views of technical aspects of recording equipment. They list excessive cost and technological issues relating to the equipment (i.e., running out of tape or batteries failing), lack of technical expertise on the part of the researcher, and obtrusiveness to the interviewee as reasons for not using recording equipment.

The advantages of tape recording the interview far outweighed the disadvantages. While Lincoln and Guba's (1985) concerns are understandable, they are based upon 20-year-old technology. New digital recording systems, which were used in this study, are more reliable, capable of recording many hours of data without having to change tapes, and can be interfaced with a computer, providing a convenient means to store, retrieve, and process the interview data. More importantly though, recording ensured that what was spoken was recorded, thus establishing referential adequacy by providing the researcher with a means of reviewing the data, including not only the words, but also the tone, volume, and emotional emphasis of voice in a way that written field notes alone would not.

The researcher also used field notes to record thoughts and feelings about the comments the participant was making. In addition, the participant's impressions, reactions, and non-verbal behavior, such as passion, were annotated as appropriate. During data analysis, the field notes greatly assisted the researcher in interpreting the data.

### *Sample Selection*

Participants for this study were selected using a purposeful sampling technique. Purposeful sampling is the dominant strategy in qualitative research; so sample sizes are usually small and non-random. It is, therefore, not possible to generalize statistically. “A small sample is selected precisely because the researcher wishes to understand the particular in depth, not to find out what is generally true among many” (Merriam & Associates, 2002, p. 28). Patton (1990) noted:

The logic and power of the purposeful sampling lies in selecting information-rich cases for study in-depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling...[t]he purpose of purposeful sampling is to select information-rich cases whose study will illuminate the questions under study. (p. 169)

Patton (1990) and Creswell (1998) identified 16 types of purposeful sampling. Four of them are relevant to this study: criterion, snowball or chain, maximum variation, and convenience. In a phenomenological inquiry, all participants must experience the phenomenon being studied. Criterion sampling is used to identify the criteria people need to meet to be included in the study (Creswell, 1998). The criterion set for this study was that all participants had to be trainers who had developed and presented a training program on a subject for which they had limited or no previous content expertise.

Snowball or chain sampling identifies cases of interest from people who know people who know people who meet the criterion and would be information-rich candidates for the study (Patton, 1990). The first step in snowball sampling for this study was for the researcher to contact known trainers who had developed a training program on a subject for which they had

limited or no previous content expertise and ask them to participate in the study. That provided the first eight participants. The researcher then solicited names of additional potential participants who were located in the central United States geographical area for possible inclusion in the study. The names were solicited from those people who were in a position to know people who met the criterion of the study. It included the trainers who were initially asked to participate and the human resources/training vice-presidents, community college business and industry directors, training directors/managers, consultants and the Oklahoma City, Kansas City, and Wichita, Kansas chapters of the American Society for Training & Development (ASTD). The researcher personally contacted both the people in the positions listed above and the ASTD chapter presidents. That effort resulted in a pool of 44 potential participants in Kansas, Missouri, Oklahoma, and Texas. The researcher then contacted each of the 44 potential participants to determine if they met the criterion for the study. Seven of the 44 indicated that they had never created a training program on a subject for which they weren't already experts, and their names were removed from the list.

Thirty-seven potential participants were left who met the criterion for the study. The presidents of the Kansas City and Oklahoma ASTD chapters were included in the study because they met the criterion for the study. Each provided names of trainers within their organizations who they thought met the criterion for the study, which resulted in two more participants. Of the remaining 33 potential participants, eight more were selected based upon high recommendations by at least three to ten other potential participants or participants in the study. That process identified the initial list of 20 participants for the study.

Scheduling conflicts with four of the highly recommend participants, meant that they would not be able to participate; consequently, four more participants were randomly selected

from the remaining 25 potential participants and interview times were scheduled. As the interview process progressed, the scheduling conflicts with the highly recommended participants were resolved. At that time, thematic saturation had already been achieved, but, since the other four interviews had already been scheduled and the four highly recommend participants could now participate, dates and times were established for four additional interviews. As a result, interviews continued beyond both thematic saturation and the 20 interviews that had originally been planned.

Maximum variation is the most useful strategy for documenting unique variations that have emerged in adapting to different conditions (Lincoln & Guba, 1985). Maximum variation tries to capture and describe the central themes that cut across most participant variation and can yield detailed descriptions of each case, in addition to identifying common patterns (Creswell, 1998). Identifying trainers who have developed training programs without setting the type of training as a criterion helped determine if there were common themes in the knowledge acquisition process regardless of the variation in type of training. Additionally, the trainers came from diverse organizations and industries, which also maximized the variation.

Convenience sample is, as the name implies, a sample of people who happen to be most available for participation in the research study and is, “because of time and money concerns, the most common sample in human subject research” (Wilkinson & McNeil, 1996, p. 167). Patton (1990) cautions that “[w]hile convenience and cost are real considerations, they should be the last factors to be taken into account after strategically deliberating on how to get the most information of greatest utility from the limited number of cases to be sampled” (p. 181, emphasis in original). The sample for this study was limited to trainers geographically located in the

central United States because the researcher was familiar professionally with the area and because of the resource limitations of the researcher and the study.

### *Sample Size*

The sample size for this study was purposive and small, enabling the researcher to gain an in-depth understanding of each participant's perspective on the experience of acquiring knowledge to develop training programs. According to Merriam and Associates (2002), it is difficult to determine how many people to interview ahead of time in qualitative research. "There are no rules for sample size in qualitative inquiry... [it] depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources" (Patton, 1990, p. 184).

Twenty-four participants were selected for participation in this study, consistent with the sample sizes of other research projects on knowledge acquisition reviewed for this study (Klingel-Dowd, 1998; Kremer-Hayon, 1991; Swanson & Falkman, 1997; Spear, 1988). The purpose was to maximize information; thus redundancy was a primary criterion (Lincoln and Guba, 1985). Merriam and Associates (2002) contended that, "data and emerging findings must feel saturated; that is, you begin to hear the same things over and over again, and no new information surfaces as you collect more data" (p. 26). This small sample size may raise some concerns over the validity of the research, but Patton (1990) noted, "[t]he validity, *meaningfulness and insights generated from qualitative inquiry have more to do with the information-richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size*" (p. 185, emphasis in original).

### *Pilot Study of the Interview Protocol*

Lincoln and Guba (1985) identified the human as the “instrument” of choice for qualitative inquiry. “The validity in qualitative methods, therefore, hinges to a great extent on the skill, competence, and rigor of the [researcher]” (Patton, 1990, p. 14). Error is a concern in any research, but in qualitative inquiry researcher errors could seriously undermine the success of the study; consequently, researchers need to be well versed as to their role and the data collection methods.

According to Wilkinson and McNeill (1996), the single most common way to reduce error is to conduct a pilot study because it provides the researcher with an opportunity to practice what he or she will be doing in the actual research and receive feedback from participants that can be used to enhance the study. The pilot study is a crucial element of a good study design and strengthens the proposal. While it doesn’t guarantee success in the main study, it does increase the likelihood of success by identifying unanticipated problems in the research design before the interviews of the actual participants (Krathwohl, 1998; Marshall & Rossman, 1999; Matheson, Bruce, & Beauchamp, 1970; Teijlingen & Hundley, 2001).

To ensure researcher competence, maximize the reliability of semistructured interview guide, test the interview protocol, and determine if the types of purposeful sampling being proposed were appropriate, a pilot study was conducted. It consisted of three interviews of participants (Appendix C), who met the criterion established for the study using the proposed semistructured interview guide. All three of the participants in pilot study were selected based upon meeting the criterion for the study, their breadth of experience as trainers, and their educational backgrounds. One of the participants had more than 35 years of experience in the training field and has a masters degree in adult education. The second participant had more than



30 years of experience and a masters degree in adult education. The third participant had ten years of experience, an MBA, and was the president of her local ASTD chapter at the time of the interview. The gender distribution (2:1) of participants also reflected the distribution of the participants in the actual study. Individuals who participated in the pilot study were not participants in the actual study.

The pilot study confirmed that the selection criterion was appropriate for the study and identified changes that needed be made to the semistructured interview guide. Two questions relating to evaluation of learning were redundant; therefore, they were removed. One question about continuing education was replaced with a question relating to the impact previous learning experiences had on the participant's learning. Four questions were added, one about the linearity of the participant's learning process and three more to determine if there were changes in the participant's learning process between their first and their most recent development and presentation of training programs for which they had limited or no previous content expertise. The final semistructured interview guide is in Appendix A.

### *Data Analysis*

Of validity and reliability, Strauss and Corbin (1990) believed that the research procedures of good science should be maintained, but "they require redefinition in order to fit the realities of qualitative research" (pp. 249-250). This holds true for data analysis as well. Qualitative data analysis should be guided by, but not constrained by, the conventional modes of content analysis, which isn't finally formulated until the end of the inquiry (Lincoln & Guba, 1985). Merriam and Associates (2002) asserted, "In qualitative research, data analysis is *simultaneous* with data collection. That is, one begins analyzing the data with the first interview, the first observation, the first document accessed in the study" (p. 14, emphasis in original).

Interview data were analyzed using the constant comparative method, which is the process of taking information from data collection and comparing it with emerging data (Bogdan & Biklen, 1982, 1992; Creswell, 1998; Krathwohl, 1998). Once the first interview was finished, a professional transcriptionist transcribed the audiotape. The researcher then analyzed the transcript for themes, categories, and recurring patterns before the second interview. During the second interview, the researcher simultaneously listened for the new information as well as any themes, words, or phrases from the first interview that weren't mentioned in the second. If an area was not mentioned, the researcher asked open-ended questions to determine if the participant had had similar experiences. The second interview was then transcribed and analyzed, comparing that data with the data from the first interview. Participants interviewed early in the data collection process were contacted later for clarification and to explore thematic areas that emerged in subsequent interviews. Constant comparison continued throughout the interview process.

Each interview transcript and the researcher's interpretations were returned to the participants for review. This was done as soon as possible after the researcher had analyzed the data. The participant could then clarify, correct, or enhance the transcript and researcher's interpretations to ensure a representative perspective. The participants confirmed the accuracy of the transcripts and the researcher's interpretations. Providing the participants with their information as soon as possible after their interviews and the analysis allowed the researcher to ensure the most accurate information possible was being used for constant comparison throughout the interview process.

Finally, four raters (Appendix B) conducted peer reviews. One primary peer reviewer analyzed all of the data and the researcher's interpretations in order to verify the integrity of the

data analysis process, the accuracy of the data presentation, and logic of the researcher's findings, implications, and recommendations.

Three other peer reviewers assisted the researcher after the interviews were completed. The 24 interviews were assigned a number, and the three additional peer reviewers randomly selected five numbers from one to 24 and were provided with the transcripts corresponding to numbers they had selected. The peer reviewers then analyzed, categorized, and coded the transcripts based upon the themes they identified. Individually, the researcher and each reviewer then discussed the outcome. With some minor differences in terminology, the themes identified by the researcher were comparable with the findings of the three reviewers.

#### *The Protection of Human Rights*

This research complied with all of the requirements established by the Kansas State University's Committee on Research Involving Human Subjects. A cover letter explaining the research (Appendix D) and the Kansas State University Informed Consent Form (Appendix G) were sent to each participant before the interviews. The information was also verbally reviewed with each participant before the interview began. Participants were given the opportunity to ask any questions they had about their rights as participants and then asked to sign the Informed Consent Form. In addition to the cover letter and Informed Consent Form, the demographic questionnaire (Appendix F) was included in the preliminary mailing.

#### *Summary*

The qualitative research paradigm was used to study the process trainers used to the knowledge necessary to develop and present training programs for which they had limited or no previous content expertise. The phenomenological inquiry tradition was used because it allowed an in-depth understanding of the participants' experiences. It also provided them with the

opportunity to speak for themselves and share their points of view. The researcher was the primary instrument for both data collection and analysis. Critical aspects of the researcher's role in qualitative research were reviewed.

Based upon the literature, trustworthiness is used to measure validity and reliability in qualitative studies. Peer reviews, referential adequacy, and member checking was used to insure the credibility of the findings. Thick descriptions have been provided to allow readers the opportunity to make decisions for themselves on the transferability of this study to their own situations. A properly managed audit trail has been maintained to establish dependability and confirmability.

Criterion, snowball/chain, maximum variation, and convenience types of purposeful sampling were used to identify twenty-four information-rich participants for the study. Data was collected for analysis using a semistructured interview guide (Appendix A). All of the interviews were conducted by the researcher, recorded, and professionally transcribed for analysis. Each participant was given a copy of the transcript of their interview and the researcher's interpretations for review, clarification, correction, and suggestions.

Data analysis began with the first interview using the constant comparative method to identify common themes and patterns emerging from the data. This allowed subsequent interviews to be more productive by enabling the researcher to probe areas mentioned by earlier participants with each additional participant. Final analysis of the transcripts began after the final interview.

## Chapter 4

### Findings

This chapter introduces the 24 trainers who participated in this study, their characteristics and profiles, and the findings regarding the nature of the process they used to acquire the knowledge necessary to develop and present training programs for which they had limited or no previous content expertise. Profiles of the participants are presented to provide insight into their breadth of training experience. The common themes and findings for the three research questions in this study are presented using quotations from the interview transcripts.

#### *Characteristics of the Participants*

The sample of trainers who participated in this study consisted of 16 women and eight men. The mean age of the participants was 49.54, with the youngest being 28 and the oldest being 67. Their training experience ranged from one to 40 years with a mean of 18.98 years, and a total of 455.5 years. Six of the participants had more than 25 years of experience, three had 21-25 years, six had 16 to 20 years; four had 11 to 15 years, three had six to ten years, and two had one to five years. They had from less than one month to 9 years of training experience when they developed/presented their first training program with limited or no content expertise and from one to 40 years of experience for their most recent.

All participants had received some post secondary education. Seventeen of the participants had graduate degrees, five had bachelors degrees, and two had some college, but less than an associate's degree. The graduate degrees consisted of one PhD, one DBA, 3 MBAs, and 12 masters degrees, with eight of those in adult education. Seventeen of the participants had also attended a formal Train-the-Trainer class, nine had attended an Instructional System Design

course, and nine had been certified as trainers/facilitators by nationally recognized training providers, with six of those being master certified to train and certify other trainers.

The participants had extremely diverse professional backgrounds. Their expertise included areas such as fiber optic cable installation, customer service, homicide investigation, banking, manufacturing, hotel operations, and religion. All of the participants, except one, became trainers after achieving expertise in another field. One of the participants has authored or co-authored 12 books, including six books on training. Another co-authored three books on training, a third has authored four books and many articles on leadership and communications, and a fourth has co-authored a book on facilitation skills for leaders. Three of the participants have conducted training in other countries, including Africa, Canada, and Ireland, and one of the participants has provided training for more than 500,000 individuals.

The training programs the participants used to relate how they acquired knowledge reflected the diversity of not only their backgrounds but also the wide variety of programs trainers are expected to develop/present. Seventeen participants described programs that were people, or soft-skills oriented, and the other seven talked about skills-oriented programs. They ranged from a one-hour class on sexual harassment to a comprehensive training program for a major ground transportation organization. The other programs were on business writing, computer skills, customer service, ethics, fiber optics, leadership, manufacturing, project management, sales, sex related murders, and Train-the-Trainer.

### *Participant Profiles*

Profiles of the participants are presented to show the breadth of experience of these individuals. A pseudonym was assigned to each participant to assure anonymity. The profiles are presented in the order in which the interviews took place.

### *Smitty*

Of all of the participants, Smitty is the newest trainer. He has 40-hours of college course work and has spent most of his career in the manufacturing industry. Four years ago, Smitty was selected to be a six-sigma black belt, a person specifically trained to improve processes and reduce costs. He attended training and then spent the next three years helping improve processes throughout the company he works for. After three years of improving business performance, black belts are assigned to other positions within the company; therefore, Smitty was asked to go into human resources and manage the process improvement training programs. That was a year ago, and Smitty has enjoyed developing and presenting training programs since that time. He was recently asked to develop a Train-the-Trainer program.

### *Martha*

Martha has a bachelors degree in business management and was in the banking industry before she moved into the training profession. She was appointed as the training officer for a financial corporation with more than 3,000 employees. For six years, she was the program director for a national non-profit organization where she provided training on management, leadership, and diversity. For the past five years, Martha has been consulting and providing training in the areas of leadership, communications, and diversity.

### *Will*

Will spent 22 years in law enforcement and has been conducting training on various subjects related to law enforcement for the past 20 years. He has provided training on subjects such as law enforcement investigative techniques, forensic sciences, community development, cultural awareness, and mental health to law enforcement and coroner organizations in Montana, Wyoming, Nebraska, Oklahoma, Kansas, Missouri, and Tennessee. He has bachelors and

masters degrees in criminal justice and has been an adjunct professor for the past 10 years. Will is now a chief of police but continues to provide training courses for various law enforcement agencies across the country, the coroner, and the regional community-policing institute.

*Julia*

Julia has more than 20 years of experience in training. She was the Director of Volunteers at the National Training Center for the Girl Scouts of America for eight years and then a member of National Training Center faculty for five years. For the past seven years, she has been the manager of education and development for a major city, where she directs a staff of four, who provide educational and training programs for more than 5,000 employees. She also provides performance consulting for 23 departments. Julia has a bachelors degree in English education and a masters degree in adult education. At the time of the interview, Julia was the president of her local chapter of ASTD.

*Zoe*

Since 2002, Zoe has been the director of training for a city with 2,600 employees and ten departments located in the central United States. She has a bachelors degree in human resource management and a masters degree in management and has been employed in the training field for ten years. Zoe has presented training programs in leadership, management, and public speaking.

*Marie*

Marie spent eight years in management before she moved into the human resource/training field ten years ago. She has developed and provided technically-oriented training in financial management and sales but has also conducted programs in customer service,



leadership, and career progression. She has a bachelors degree in business management and is an adjunct instructor for a community college.

### *Cheryl*

Cheryl has more than 30 years of experience in training, working in both the profit and not-for-profit areas. She has a bachelors degree in chemistry/physics and masters degree in adult education. She is certified by ASTD for Human Performance Improvement and as a Senior Human Resource Professional. She is the president of her own consulting firm, which she founded in 1992 and has a staff of ten consultants. Her firm has assisted more than 100 different organizations in 11 industries, 7 states and provided training for more than 20,000 attendees. She has authored articles on developing customer service programs, managing diversity, developing performance appraisal systems, and much more. She has training expertise in the areas of customer service, leadership, strategic planning, team building, personality driven behaviors, diversity issues, human resources issues, and time management. She also co-authored a book on professional development for women and is a regular contributor for HERS magazine.

### *Shirley*

Shirley has bachelors and masters degrees in business administration and has been a training consultant, professional speaker, and college instructor for the past 28 years. She has owned and operated her own training/consulting company since 1993. She presents training programs for companies and organizations throughout the country, concentrating on quality oriented customer service, leadership, team development, managing change, training skills, and communications.

During the past several years, Shirley has consulted in four African countries and in Ireland focusing on leadership and management development. In addition, Shirley is the author of several training manuals.

*Stacie*

Stacie spent 10 years in hotel operations and has over 25 years of experience in training and development. She is the president of her own consulting company and has affiliations with a number of international hotel corporations. Her experience spans from planning complete start-up programs for new companies to developing new initiatives for more mature companies.

Stacie has a bachelors degree in hospitality management and business and has been an adjunct professor teaching Hotel Management in California, Texas, and Nevada. She has been an executive board member on the Las Vegas, Nevada ASTD chapter, is on the Council of Hotel and Restaurant Trainers, and is also certified in many nationally recognized training programs.

*Greta*

Greta holds a bachelors degree in education and a masters degree in adult education and has more than 19 years of experience in training and development. She has directed the customized training program for a community college in the central United States and the Quality Through Training Program for a major aircraft manufacturer.

Throughout her career, Greta has developed workforce literacy, quality improvement, and six-sigma training programs. She has also planned and written multi-media courses for new software. As member of a career guide development team, she created new task based/training guides for more than 50 jobs. Greta has been an adjunct professor for the past five years, teaching such classes as Professional Communications, Business Writing, Creativity in the

Workplace, and Psychology. Greta is a past president of her state's Adult Education Association and on the Governor's Task Force for Adult Literacy and Learning Disabilities.

*Carrie*

Carrie spent five years in human resource management before formally moving into the training and development arena. She has been a Training Specialist, Lead Trainer, Training Manager, and is currently the System Training Manager for a major communications corporation. Carrie has a bachelors degree in international marketing and French and a masters degree in adult education. Carrie has served as a trainer for five years and has taught programs such as interviewing, performance management and coaching, customer service, sales, product knowledge, data entry, billing and technical support. At the time of the interview, Carrie was the president of her local ASTD chapter.

*Tim*

Tim had more than 20 years of technical experience in electronics, communications, and fiber optics in the cable television industry prior to entering the training field. Eight years ago Tim became a technical trainer and started developing and presenting classes on pole climbing, fiber optic restoration, testing equipment operations, and digital constellations. He has been the Technical Training Manager for the past 18 months.

Tim attended community a college and many technically oriented training classes. He learned his skills as a trainer from vendor-sponsored training classes and working with other trainers. Tim is a member of his local ASTD chapter.

*Raymond*

Raymond started out his 20-year training career by developing and conducting management, professional development, and sales training for an international security services

corporation. He then transferred into the aircraft manufacturing field where he provided professional development and sales training for 12 years, then became a training manager for eight years, and has been the Director of Learning and Development for the past two years. Raymond has a bachelors degree in law enforcement and a masters degree in management and public administration. He is a certified master trainer and has held leadership positions in his local chapter of the ASTD.

*David*

David has more than 30 years of training and consulting experience. He has consulted with many national firms, including PepsiCo, Beech Aircraft, Canadian Pacific Railway, Coleman, Farm Credit Bank, and State Farm Insurance. He also currently is a colonel in the United States Army Reserve.

David has a bachelors degree in accounting and finance, and a DBA in marketing and management. He has written extensively about training, business, and team building.

*Rose*

Rose has worked in the adult education and training profession for the past 18 years. She has held director-level positions where she oversaw developing and marketing of training programs for profit and not-for-profit businesses and government agencies across the state of Kansas. Rose has also developed various training programs, including rewriting a police department's private security officer training program and developing and implementing a Computer-Aided Three-dimensional Interactive Application (CATIA) training lab. Rose has a bachelors degree in journalism and a masters degree in adult education.

*Linda*

For the past 15 years, Linda has conducted leadership, customer service, and skills training for banking institutions. She has worked in small companies and Fortune 100 corporations and is currently the Vice President of Training and Development for a major financial institution. Linda has bachelors and masters degrees in business administration and has attended many training oriented professional development courses to enhance her ability to both present training programs and mentor other trainers. Linda is also active in her local ASTD chapter.

*Jennifer*

Jennifer has 14 years of training experience and has been in the field since the beginning of her professional career. She has been a training specialist in both banking and manufacturing and has worked her way up to be the manager of organizational effectiveness for a major aircraft manufacturer. She has also developed training programs as a consultant. Jennifer has a bachelors degree in human resource management, has taken courses in a masters program in adult education, and is also the only participant interviewed who attended a specially designed college curriculum for trainers. She, too, has been an active member of her local ASTD chapter.

*Chris*

Chris is the president of his own training and consulting firm. He has more than 20 years of training experience. He started out providing sales training and then began developing and teaching process improvement, leadership, strategic planning, and project management classes. He has created training programs that vary from one hour to two weeks long.

Chris has directed subject matter experts (SMEs) and a production staff to create a variety of instructional media resources and has produced in-house videotapes for product knowledge,

sales training, and customer service training. He has a bachelors degree in human resource management and a masters degree in industrial/organizational psychology. Chris is certified as a master trainer and is also a past-president of his local ASTD chapter.

*Elaine*

Elaine has more than 15 years combined training and consulting experience in various settings including banking, manufacturing, and higher education. She has operated her own consulting business for the past two years and has designed curriculum and conducted training in a variety of content areas. Elaine has bachelors and masters degrees in Business Administration and is also a member of her local ASTD chapter.

*Frank*

Frank has, by far, the most extensive training and development background of all of the other participants. Whenever the other participants were asked if they knew of anyone they would recommend for participation in the study, Frank's name was always mentioned, immediately followed by, "he wrote the book." Not only did he write the book, he has been the sole author of three books on training, five books on leadership, and is the co-author of 13 other books/training manuals.

Frank started working as a training developer for a major restaurant corporation in 1976. Five years later, he was promoted to Director of Training Development. He switched to a different corporation as their Director of Field Training in 1983 and was the Vice-President of Training at another corporation in 1984. He has been the owner and president of his own training company since 1986. His clients have included several Fortune 500 companies.

Frank frequently conducts Train-the-Trainer workshops and seminars on customer service, leadership, orientation and training, and time management. Frank has a bachelors degree in history/political science and is a past president of his local ASTD chapter.

#### *Dawn*

Dawn is the youngest participant in this study; however, she still has three times more experience in the field than the participant with the least amount of experience. She started her career as a learning analyst and instructional designer. She then moved into a human resources position for a healthcare and information technology corporation with more than 5,000 employees worldwide. She has developed programs and trained people in sales, leadership, information technology, and healthcare. Dawn has a bachelors degree in speech and organizational communication and a masters degree in organizational communication and instructional design. Dawn is the Director of Programs and Seminars for her local ASTD chapter.

#### *George*

At 67, George has more years of training experience than any other participant. He is known throughout the country for his consulting/training skills and management workshops. He has conducted training and development programs throughout the United States and Canada. He has a bachelors degree in business and a Ph.D. in management and is the former dean of a school of business. He writes a column for a business journal and has published numerous research articles on human behavior.

#### *Marian*

Marian has almost 30 years of experience in training and continuing education. She started her career as special programs director in the college setting, went into corporate training,

and then started her own training/consulting business in 1986. In 2001, Marian sold her business and became a freelance consultant. At the time of the interview, she was developing and presenting a program on women's issues for her church. Marian's expertise lies in the areas of religion and philosophy, leadership development, business ethics, communication, and emotional intelligence. Marian has a bachelors degree in religion and philosophy and a masters degree in adult and continuing education. She is a past president of her local ASTD chapter.

### *Karen*

Karen has more than 20 years of experience in training and adult education. She has a vast background in training within the banking industry and was the director of training for a major catalog sales corporation. Most recently, she has been the Director of Human Resource Management and E-Commerce Management program for a college of adult professional studies. Karen has a bachelors degree in business administration/human resource management and a masters degree in adult and continuing education. She has consulted for various banking, educational, and religious organizations, is a member of Society for Human Resource Managers and a past president of her local ASTD chapter.

### *Common Themes in the Study*

The common themes discovered during this study emerged in relation to the three research questions: the process trainers use to acquire the knowledge they need to develop training programs; the common factors that facilitate the acquisition of the knowledge; and how the common factors influence trainer's acquisition of knowledge. The findings are reported in detail, using quotations from the interview transcripts, to ensure an accurate presentation of the experiences and perspectives of the trainers who participated in the research. Some quotations



have been edited for clarity and readability. The accuracy of the information and intent in the edited quotations were verified through member checking.

The common themes identified in this study were self-directed learning is extensively used, the training and development process becomes part of the trainer's life, needs assessment is essential to knowledge acquisition, knowledge acquisition is a continuous part of the trainer's life, understanding adult learning principles is important, and reflection is essential.

### *Self-Directed Learning*

The most frequent theme that emerged from this study was that self-directed learning is extensively used to achieve content expertise. Although none of the participants actually used the term self-directed learning, their descriptions of how they acquired knowledge reflected a process in which they had control over both the goals and the means for learning (Spear, 1988). They also diagnosed their own learning needs, formulated learning goals, identified resources for learning, chose and implemented learning strategies, and evaluated their learning outcomes (Knowles, 1975).

Only one of the 24 participants, Smitty, purposefully attended a class to acquire the knowledge he needed, but he realized after he had attended the class that the information he had learned on his own before the class was more in-depth and up-to-date than the material that was presented in the class. The following discussion explains how self-directed learning was evident in participants' plans for learning; whether they used linear-interactive-linear or interactive-linear learning processes; how acquisition of knowledge was part of the program planning/training process; and how they used of a variety of resources.

### *A Plan for Learning.*

Seventeen of the 24 participants indicated that they had a plan of how they would proceed with their learning; however, they tended to speak more about how they designed the program than how they gained the knowledge. The other seven participants said that they didn't have a plan to acquire the knowledge they needed. The participants described their knowledge acquisition journey as either a linear-interactive-linear or interactive-linear process. In addition to the two processes, they described their learning through the use of actual program planning models such as Analyze, Design, Develop, Implement, and Evaluate (ADDIE), as an integral part of the program planning process and in terms of the resources they used.

### *Linear-Interactive-Linear Learning Process.*

Six of the participants indicated that they thought their learning was linear in nature, but went on to say that although they would prefer the process to be linear, they realized it wasn't very realistic in learning. Of all of those interviewed, Zoe was, without a doubt, the most comfortable with a linear process:

It has to be a process. I have to see the process and I have to see the end, what the end result is going to be in my mind before I can even get started. So, that's where that course outline is extremely, extremely important to my process. It will change, but that foundation of that course outline of what content I want to include, and the order in which I want to give it to the participants is really, really important.

When asked if she had the ability to acquire information randomly, Zoe said.

It bothers me, it can come in as helter skelter, and the course outline is a good example. Like if I put a title and somebody calls me and says, "Oh, I found out this group of people may be attending this training," and it may affect the title of that, I'll make a note up there next to the title. I may not change it at that time, but it bothers me to have any kind of chaos happening. I would prefer for it to be linear. You sending this [participant's package] to me was extremely comforting. It would bother me to just walk in and not have answers prepared or be prepared in some way of what I was going to say. That's how extreme it is sometimes.

Tim, who primarily teaches skills-oriented classes also described his preferred learning process as linear, but said that he “could take random data and arrange it in a logical process” and went on to clarify his response by saying, “I think that’s the technician in me, I tend to go step-by-step-by-step.”

When asked if she had a plan for her learning, Greta responded:

I’m very systematic. A does come before B. So I think that it’s very important, there’s a sequence, there is a natural sequence to everything. So I guess you would say there was a plan, I don’t know that I wrote it down, but I felt like in that first formulative period it was all up here [in the brain]. I knew exactly what I needed to do first, second, third, and fourth.

However, when asked if she considered her learning process to be linear or non-linear, she exclaimed,

Wow! As long as I can end up in a linear fashion, I will tell you that I’m global enough that there is an awful lot of that going on initially... I tend to take that information and put it in that [linear] format, whether it comes to me that way or not. And the reason I do is because it’s like having your ducks in a row. I just feel like when I walk in front of the class, especially with four hours, I need to have my ducks in a row. But I am global from the standpoint that I like information to come from a variety of places, and I’m very open to new sources.

Linda’s description of her desire for a linear process provided insight into the benefits of a non-linear, interactive process.

It’s linear. But, in some ways it’s non-linear because that’s the way the creative process works. But the difference is, I understand it more, I think anyway. I understand it more. I start with a linear process, but I know that sometimes you need to let ideas incubate, and there’s gonna be things that are non-linear and it makes for a better session to use them both, I think. Because otherwise, to use an old cliché that’s totally over used, think outside the box. If you’re totally linear, in my opinion, then you’re gonna do things that have already been done before, and it’s not going to be that breakthrough thing that everybody’s always hoping for. You know, you want to do it better than anybody’s done before. Find out a way that’s gonna make light bulbs go on with people.

Frank provided an outstanding explanation for why it is so hard to use a completely linear process when learning.

We try to make it be linear to some degree, because again, we're dealing with skill. We try and say, "Let's just focus on this job and let's do this job from A to B to C." But you couldn't get very far before you realize that that job interacts with that job over there, and that job interacts with that. So, it's not, you kind of have to look at all the jobs and have an eye on everything that's going on at the same time.

*Interactive-Linear Learning Process.*

Everyone interviewed, even those who preferred a linear process, agreed that their learning process contained a certain amount of interactivity. Those who preferred the interactive approach also agreed that there is a point at which their learning process becomes linear. The interactive-linear approach was typified by what appeared to be a nonsensical gathering of knowledge followed by a funneling of the information into a logical order. Will described the process.

The information that I sought, the information sources that I sought, may have appeared as though there were no design. But I had an idea what sources I wanted to access and who I felt had credibility on the topic matter, on content expertise. I knew I needed to get that information together to be able to go through it to then begin a linear process of how to sort through the information, what information led me to some other source or other source person so that it was a linear process. Then in the structuring and preparing [it] was all part of the learning experience and that certainly is linear.

Chris used the following analogy to describe how the interactive learning process works for him.

There's a point it gets linear. I think you're doing the "grass catcher," you get all that information but there's a point at which you begin to start sorting and start making some decisions and start discriminating based on, OK, this I need, this I don't, this'll work, this is something I'll put over here on the side. So I think it definitely does get linear.

Stacie expressed how significantly the "grass catcher" effect could impact the learning process for the interactive-linear learner. Even her statement shows how random the process can be.

I usually gather information randomly. I do it often. In fact, I enjoy it. I will be easily taken off task, because I'll run across and I'll research for this thing, I'll run across some great stuff that had nothing to do with, and I will spend hours. It's time that comes back to me, but hours in an area where I'm pulling from this, because I know it's going to affect something that I have three or four months from now, and I'll jump between those steps and I'm very comfortable doing that. I know it drives some people nuts.

David combined both the linear-interactive-linear and interactive-linear to describe what he labeled as a "hybrid" approach. He typified it as a "linear approach, with some kind of hybrid in the middle, and then it comes back more linear."

Marian echoed the feelings shared by most of the interactive-linear oriented trainers in the study.

My natural learning is very non-linear, very non-linear. So, I make myself be linear in learning what I'm going to be writing and presenting because otherwise, [with] my nature I wouldn't get there. I can take it in from anywhere. It doesn't make any difference. I make sense of it later... I can bring it in non-linear. It's like I said, that's why [I use} all those colored Post-It notes. I can go through resources and see application to eight different areas. But, I have the linear, the outline in front of me, and I've already distinguished where I need information. But I don't have to just work on one piece at a time.

*Knowledge Acquisition - Part of the Program Planning/Training Process.*

Two participants, Dawn and Frank actually used a copy of a program-planning model to describe the manner in which they acquired knowledge. Dawn used a program-planning model designed by her company.

The design is so thorough that a majority of the information needed in order to prepare and facilitate learning is there. I think you're gonna have the tools, you're gonna have the contacts, you're gonna have the considerations to think about and the points to make throughout that training process...a lot of the learning obviously happens in the discovery phase, but you're also learning as you're developing and making more connections. This is what needs to happen to get the content pulled together. Now, depending on what your level of involvement is going to be in that actual training process, the learning may differ. So there may be additional learning that takes place with this, that wouldn't if you were just designing and then giving it to a content expert to present, or a subject matter expert to present or facilitate the material. So, there are probably some key things that take place throughout this process, but without it the learning wouldn't

be as in-depth. But I think the relationships are another thing that are going to be key to that learning process making sure that you get to the right people and have the conversations with them and observe the experiences, or at least get as close to observing as you can, that aid in learning.

Frank used the ADDIE program planning model when he described his process for acquiring knowledge, but did so more in terms of how determining the organization's training needs is part of the learning process.

We interviewed people at the corporate office who were gonna be the sponsors of the program, from the people in training to management, and that. We also went out and spent a good deal of time at the terminals visiting with the managers of bus terminals, their customer service people and some of the employees. And we also talked with a few customers along the way. We did all of that and we did one-on-one interviews, and I can give you this. You can look at it [the model], or I can make you a copy of it. We went to several bus terminals in Fort Worth and Dallas and San Antonio and at the corporate office. So, we went through a pretty lengthy process of interviews and discussions and phone calls. Most of them were face-to-face, but we did a couple of phone calls. But primarily we went and sat, kind of like you and I are doing, face-to-face.

#### *Use of a Variety of Resources.*

The participants used a variety of resources in pursuit of their learning, with subject matter experts (SMEs) and printed material being the most frequently used. Interacting within the organization and using the Internet accounted for other resources used. The Internet was a difficult resource for the participant's to prioritize because it was considered an integral tool for locating other resources throughout the learning process.

#### *SMEs.*

Eleven participants said SMEs were their primary resource for gaining knowledge, and another eight said they were their second resource. Of the participants who indicated SMEs were their second choice, three had said that the Internet was their first choice; therefore, if they hadn't used the Internet as a means to identify resources, they would have gone to an SME before any other resource.

George said that SMEs are “the starting point in acquiring knowledge.” The trainers used them not only as the starting point, but also in various ways depending on the course they were developing. They used them in everything from gaining knowledge to designing a training curriculum, to co-facilitating, or actually having the SMEs deliver the training programs themselves. The following descriptions are typical of the participant’s feelings about the crucial role SMEs play in the knowledge acquisition process.

Jennifer talked about using SMEs for the first class she developed without having content expertise.

Actually, the first time I used subject matter experts was for one of the classes that I really didn’t know a thing about, and [it] was part of a major program that was being rolled out. And it was my first, so it’s the one that really comes to mind, and I went to the subject matter experts... Ever since, in programs that I’ve had to do, I will go to subject matter experts...

Julia shares how she used SMEs to help her develop training programs when she served on the faculty of the National Training Center for Girl Scouts and had little, if any, content expertise.

I pretty much created, not totally new, but new based on the participants’ needs assessments and things like that. So, it was fairly uncommon for me to know very much at all about the topic, other than it was in the general area of Girl Scout programs... So there might be people that were in charge of fun development, there might be people in charge of product sales, the cookie sales, or people that were in charge of membership. Now, I worked in a Girl Scout council, but I had worked as the training director. So, my area again, of expertise, was training. So, generally, the approach that [took], and what I called it was Learning How to Lead from Behind, which has held me in good stead in a lot of consulting kinds of roles within organizations, is when you get people together that know the material. And we spent a lot of time talking about what it is that we should cover that we think people should know, and compare that with what the people themselves who are going to be in the class think they should know, and create from that what should be the content of the class. And then, as the lead trainer for these training events, it was my job to assure that it was good adult education. So, that process is OK. I mean I get from you the knowledge and the content, but I’m going to help you figure out, or as a group we’re going to come to an agreement on what’s the best way to deliver it.

Cheryl said she learns more from live interviews and listening than she does from any other source, adding that, “it just sticks better.” She went on to explain that even though she was a woman and had been in management for years herself; she still used SMEs to increase her knowledge on the subject of women in management. She explained how she conducted interviews with women in managerial positions at the highest levels of the government and organizations to gain the knowledge she felt she needed to feel comfortable teaching a new class.

I was asked to teach an American Management Association class called Women in Management... I've been female my whole life, I've been in management 20 something years, but I had never really stopped to think through what we did different, or what challenges that we were up against that were different. If you were just teaching a “Women in Management” program, “How would you format that, and what would you do?” Very lucky, here in Kansas at that point Governor Finney was in; she granted me an interview. I got an interview with the head of the Department of Human Resources for the state, interviewed one of the judges who was female, the president of Payless Shoe Stores at that point was a female, and the president of SBC was a female. So [I] interviewed 8 or 9 females who had made it all the way up to the top of their respective food chains, and asked them all the same set of questions, and was able to just have some wonderful stories to tell, and it helped me put it in perspective of how things had changed, too. Because I was, even though I'd been around a long time, but the women who were ten years my senior had had a significantly harder time than even the folks that were my current age. Then when you interviewed people that were ten years younger, they had never reflected on what they had had to do different, because they really hadn't had to do anything different. So, it was really interesting, and for me personally, it was a great way for me to learn and assimilate... that was a great way for me to better understand the content, and it brought a lot of depth to the program as well.

Cheryl's example showed how she considered the women she interviewed to be SMEs for the subject based upon their achieving success as women in upper-level management positions. Her example is fairly typical of the way trainers seek knowledge from SMEs. Elaine used a much different approach to gain the knowledge she needed from SMEs.

The first class I was asked to teach was on making a change on the aircraft, on the floor, so I spent a couple of weeks, in overalls, on the production floor talking to folks about how the aircraft goes together. Learning and understanding some of the major pieces and the minor pieces and what the flow was, and what their life was like...because they touched it every day and they



knew – they knew the system... When I developed curriculum for the production floor, I had to develop at a 6th Grade reading level, because not many of them had been through high school. So you had to talk in their terms, but that did not by any means mean that they didn't know.

Frank's use of SMEs is an example of how Cheryl's and Elaine's approaches can be combined to develop a comprehensive training program. He used more of a team-oriented approach to develop a skills-based training program for Greyhound.

Fortunately at Greyhound they have a team of trainers, they have several field trainers... We had, what I call them, our SMEs and there are 2 ½ pages here [pointing to the pages in the book], of people that helped us with this project. So, they were assigned to do that. So, for a ticket agent, there were seven people that were kind of involved in that. And what we had was a mix of trainers, and then there were some home office people, and then there were some actual ticket agents. One thing that we did as we developed the program is, that we had access to the Greyhound Bus Terminal in Wichita. So the manager there was real helpful, and we'd go down and visit with her and talk to her and her employees whenever we wanted to. And actually develop things, we could give it to her and let her look at it and say, "Does this make sense to you?" or, "Are we on the wrong track here, are we going to wind up in Fort Worth when we're supposed to be in Dallas?" So she was helpful for us in that way. But I would say, we had the SMEs...

Dawn said that she used SMEs who were either identified by the "executive pool as high performers, or were the folks who were putting up numbers, or were pointed out by some other person within the organization." She went on to explain why she thought the high performance SMEs could add a different perspective to the knowledge acquisition process.

Although they may be the high performers and the ones putting up the numbers, doesn't necessarily mean that they're utilizing the process, which sounds ironic. But there's something about the way that they go about business that produces the numbers, but they may not be looking at the level of detail that some of the folks are. So it's nice to get some tips and tricks from those folks, and maybe some best practices.

Will used more academic/research-oriented SMEs to develop a four-hour class on sex related murders.

SMEs includes not only practitioners at a local level of law enforcement agencies who typically conduct those types of investigations, but more

particularly I was concerned with folks at the federal level who performed research and consulting functions to local and state law enforcement for that specific type of murder investigation. And it is those federal practitioners who have the methodology and the research published from prior research they have conducted for different parts of the United States Department of Justice and published through the National Institute of Justice, or other professional periodicals for homicide investigators, and psychiatric practitioners and other academicians concerned with behavioral aspects of violent crime.

Will went on to say that the SMEs he used were SMEs because “they were also primary researchers of both quantitative and qualitative research, and the [research] they had conducted over specific periods of time and specific populations was relative to the issue.”

Instead of discussing how he used SMEs to develop a specific training program, Chris shared his views on the value of the different types of SMEs.

I think there are varying levels of subject matter expertise. You can have subject matter experts that really know a particular subject from an academic standpoint, or from an experience standpoint, but then you can have those people that do it day in and day out. They have that real practical subject matter expertise. And depending on what you’re trying to do, those are the people I tend to want to gravitate to the quickest. The ones that are doing the job, day in and day out. Now, the people that have the academic or technical expertise, they’re important, certainly too, I mean they’re critical. But, a lot of times you take what they tell you and have to apply it..., with the folks that are actually doing things day in and day out.

Dawn also shared her views on others who can also be considered SMEs and can be helpful to a trainer’s pursuit of knowledge.

I think we have subject matter experts who haven’t been out in the field. I think they’ve either just interacted with folks enough or designed enough that they know the process. They know the different components and they know the players, but they still haven’t lived the day-to-day. So, I think you do have some subject matter experts who are out in the field doing, but I also think you have some who are not, who may be playing a different role or capacity in the organization, but have the knowledge. It’s a good place to start, a good place to get the structure, but I think it’s risky to stop there.

Jennifer, Raymond, and Will gave some recommendations to consider when using SMEs for knowledge acquisition. Jennifer believes that trainers should be prepared when they meet with SMEs.

Learn as much as you can so that you're understanding what the subject matter experts are talking about. I mean, you have to know enough to connect with them and to relate to them and to know what they're talking about. But really, you need your subject matter experts to give you the experience, because otherwise it's just book stuff. And unless you have practical experience around it, or how it's really applied, or what it really looks like, then it's just book stuff and you won't connect with people.

Raymond agreed with Jennifer, saying, "I like to know the models, or have some idea of the theory, before I go out and talk to the practitioners so I have a place to put the knowledge. Will added that it is also important to verify the credibility of SMEs.

Pay attention to the authors of research and/or agencies that sponsor or produce the research to insure that there is credibility and validity on the part of the people who prepared or presented the information to insure that it's going to be relevant for the audience, and that it not be junk science for example.

#### *Printed Materials.*

The participants identified printed materials as the second most useful resource for gaining knowledge. Four of the participants listed it as their first choice. Nine of the participants listed it as their second with five of those preferring it second to SMEs and the other four second to the Internet. Printed material was mentioned throughout the interviews, but primarily as a source of research, or to gain sufficient knowledge about a subject to ask intelligent questions when interviewing SMEs. Stacie's comments indicate some of the difficulties with using printed materials.

You can truly look at a ton of stuff, and only use 10% of it because you are making that link between this very solid and accurate and good and quality information, but is it right for the message that I'm trying to get across? You'll find something in there that is right. But you find you have to do a lot of reading, a process of looking at that saying, "That's really great, I believe in that. I've

experienced that, but that's not right. That's not the right set for what this audience needs."

Will spoke about printed materials, again from more of an academic perspective, and showed how he used online academic libraries in conjunction with the printed materials to acquire knowledge.

Well first, in exploring the issue, I had to decide what were my possible sources of information. So, being able to utilize online resources from [an] academic library, I was able to get a fairly complete listing of journals and even entire journal articles without having to order specific articles from the abstracts. So one important source was that academic online resource. Probably the primary resources were the available texts and the available journals that I found from other searches, other than online, from other professionals in that area who recommended specific texts, specific authors, specific works.

The most interesting findings about the use of printed materials as a resource had nothing to do with the process of using them; rather, it had to do with the participants who used them. Two of the participants who indicated that printed materials were their first preference for gaining knowledge were in their sixties, had strong academic backgrounds, and have done training for over 30 years. Both of them actually considered SMEs and printed materials equally important. George explained how he combined the SMEs and printed materials to gain knowledge.

For me, I think, it'd be a close tie between talking to the people who are doing it and the print. I use the print to make sure, but now, you see, I've done that enough. I go to print for new things, or new twists or tweaks on it, but the basic fundamentals of leadership, or motivation, or what, I don't really read to try to find new information. But, I use the print to make sure I've got the constructs and the background and the theoretical part, and the latest research on it, and so on. But then I use the people to really try to understand it.

Two of the other participants were so reliant upon printed materials for acquiring knowledge that they stood out from the other participants; therefore, the researcher asked further probing questions in an effort to understand their preference for learning from books. Interestingly, they both were able to trace their comfort with books back to their childhood.

Greta told the following personal story; which she had never given any thought to, or shared with anyone until the interview; to explain her comfort with printed materials.

Let me tell you a funny story. I share this with you because I believe this is that critical moment where a pattern maybe develops for whatever reason. But, when I started menstruating as a teenager, the natural thing for you to do would be to go to your mother, or if you didn't feel comfortable going to your mother, it would be to go to your sister, and I had an older sister. When that process began, I went to my mother, asked her one question, and she answered the question, but her inflection, attitude and tone told me, this was an embarrassing subject and she really didn't want to have this conversation. So, I backed off, and I didn't go to my sister and the reason I didn't is because I knew she was doing that, and she had not talked to me about it. So, I quickly learned that there were boundaries of who you talked with that about. I didn't talk to my mother or my sister and my mother was an RN... That would have been 1960, probably. I was going to say, when I needed to self-discover about that most intimate of processes, I went to books... I went to books. So, that is part of probably why books to me are non-threatening, they don't embarrass you, you can take them and not everybody knows you've got them. You can read them in private, and you have them with you, you can always refer back to them. So I think, I do remember that that was somewhat of a turning point for me in terms of how I chose to learn. I mean, there are things that happened to me leading up to that, that I can say I don't know why I did it that way. But I remember that specific instance where I was laying myself out in a very vulnerable way saying, "This is happening to me, can you help me understand it?" And mother just couldn't do it. So I had to discover that how, why, how to handle it. That was a different era then. We didn't talk about it in school very much... But it was a pretty defining moment.

Greta went on to explain

Until I was sitting here reflecting on [it], and why I kept coming back to books, I couldn't remember. But, boy, I do remember that, and that helps me kind of just sitting here, understand maybe why I did that. Because it became my source of information...

When asked when the last time she had thought about that moment in her life, Greta responded with, "I don't know that I ever have. But I've never, ever had anybody pin me down that reading was that important to me. It is. It's the self-discovery kind of thing... that I've never shared with anybody."

Zoe was the other participant who admitted that books are her major resource for learning. Like Greta, she used a story from her childhood to explain her dependence upon

printed materials. She said that even though her sister was four years older than her, she would always come to her if she wanted to learn something. If Zoe didn't know the answer to something that she didn't already know, her first response was to go to a book.

I became dependent on books because even at a young, young age, like 2 or 3 years old. If we went to the grocery store, if we were anywhere, the only thing that my mother would buy us extra was books. And so, I became so comfortable with that and actually got excited when I'd get a new book that I will, I don't know, that's what I look forward [to], is getting that new book to learn. So from a very, very early age, if I said, "How do you spell this word?" most parents would spell the word out for the child. My mom would say, "Go and get the dictionary and find out." So you became used to being dependent on a thing instead of a person, or self-dependent. Extremely independent!

Carrie was the fourth person who said that she preferred printed materials. Even though she used SMEs extensively when learning, she said that she goes to "printed materials first, because people are harder work."

*Latest Books by the Stars in the Field.*

The continuous search for books by the most respected authors in the field and the latest books on the content areas in which the participants specialized was heard throughout the interviews. When David spoke about searching for the latest books, he said that he starts with college textbooks to see how academicians are handling the topic, and then he goes to whoever is considered to be the top name in training – the top writers/speakers in the area. He said that he looked at their books and if they had videotapes, he viewed them too. As a matter of fact, he had just finished viewing a tape on entrepreneurship by the founder of Starbucks, who had just been named the Entrepreneur of the Year, right before the interview started. David went on to say,

So I've looked at what trainers are doing in terms of materials. I've looked at the academic approach to it. I've looked at one or two of how the top people are treating it... And all I'm doing there is, it's kind of percolating. I'm taking a few notes, I'll have a legal pad and I'll be taking a few notes, such as, "we'll need a leadership style instrument." We'll be looking at the different styles and particularly the vernacular that goes with different styles, contingency management, whatever it might be in that regard...

Then I'll start getting into the star material. I'll go to like a Jack Welch, and I'll read Jack Welch on Leadership from General Electric. So I'll read two or three of the hot CEO's treatment of it. That'll be pretty exhaustive reading, but it's the only way I'm comfortable on new material, and I don't know whether it is out of seeking knowledge, or fear of being blindsided...

Then after I look at the modern, or kind of the stars of the day, I'll go back to some of the almost classical material in it. I'll go back and I'll read an Iacocca, who was 15 years ago. I'll read a Drucker on leadership, so I'll read some of the classic stuff on it, also. So then I've got a pretty good feel for the field.

When asked to expand further upon "Stars in the Field" and whether he considered them to be SMEs, David responded,

Yes, practitioners, yes. For example, in leadership, I'd look at kind of the traditional academician who has contributed the Bennes', Smitty Bennes'. After the first Gulf War, I read both Schwarzkopf, and who was the logistical genius.... So, I'm reading, they're typically best seller guys. It doesn't mean that their content is absolutely the best, but that's who I'm gonna go with. So, yeah, I'm gonna look at the vogue, the in, type of people, and I'm gonna quote them. And of course, they're gonna have more credibility. Today, if you say Iacocca... anybody under 40 is not gonna even know who [he is]. So, you can't quote Iacocca very well... But, yeah, the stars are typically the best sellers, more current today back to five years or so.

George shared his perspectives on why it is important for trainers to keep up with the latest material and the Stars in the Field for their subjects.

Several years ago there was a book came out on re-engineering. Well there wasn't a whole lot really new in that book. But if you go to an executive somewhere, or you're talking about delivering or selling your service, you need to know the concepts in terms of what re-engineering is. And it's just a different way of describing, and talking about it using different words and labels... you need to package your content and material in the framework of whatever some popular terminology is. You go way back to Theory X and Theory Y, you could still explain those same concepts today and never use the term Theory Y. But when Theory Y was hot, you needed to know what the labeling was and how it worked and so forth. So in that sense, I think the trainer needs to keep up with how your content is being labeled and described and packaged...

Stacie believed trainers could approach a project where they are not experts by "finding out what the experts in that field have to say... they can validate whether the piece of research is

really a good fit for their target audience.” “They can pick and choose what they want.” Stacie also provided her thoughts on how to realistically use the latest books on a subject.

Now, what I think brings power to that program, though, is not the research, it’s not the research on the front end or the research out there in terms of who’s written the latest book on that. It is identifying what, and this comes from either life skills or some basics of experience prior to training, what link I can make between what the experts are saying and which models really do scream at what my audience is needing. That’s the tough part. That link is where it happens.

Raymond approached the Stars in the Field in a much more assertive manner than any of the other participants. He said that when he did his research, he would look for the latest material on the subject and looked for trends and find out who the significant authors were and whose name kept popping up. Raymond said, “OK, I’m gonna go look at him...his name keeps popping up so he must be one of the gurus on the subject.” He went on to explain how he takes the process of looking for Stars in the Field one step further.

There’s one other thing I need to tell you, because this one is unique. I’ll never forget. This is the book I use for my leadership class, *The Leadership Challenge*, by Cousis and Posner. It’s a pretty well known book now, they started a consulting firm. I don’t know if they still are, but they aligned themselves with Tom Peters’ group for a while. When I read this book, I called Jim Cousis. I was there, I was at McDonnell Douglass, I looked at the back. At that time, he was with Santa Clara College. I looked and I called directory assistance at Santa Clara College, they said, “He’s no longer here.” The third number I called he goes, “Hi, this is Jim.” I go, “Hey, Jim. I’m reading your book and I’ve got some questions.” Another one I started here was Structured On-The-Job Training; that was another thing that I started up here and I researched; I had to become [an] expert in it. I did the same thing; I found this professor in Ohio at his summer home up on Lake Erie, and I talked to him. I said, “I’m reading your book and I’ve got some questions – where is this company, and who could I contact there to tell me about how things worked?” And he was very helpful. So, I have, and that’s two examples I can think of, but there’s probably been a dozen times where I’ve called the author. I actually got to talk to them. And you’d be surprised; they’ll talk to you.



*Interaction with More Experienced Trainers.*

Other more experienced trainers were identified as another pool of SMEs. Several of the participants spoke about how valuable their interactions with more experienced trainers were in their pursuit of knowledge. They used the other trainers as a source of knowledge in two primary ways. First, other trainers served as mentors on the best ways to learn what they needed know, on where to locate resources, and on tips for teaching. Second, other trainers have personal resources, such as information from similar training programs they had either attended or developed and books on the subject.

Smitty, the participant with the least amount of training experience, who had been asked to develop a one-day Train-the-Trainer class, used his training manager as a source for gaining knowledge.

My boss has been my mentor, she is and still is, and she does a great job. I rely on her heavily to bounce things off. I am impressed with the fact that she has been in training for a long time and has a ton of books, so I went and got her books. So, she had gone to a five-day training session for “Train-the-Trainer;” she had gone to a three-day training session of Training The Trainer... I took the five-day training that my boss had received, she had their manual, I took and read the manual cover to cover. Took her notes, went and interviewed her, and asked her what she meant by some of the comments she made, and took that kind of into consideration. She said she also did a three-day one, and I said “I’ll take it.” I read all of that and got it real quick... So, basically, I did her five-days of training in one night, you know. Then I went back...after I got done with that...I went back and asked for her three-days...

Zoe said she used other trainers to learn,

because they would have had to have been in the classroom prior, and they could say, “You need to change this,” or, “make this a little bit more interactive.” They could really say from a trainer’s standpoint what needs to be changed with the curriculum, or what I need to concentrate on when I’m developing a curriculum...

Elaine talked about learning by co-presenting with more experienced trainers.

When I did that training for the Catholic dioceses, I co-presented with Bill. He works at Boeing full time, but he does a lot of consulting for the church, and I

learned a lot from him. He really helped – I’m not real good on stand up rehearsal time. I do my rehearsal, and I look at my notes and read them through and talk them in my head and in the shower, and in the car, and as I cook. But he really emphasized to stand in the room. We went out to the church three weeks ahead of time to stand in the room and talk out loud to each other. I mean, he taught me a lot of good things I know I need to be doing.

Linda relied heavily on professional organizations for access to information and other trainers she needed to develop training programs.

ASTD is a wealth of information. They have info lines... I use that a lot. A lot of times they have networks of other trainers. I will use the directories, I’ll call them, I’ll call local people, we have a network here. I’ll ask them, I’ll say, “Hey, have you done this?” So if I can shortcut this method in any way possible, I will. Sometimes, if it’s not a copyrightable kind of thing, and we’re comfortable with that, we’ll share materials. It just kind of depends.

When the participants spoke about using more experienced trainers as resources, they always did so with great respect. Martha and David’s comments are reflective of the comments made by several of the participants. Martha talked about learning from Marian, saying that she “would share and give you anything you needed, she isn’t threatened by anybody else, it seems, and she’s always been a really good resource.” And, true to form, during Marian’s interview, she mentioned that she had just dragged out a course curriculum called Advanced Training Techniques to lend to another trainer. It was David’s comments about George though, that exemplify why trainers use other more experienced trainers as SMEs for acquiring knowledge.

George is a consummate trainer. He is extremely bright; he’s probably the most talented trainer out there. He’s been a mentor for me for 30 years and extremely well read... I was doing training and I didn’t really see how to do it. And we sat down one time and he says, “I want to tell you how you really learn training,” and he gave me a book...and all of a sudden I started putting training with that book, and my gosh, it was like a light bulb went on... The book was by a fellow who was an old guy out of Big Cabin, OK, he was a world famous dog trainer, bird dogs, and he was not crude, but he was poorly educated. But if you read his book, you were sitting at the feet of a master trainer who understood behavior. Now, it was applied to a dog, but, I’ve got to tell you, people will roll their eyes on this one, you can apply about 99% of it to human behavior. He understood reward, he understood correction, he understood repetition. He didn’t understand maybe, it falls short on some of the cognitive things, perhaps, but

training a dog is an excellent, excellent activity for a trainer. In fact, if I were running a training university, I'd probably fit it in one way or another.

*The Training and Development Process Becomes Part Of Your Life – You Live It!*

One theme that was prevalent in all of the interviews was the tendency to think about training program development both night and day. The participants shared how thoughts about training programs they were developing would come to them while they were in the shower, in meetings, while driving, late at night, and in the middle of the night. The following are the participants' descriptions of how the training and development process affected their daily lives. The randomness of the thoughts is reflective of the phenomenon. Julia was the first one to really go in-depth about how the process affected her, saying

When I design, here's how it looks. One of my [friends] said, "You just sit there and you pump a design out in like three hours." No, that's the end of the road. The process looks like this. I'm thinking about it, I'm in the shower, or in the car and I have an idea, or I can't get to sleep because I'm writing in my head, or I am at a meeting and someone says something, and I think, wow, that really connects over here. So, it's very non-linear. And to actually sit down and write it is – and usually when you sit down and write it, there's a gap, then you go and look for it...

Shirley said that she had worked on numerous training programs while she was walking, exercising, and while driving. She believes that, "a lot of that has to do [with the fact] that the subconscious is certainly at work, because when I'm thinking of a new program, developing it, it's churning. I know it is." George said that the ideas usually come to him when he is talking to somebody about something. He went on to say,

Occasionally in the evening or morning, occasionally in bed. If I've got something that's lurking out there and it's kind of on my mind, before I go to sleep, I might be thinking about it, "OK, what have I got to do to get all this covered?" Something might come in, but usually it's when I'm talking to people, listening to people.

Linda said she thinks about training programs when driving and in meetings.

My husband tells me I shouldn't be doing that, driving, I should be concentrating on the road, but I'm one of the cell phone people, unfortunately...I think about training programs I'm developing all the time. In fact, that's where I probably get my best ideas. In a meeting yesterday, I had one for an idea that I watched somebody present, and I thought, "I can use that in this."

Karen was a little more dangerous when it came to thinking of ideas about her training programs while driving, admitting that she had napkins, the backs of envelopes and the back of receipts she had written on while driving, so she wouldn't forget the thought.

When Will was asked if he had ever had a training program he was working on wake him up in the middle of the night, he laughed loudly and said,

I'm glad to know I'm not the only person who has ever done that. I had many epiphanies and I still don't know if they were part of my dream cycles or my thought processes as I tried to prepare for sleep. And I actually would write some of them down, and I found over time that when I told myself, "That's a great idea, don't forget that idea," I invariably would. So that's how I trained myself to turn on the light and write it down on the notepad I had at the bedside, because too many great ideas were lost. I couldn't remember my idea.

Greta also said that her thoughts keep her up at night.

They come from nowhere, the ideas just come, and I can't always control it, they just all of a sudden come and something will click. If I'm right in the middle of [teaching] a class, they wake me up in the middle of the night. In fact, one of the reasons I wanted to do online instruction is you can do it 24 hours a day, and I was having trouble sleeping. I just couldn't sleep. And I've had students say to me, "What were you doing online at 2:30 in the morning?" "Well, you know, here I am. You were there. I was there."

Carrie admitted that she thinks about training development while she is driving her car and sleeping.

Sometimes I forget to get off the highway at my exit, because I'm so busy thinking about it...And a lot of times, last thing at night, when I'm just about to fall asleep I'll think of something and now, because I used to have to keep getting out of bed to go and get a pen and paper to write it down, now I actually have a note pad and pen beside my bed.

Thinking about training programs keeps Rose awake all night. She said, "That's what I did with the call center, and with the CATIA, and several of them. You don't go to sleep, I

mean, you're just thinking about it." Cheryl also said that she couldn't sleep because she was trying to hold on to some little piece of information in some way. She said, "So, I've just had to learn that I actually will get more sleep if I go ahead and interrupt it and write it down; then I don't have to worry about it again."

Raymond said that he frequently thinks about training programs he is working on at night or when he is driving home.

My red light is on here [in my office] many times when I come in because I call myself. As I learned years ago, you write things down on things so you can forget about them, not so you can remember them. So, if I go to sleep, I lean over and I dial, and the most recent is right here [the light was flashing during the interview from the message he had called in the previous night]. They're putting together a new course on customer service, and it came to me, a whole bunch of, this is stories, anecdotes, examples of allegories, and supplemental content for the customer class. I was trying to get it all down, because I wanted to get all this knowledge into my new trainers. I said, "You guys developed a program, but here's some stuff, some stories..." so, I called myself on that. I said, "Remember to put this all down on a piece of paper so you're not laying here at night thinking about it."

Elaine also used the phone to help her remember thoughts that had come together for her because they came to her too fast to write down. She admitted that she called her voicemail, because otherwise, "you wake up thinking, what was that? I had a brilliant thought, and I lost it."

The training and development process also affects Tim when he is sleeping and driving his car, but he was the only participant to say that instead of writing it down, or calling his voice mail, he carried a tape recorder with him to keep track of the thoughts.

I wake up out of a dream or something. You know, at one time, I had pad and pencil by the bed on the nightstand. This sounds just so corny and silly, but I would jot those things down. Now, my eyesight is so poor that I've got to get up and put glasses on, I just don't mess with it. And my memory is not good enough that, chances are I might have dreamt it, then I forgot it... There are a lot of catalysts out there. It could be a billboard. I actually used to, when I was in the field, I carried a tape recorder with me. Because driving, and so forth, there may be something and I'm driving by at 40 mph and I can't pull over and take a note, so I would just talk. I carried it – and actually what happened, it wore out, and I

haven't replaced it. But I used to talk into my recorder there with little ideas and things that I would have.

Marian said that when working on a training program, "It's first and foremost in your thought process" and shared the following story to help explain the phenomenon.

Years ago I took a class in Homiletics, which is preaching. And I remember the teacher saying at that point in time that, what you do is you plant the seed in your mind of the topic, and then you're amazed at how many things in life support that topic. Once you've planted the seed, that's all you have to do, it's there, and then all of a sudden things just pop out as illustrations and that's right. It does. Everything relates. It's kind of like buying a red car, and then all of a sudden, everybody in the world has a red car.

David's words on how the development process affected him actually provided the term for this theme. He said,

When I'm developing a program, I live with it! I don't turn it off. If it's gonna be a two-week period or a three-week period, or a four-week period, it's gonna be on my mind pretty darn constantly. I'll spend windshield time with it, all the rest. I'm not able to turn it off very well.

Linda agrees with David, adding:

You know, you hear that from actors, really good actors, that they do that. And the ones that are Oscar quality actors say that you have to live it. And if you don't, I mean if I don't, because I try to do that, but if I don't, [because] I'm under a time frame, and I'm pressed, and I don't, it's never near the class that it would be if I lived it. You have to feel it. I know it sounds corny. But you're getting into [living] it, you know.

Chris shared a story about living it from a different perspective to show how a vice-president for engineering used his understanding of people's natural tendency to subconsciously think about different aspects of their lives to solve problems in an organization.

One of the most fascinating applications I've seen of [living] it, but there was a vice president of engineering at a major aircraft manufacturing company would have a Friday afternoon engineering meeting for all of the project managers on different models or different systems. All it would be was a status report, and he would say, "OK guys, this is what we're working on, this is where we are, these are the five key problems that have dropped out of this and here's what we're doing, here's what we're working on, here's where the gaps are." He would close with "All right, great, wanted everybody to know, have an update on

where we are. Have a wonderful weekend, have a great evening.” The vice-president said that “people who tend to go into engineering by nature tend to be very analytical people, and they tend to be very process involved and by nature, things are always running around in their head.” He went on to say that he got “countless hours worth of free labor out of those engineers. I can’t tell you how many times on a Saturday afternoon, if I would walk through the plant, those guys would be back here and something had sprung into their head when they were asleep Friday night, or when they were taking their kid to the soccer game on Saturday morning.” It’s kind of a dirty trick, actually. But I think it’s really true. You plant things in your mind, or you’re working on something and suddenly it just kind of comes – Pow! It all kind of comes together. And that’s when it wakes you up, or you’re sitting watching basketball at the kids’ game or something, and all of a sudden, that’s it, there it is.

### *The Needs Assessment is Essential to Knowledge Acquisition*

Needs assessments are part of any program planning models and integral to successful training development, but the participants spoke of another type of needs assessment based not only on learning content, but also learning context expertise. George said that in order to gain knowledge, he sometimes attends workshops, but more importantly, he talks to the working people, the people who are doing what it is that he is supposed to be training. He almost always does a needs assessment, but

...not a traditional needs assessment, just talking to them. You know, what are your problems, what are your barriers? You talk to several different people, they have different ways and you find some of them make whatever it is that you’re doing more effective or work better than others. And so you just kind of pick up those cues from people.

Chris shared how his previous learning through the use of needs assessments influences his current acquisition of knowledge.

My previous learning was the way I’ve developed kind of an on-the-fly needs assessment capability. That’s what I do in my business practice now. That was just kind of honed from [that], at that time I’d been a human resource development person for at least 10 years. And so the previous learning had to do with really getting clarity around what the problem was.

Frank was very straightforward with his feelings about needs assessments. He believes that needs assessments aren't always done, but went on to share how taking the time to do a proper needs assessment resulted in a successful training program.

We did spend a lot of time doing needs assessment. We always talk in training about doing a needs assessment, and the design document, and all that. The fact of the matter is we don't usually do it. They say, "We need training, OK, let's develop it." And off we go. This is the one program where we did that [the needs assessment], and we did the design document, which laid out the program pretty much in detail. So, I guess, this is a case where we went the extra mile. We really followed what we always knew in our hearts we should do. We actually had the opportunity to do that and put that whole thing into practice and see if it really worked. And it did. So, I don't know if that answers your question, but in this case we really did follow our process and immerse ourselves in it. We really did what it took to get to the end result. I felt like we really did all of the front-end work that was needed, but sometimes we don't always do it.

Many of the participants discussed how they gained knowledge while conducting their needs assessment. The assessment is necessary because, according to the participants, a lot of times in the training development process, the trainer doesn't know what he or she doesn't know, doesn't know what he or she knows, and doesn't know what he or she needs to know about the subject. Additionally, the assessment helps trainers gain knowledge about the context/culture of the organization in which the training will be conducted

*You Don't Know What You Don't Know.*

The participants indicated that not knowing what they don't know, not knowing what they do know, and not knowing what they need to know characterized the knowledge acquisition process. Consequently, trainers start the learning process with an open mind, trying to find out as much as they can. Sometimes they find out what they didn't know before the training classes began and then other times, they found out what they didn't know while they were actually facilitating the class.



Marie said, “In the beginning of the [learning] process there is so much information that you have to learn, that you have to pick up, that you don’t know what you need to know.” Dawn described it as follows:

Oftentimes you don’t know what you don’t know until you get into it deeper and deeper, which is I think why the learning curve happens more in the middle... I mean, I think, at that point I had enough information to know the organization, the general premise of the people, but I didn’t understand the detail that was behind the processes for what they did...I think we have to have the A to Z always, and then from there we can taper it down to fit our needs. But we’re often moving so fast that we don’t have the time at the end to pull in additional information if you need it, so it’s best that you have it up front. Then you can always taper from there if you need to.

Greta said that in the beginning she was just trying to figure out which questions to ask and gathering up information and resources.

Reading the text, there was something to be said for reading the text, a lot of learning took place there, but I can be very specific and tell you that – this is going to sound really strange – I had to pull it all together. I had to pull it all together and plan it all out.

David agreed.

Early on you’re just absorbing and – you’re learning a lot, but I think really in terms of putting it together for learning, it’s the latter part of that exploration stage is where you really start dismissing some things. That’s learning, I guess, but you say, I’m not going to pursue that, the contingency theory doesn’t work, da, da, da, that sort of thing.

Raymond said, “In the beginning, I’m ignorant of the topic. So, when I get into it, I don’t know which way I’m gonna go... I don’t know enough to say.” He explained it through the following story about acquiring knowledge for a leadership class he was asked to develop.

Leadership was probably the most, the longest and most intense learning period that I went through in terms of study, getting an assignment to develop a leadership training program for McDonnell Douglass. And the first thing I had to do was to go and start becoming knowledgeable about leadership. And as you know, there are several models of approaches to this, there’s the psychological, the inside out, and there’s almost a kind of a spiritual, you know, you become a good person, you become a good leader - servant leadership. There’s behavioral, be good leaders, behave like this, if you behave like this then you’ll be a good

leader. But you don't know that when you start out. So you read a leadership book and you say, "Oh, well that looks like..." then you see in the bibliography, and they reference some other people. And maybe one person like Cotter is referenced a lot. So you go, "I'd better go read some stuff that Cotter wrote." Then you see that Gardner was referenced a lot, so I'd better go read Gardner. I remember at that time, from just my basic research, I either read thoroughly or really reviewed about 17 or 18 different books on leadership.

Raymond gave another example of what he does when he doesn't know what he doesn't know.

I remember when they asked me about being on the CRM team and I said, "I don't have any idea what CRM even is." I thought it was software or something; I'd better look into it. So, I did some searches on the Internet, it's a lot faster; I used to have to go to the library. So, in a couple of days I knew enough about it to know at least what it was. I said, "I think I can do something here. I've spent time with our customers and I understand customer service." But I told them at first, I had no idea what that is, no idea... You have to admit you don't know it, and start from scratch and go out and start learning...if you go to people and say, "You're the expert, tell me... Help me out with this, I just need..." they're anxious to help.

Elaine's feelings were similar to Raymond's about gaining knowledge when you don't know what you don't know. However, she had to succeed in an environment in which, at first, she wasn't welcomed.

When I started out, I had to ask for help. So, I think you have to have a huge amount of humbleness because you admit you don't know. You admit, "I have no clue." And people would say, "Who the hell do you think you are?" "I'm nobody. I'm just trying to learn. I've been tasked to do this, and I can either set it out before you, or we can figure it out together." In the end, they were keeping a little list at the supervisor's desk that said, somebody needs to look at this, and somebody needs to go here. And they had already thought in their heads, "I've already thought this through, and when we do this piece..." and they were backing the process up and saying, "We need to figure out." I mean, they didn't put names on it, but they were making the best changes in the end to save the company money.

Cheryl, Carrie, and David shared how sometimes no matter how much preparation and learning is done before the actual training class, the trainer still doesn't know what they don't know until they are actually facilitating the class. Cheryl said,

Because of the kind of training that I've had to do, I had to be good when we went live, and so almost all my, probably 85-90% of the learning is done pre-class. I mean, you obviously learn while you're doing it, and get better as you're doing it, and then sometimes participants will share stories that are like, "Oh!" You learn from them and change things because of that.

Carrie told about how she found out what she didn't know when she was conducting multiple orientation classes for her company right after they had just merged with another company. She also explained how the reality of the socio-political environment in an organization can prevent trainers from doing what they know they need to do to learn what they need to know.

Well, we didn't really know all that we didn't know until we actually started the classes and people started asking questions that we hadn't already thought of. So another thing I would have done differently is I would have had a couple of pilot classes. [My company] isn't really big into that, though because that takes up time. So, I would have liked to have had a couple of pilot classes with leads and managers, but we couldn't do it, so we just had to jump in and go live and, it's not until you're up there in front of the group and people start asking questions, you realize, "Oh, I never thought about that. I didn't ask anybody about that, so I don't know." Let's just say, after those first few classes, there were very big parking lots of follow up items of things to follow up on. But then, with each successive class, we learned more and more, and I knew the answers to those things that had come up in the last class.

And finally, David said,

Sometimes as a trainer, we don't like to ever admit this, but sometimes it'll come, oftentimes it'll come from somebody in the class who'll say, "By the way, have you read so-and-so's treatment of this?" And then you look and you find out, hey this is a star, and you just hadn't paid attention. So you go back and do that. But more and more, I'll just hold those up and do it all at one time as opposed to the revision, which is, I think the more disciplined way you should do it. Maybe that's a casualty of age, I don't know.

*Content Expertise Isn't Enough – You Need Context/Culture Expertise.*

Shirley was passionate in her belief that gaining expertise means much more than just learning the content, indicating that the trainer's learning process for the development of training programs consists of a combination of both content and context.

I always think there's two parts to development, and the one is the material of expertise. So, it's something, whether you get it from books, or you get it from other people who are experts; how do you get that information? But I think the second one is to know your participants, know the context. And I think one without the other is still a half program. So, even after 15 years of teaching a writing class, and that's probably the one program that in terms of actual content changes the least of anything I've done in the 20 years. Business writing. Basically, business writing is business writing. However, whenever I do something in house, it is focused or edited for either their type of writing, their vocabulary, [or] their application of writing, and so it's not even the same program that's given public, in a generic sense. I'm just a firm believer that content and context are both so important.

Shirley went on to explain how she does a needs assessment to determine how to develop her training programs based upon the audience's context.

[When] I'm going into an organization, I would want to talk to [whoever] the key people [are], but I may do a survey of participants, or I might do – I'm doing a board workshop next week, and I've got the chair's perspective, I've got the CEO's perspective, and then I did a survey with a list of questions from the whole board, from each of the board members. I want to know where they're coming from before I walk in there; I want to know what they're thinking. I know what I'm thinking, but I want to know what they're thinking. I also do that to get a, I mean I think it's a baseline to figure out where we're starting. I think there's way too much training that is ineffective because the gap is just way too great. Somehow, whatever is being presented, isn't matching wherever we're starting from. And especially, if we just think we can be content experts...

George reinforced the importance of understanding the context by saying,

You have to put the content into the contextual dimension in which you're in. If you take an example, such as manufacturing and use it with sales people, it doesn't work nearly as well, and vice versa. So even though the content may be the same, you do have to put it into context.

Will agreed that the context is important and shared what he wants to know about the people being trained. He said, "I want to know exactly who the audience was, what their skill

levels are, what the goals are of the folks who invited me, so that I can match the desired learning goals from the audience with the presentation information.”

Since the context is different for each organization, Raymond said that he “actually spends a lot of time with them finding out what their culture is like, how they lead, and what their problems are, etc., etc.”

I like to do a lot of real life interview type stuff with leaders, people that have been there, get their views on those things; get to know their business. Even here, we have many little collection of businesses. And to give you an example of how that would be, another one that I did this in is customer service, and it was for our service centers... As I was learning about customer service, I also spent a couple of months getting to know their business. I mean I spent time with the accounting people in the service centers, so I knew the financial levers. I visited the service center here in Wichita first, spent time on all three shifts with supervisors and people on the floor. Then I visited our outlying service centers because what you have in corporate is not necessarily what it is away from here. I went out and spent time with the GMs there, again, on all three shifts, and more critically, with customers. Everywhere I went with our actual customers; I went to lunch, I went to dinner, I picked up war stories; I found out what was important for them. And then when I felt that I had a good handle on their business, and I researched customer service and looked around enough to realize what seemed to be the common themes in that, then I was ready to decide on either a vendor or design the program myself, and then go out and implement it. There’s learning the business, and then there’s learning the kind of pure content, whether it be customer service or sales training or leadership.

Cheryl talked about the value of learning about the context when she developed a computer training program for an organization.

Going to the company itself and looking and having them work [with] you on how the system worked so you could understand big picture, helped me a lot. I’m not a conceptual learner, so I need to put things in context, and I’m not as good at making that context out of just a bunch of information. That comprehensive listening style and what not – [it’s] my worst. So, for me having that big structure, that then I can kind of put what I did learn into was helpful. Then going to each department and understanding why they did what they did helped tremendously when the participants would say... I don’t like that. At least if [I] could help them understand why it was set up initially that way.

Marian also emphasized that learning the context is important but stressed that it isn’t a one-time occurrence; it is an on-going process.

If you're smart, you continue to go back to the client and back to the client and back to the client, and you don't put anything down as the definitive, until you have run it back and forth and back and forth... You have to be able to say, "I don't know," in order to find out what the client wants. And sometimes, the client doesn't know what they want. But I've had clients say, "I don't know what I want, but I'll know it when I see it." So, a lot of times it's problematic, this has worked very well with my clients, and they were very open to me continually being in contact with them and making sure – I made sure of everything.

In her examples, Marian emphasized that the client doesn't always know what they want.

Frank shared his thoughts on the consequences of not adequately determining the context of the organization and meeting their needs.

What I want to find out from them is, what is it you want people to be able to do? And that's the key component, the deliverable. You find out up front what are these people expecting when you get done? If you don't know that, then you might as well have stayed home. You may have wished you had stayed home if you don't know what it is they expect because you can't meet unknown expectations.

#### *Knowledge Acquisition is a Continuous Part of the Trainer's Life*

The knowledge acquisition process is a continuous part of the trainer's life. It is characterized by a continuous pursuit of expertise and identification with Howell's (1982)/Pike's (1994) Levels of Competence. To achieve expertise and competence, the trainers were continuously searching for new books/material to help them stay current. They also highlighted and marked the books with sticky notes for future use, which meant that they had to buy their books so they all had extensive professional libraries. Additionally, they observed other trainers to improve their performance. The trainers' continuous pursuit of knowledge resulted in their knowledge and abilities increasing with experience.

#### *Continuous Pursuit of Expertise.*

All of the participants in the study had a difficult time believing they had achieved expertise in any specific area. Zoe and Jennifer's comments about their own expertise are reflective of the majority of the participants. Zoe said, "Although I've taught public speaking for

several years, I wouldn't consider myself a content expert, because that's not all I do." Even when she was asked about whether or not she considered the other trainers she goes to for help and advice on training programs to be experts, she responded... "They're training peers is what they are, and they've trained in those particular subjects. I guess they would have to tell you whether they're content experts or not." Jennifer said, "You could probably build a case that I'm not an expert on any topic I train. I don't feel like I'm an expert in communication, or leadership. I've done a lot of that, but was I ever an expert."

Although highly respected as an expert in many areas by other trainers, Shirley was the most adamant about her lack of expertise. Her ongoing pursuit of knowledge over the years was indicative of her desire to continuously learn. The following is Shirley's reflection of the phone call she received asking her to participate in the study

The reflection about content expertise started with the phone call, the conversations that we talked about on the phone. Because my first reaction, I think when you asked the question, was that I don't present on anything that I don't feel a certain degree of mastery of material. And reflection, it's just an ongoing journey. The second reaction I had to your comment was, I don't feel like I've mastered anything. It's like it's a done deal. I'm forever learning.

When asked if she thought her learning was a continuous process, Shirley responded,

Absolutely. And in fact, I think it's dangerous. I think it's really dangerous for any "teacher" to ever assume that they're done learning. That comes back to where we started as saying the best students are teachers. I'd say [it] another way; the best teachers are students, as well.

George, who is the oldest participant, with the most experience said that his pursuit of expertise is "still in process."

Even the courses themselves, when I'm delivering the course, I'm also acquiring content, through the participation and the responses and so on... I mean, there are some basics that you keep all along, but I'm continuously tweaking and trying and dropping and adding, just continuous...I think you do have to stay up with the terminology and the labeling and whatever the latest little diagram is... part of the new is more packaging, or marketing, but I think it's important.

Linda said that she does something everyday to learn more about leadership development because it is a key initiative in her organization.

I feel like those of us in the training and development profession ought to model continuous learning. So, I try to do something every day, whether it's just like grab an article, or think about it, or whatever it takes, maybe nothing big... When I stop doing that, then I think that I'm, you know. And sometimes I feel like I don't do it enough; I have to admit there. So, when I'm starting to feel like I'm not doing it enough, then I make conscious effort and actually plan my day so that I do it. I have to add it to my planner, or it doesn't get done.

Raymond said that he continues to spend about 20% of his time pursuing content expertise and believes it is "a fatal flaw trying to tell people that you know everything and trying to be the expert. It doesn't work."

Don't be afraid to tell people you don't know, don't be afraid to tell other people they're the expert. You've got to have a big enough damn ego to know that you don't know stuff, that other people are smarter than you. There are some people that end up failing in this business that feel that they have to act as if, and be the expert in everything. That's fatal. Stupid is not fatal; you can go get smart. Number two is, people want to help you learn. It reinforces their ego, they're supportive, a lot of people like to teach. So, #1 is, admit you're stupid, #2, don't be afraid to ask people to help make you smart, to educate you, because they love to do it.

Raymond also shared that he gains a lot of knowledge over lunch. He said that there are about three or four different people that he goes to lunch with.

...there's two of them, Sheryl Schulze... and another one is a guy who works here as one of our master black belts, and we go to lunch. And I don't know who's the mentor and who's the protégé, I don't know. We tend to change roles. We discuss problems, we exchange thoughts... some others, where clearly, I'm helping them, and there's one where clearly, they're helping me. But there's a couple that I don't even know. So I use lunches another way. But that's just an example of saying, if you go to people and say, "Help me out with this, I just need..." they're anxious to help.

Will, who is considered to be one of the foremost experts on serial murder investigation in the Midwest doesn't consider himself to be an expert. When asked why he continues to learn the subject, he jokingly said,



I continue because I'm an idiot. But, yes, I constantly learn. An example is the particular content that we're discussing in this research really only began in earnest with a first research project at the level, with the folks we've been discussing specifically at the FBI in '79 through '85. Actually, it was two research projects, and that was just scratching the surface. And since then, there have been so many more academicians, so many more practitioners, so many more folks who have come along, who had different perspectives, done different research from those different perspectives that this issue or perspective of behavioral analysis is constantly evolving and changing and tossing out what once were thought to be caveats have found to be not true, or not valid. So with the kind of an issue that has a life, or has the ability to evolve that way, if you don't stay on top of it then you really don't know much. So, it's probably like other hard science that evolves maybe more slowly, but there are spurts of time where hard science evolves even very quickly in relative terms, so I think the same is true in soft science or the human behavior sciences.

Marie's feelings about expertise and learning also reflected the feelings of most of the participants in this study.

I think just because I'm naturally a curious person and I like to know, not only how things work, but why they work the way they do, and stuff, so my curiosity and passion for learning, I guess, is probably – I know a lot of stuff about a lot of things, it's just I'm not an expert...

#### *Levels of Competence and Confidence.*

Competence and confidence levels were spoken about in various ways throughout the interviews. There are five levels of competence: 1) unconscious incompetence; 2) conscious incompetence; 3) conscious competence; 4) unconscious competence, and 5) conscious unconscious competence (Howell, 1982; Pike, 1994). True to the model, the participants weren't aware of Howell/Pike's model, but spoke about how they progressed through levels of competence/confidence in general terms.

Raymond had, by far, the most in-depth understanding of the Levels of Competence but hadn't heard of Howell (1982)/Pike's (1994) model. Instead of using the term competence though, he used the term "skilled." Raymond provided the following example to illustrate how the phenomenon affected him and his training.

In some of the classes that I do and have taught, there have been what I would call mentors or master trainers that did, when I co-taught with them...there were two people that I worked with then, Rob Portnoy that had a big influence on me. Rob taught me a lot about how to present. We co-presented, and he would give feedback to me in places, back and forth in giving feedback you learn as much as getting it...we would sit down and go, "Well, what did you see?" And he'd say, "Well, you did that, that was good." And what it did for me and what I learned was, an example, when I got there I was a fairly accomplished trainer, but I couldn't tell people why, and I couldn't help other people train. I was unconsciously skilled. And I had to get down the learning curve to being consciously skilled. See, that's the difference. In order to teach it, you have to come down the learning curve...

I'll give you a classic example. There's a book that influenced me a lot, and it's called *Love and Profit: The Art of Caring Leadership* by a guy named James Autrey... It's not so much that I learned from James Autrey, but I saw myself in what he wrote and I said, "OK, here's a name for what I've been doing, and here's why it works...he says this is OK to do; kind of what I've learned through experience." It was that way with the training, giving feedback to each other...[Rob] was telling me things that I did well that I had no idea I was doing. I had no idea. I know now they were skills just the same, but I was simply at the unconscious level with it. He'd say, "When they asked that question, you moved in towards them and looked at them, that was very good, very effective." I wasn't aware I did it, I just did it...

I knew how to do it. I didn't know why in some sense, I couldn't teach anybody how to do it. So, you do, you have to get to the level where you're conscious and unconsciously skilled. You can do it automatically, but you can also turn around and tell somebody else how to do it.

Stacie didn't use any of the terms associated with Howell (1982)/Pike's (1994) models but provided insights on how one's life skills impact program development and trainer competence when she spoke about a training program she developed on conflict management. She said,

Conflict management. It's not one that I give myself credit for knowing a lot about, although I suppose, because when I think of conflict management I tend to define that more in terms of having to resolve issues between your employees. So, I don't think I'm masterful at that. But I think I'm probably better than I give myself credit for. Because of being in this highly public, fast-paced, heavy-stress position, I think I acquired some skills that I would call customer service. So the conflict that I think I'm really good at is the conflict between us as an establishment, and the day-to-day grind, how you get pounded by your customers and their expectations...

So that's where, again, the real world experience of any kind can and does come into play. You don't really think of yourself as skillful until you start digging deeper and you say, you know, that sounds an awful lot like what I did in this past job. It was never called conflict management, but your ability to acquire certain skills has so much overlap...you can validate what you do.

When talking about the success of her training programs, Karen indicated that her adult education degree provided her with the insight she needed to understand what made her training a success. She said that earlier in her career,

It was successful, but I didn't know why. But sometimes it was successful and sometimes it wasn't successful, and I didn't know why. I couldn't identify any consistent tool or consistent presentation that made it successful... Getting my formal education gave me an understanding of adult learning theory, adult learning motivation, and the practice of curriculum development helped me succeed and understand why... All the connections were made. If you were to put together a puzzle, now all those connections are made about why things worked, why things didn't work. I could think back on experiences that I had with chagrin that was enough to put me into the ground. Things that I unconsciously did that violated everything we know about adult ed. And then you'd leave the classroom thinking, what went wrong there? And then you'd have successes, but you'd think, that was great so I'll repeat that, and then have it fail with the next group of people because you weren't aware of those underlying things you needed to know to be successful.

Linda spoke about confidence when she said, "If I'm gonna, or one of my trainers is gonna, stand up in front of people, we need to feel comfortable that we have information personally, and through the research, that we can impart to other people." Linda went on to use Howell (1982)/Pike's (1994) Levels of Competence to explain how she achieves that confidence/comfort level through her learning process.

I'm thinking of that model with unconscious, I suppose it sort of follows like that. I mean, initially I think, "Oh, I can do this, how tough can this be?" And then, sometimes I don't even know how much I don't know. I am, where's level 1, unconscious incompetent, maybe. I know I'm conscious and I can do a training session, but I'm probably unconscious in competence that maybe the subject matter needs a little more work than I think originally it's gonna get. So, logically I'd say more up front, but sometimes as I go through it, I reach the conscious incompetence and I know, hey, wait a minute, I'm gonna have to spend a little bit more time, so that might happen in the middle. Because I usually set the deadline where I've got a week or two, so I know this process. And I try to at least get the

conscious competence, or I'll delay the training session. So, yeah, that kind of works.

*Continuous Search for New Books/Material.*

Just as the participants were constantly in pursuit of expertise and increased competence, they were also continuously searching for new books/material. Shirley indicated that it wasn't like a switch that you could turn off; "It is something that is part of being a trainer." The participants read their books with future use in mind. They highlighted the books and used sticky notes to make it easier to locate the information in the future. Lastly, most of the participants had very extensive libraries with information on their areas of expertise and myriad other topics.

During Raymond's interview, he had a recently released leadership book on his desk. The interview occurred a couple of weeks after the author had appeared in the community. Raymond was no longer teaching leadership classes but still attended the speech and bought the author's book. He also bought a copy of the book for everyone in his department. When asked why he bought the book on leadership, when he no longer taught leadership classes, Raymond said,

Because [my company], like every other company uses a performance management or performance appraisal process... I shouldn't say every, but the ones I know of, they use a performance management or performance appraisal process to pick scabs. You come in at the end of the year, "you're OK, you've done this kind of a job, you're pretty good, I've studied all these competencies, and I think I've found three things that you suck at, let's focus on that next year." I decided that I didn't like the way that that worked. So, I required everybody to at least have two of their development objectives be based upon one of their strengths. So, depending on what your strength is and what you're gonna do next year to leverage that strength and get even better at it.

Raymond's continuous pursuit of new materials and sharing with others was similar to the other trainers in this study. Some of the participants were more active than others, and some used online resources more than others, but they were all looking for new materials in one way

or another. Shirley said she is always looking for new books and buys a couple of new books a year.

I'm always looking...and it's not like I'll wait until my next class and then dig in again... And that's especially true for my big topics. Not so much in writing, in this case, but leadership, government, teams, I'm always looking. Interpersonal stuff, I'm always looking. I always have a stack of books that I'm reading.

Cheryl read at least a book a week, did research on the Internet, and talked about the amount of information that is available. She said, "The challenge in today's world is that there's actually so much information that you can get your hands on that it's trying to sort the wheat from the chaff and figure out what you really need to be reading." Stacie primarily used online resources to keep her material up-to-date but also talked about determining what material is useful and what isn't.

I research things constantly. I subscribe online to many very good business magazines, and I get the newsletters, half a dozen at least, every day, and I read them. I quickly assess whether they will be useful at some future date, and many times when I'm doing that, I am reflecting. The ones that catch my eye are obviously the ones that would have had some meaning... If it doesn't have meaning, it's nice to know information, but if I never see myself using it, I won't save it.

Martha works primarily with the National Conference for Criminal Justice, teaching classes on diversity and community-related issues. Therefore, she is continuously searching for material in the news to keep her classes current.

I know there's at least an hour a day I'm still learning and gathering information. I don't read the paper without having a focus of, how could I use this? You know, there's something in there today about the mayor saying, "Boy, next year when they have this Winter Festival thing, it's going to be a Christmas tree, not the community tree thing." I'm clipping that out; I'm going to use it for staff training on how to have a dialogue on this issue. So, it's like every day. If you plan to ever do it, you're learning every day. So, as a minimum, it's all the time I spend with the paper, then I check the Internet and see what's going on in other places. I am constantly writing stuff down, so I can use it somewhere.

Zoe's search for new materials differed based upon the topic.

[I]f it's something like public speaking that I've taught for several years, then you know, I'll occasionally go out, maybe annually and look and see if there is any new updated material, something I can include to update the curriculum. If it's a topic that I've only been teaching for a couple of years, I try and stay up on that as much as possible because I think I have that feeling that I've missed something or that I worry that I've missed something.

Marian shared what she looks for in new material.

I still collect leadership books, and I read leadership articles, and I subscribe online to leadership newsletters, that kind of thing...I'm quick to say, this is 101 and throw it aside after I've scanned it. Now, I came on some new book the other day called *The Seven Practices of Effective Ministry* that just blew me away in its simplicity, and how right on it was. Every now and then you'll just hit on something that's said in a new way that makes so much sense. And you say, "Wow, I wish I'd thought of that."

Chris said he doesn't do anything deliberate now to find new material, but it is still part of his makeup.

It's kind of a hobby. If there's an article in a publication, whether it's in a *Popular Mechanics*, or something that's sitting on a table at a dentist's office, or a publication, a book that comes out that I'm just kind of perusing in the library. I'll pull it off and just kind of peruse this or read that. I just try to stay abreast of what is kind of generally the state of the art...

David admitted that he looks for the latest books and material, but not as much as he should.

I used to have a rule of 20% new course material each year. That probably is, it's probably not even on a percentage, it's on an ad hoc basis. For example, I have a traditional time management program. I probably hadn't changed that at all in five years, and then when I went in to put it on PowerPoint, I probably changed 60% of it. So it is not as disciplined as it was earlier in my career, it's more ad hoc now... And the technology drove so much of it. When we went from transparencies to PowerPoint, there were just a lot of things... And the last two or three years, I've revised, major revision on almost every area, just because I'm putting it in PowerPoint.

*Highlighting and Sticky Notes Everywhere.*

Almost every participant interviewed had several books lying around when the interviews were conducted and many of the books had sticky notes protruding from their pages. When

questioned about the sticky notes, the participants said that was how they marked their material for both personal knowledge and future use in their training. Marian said that she “goes through resources and sees application to eight different areas” so she has to do something that makes it easier to go back and find the information she had previously identified. Shirley’s comments were representative of the other participants.

I will use my highlighter, it’s not color specific, but then I write in the margins for teaching just as though it was a structured outline...I will put notes, commentary in the margins to remind me of how I thought I might use this, so it might be some memory jogging words.

Tim said that he actually used highlighting and marks to develop an entire course, and eventually a textbook, for his students.

I sat down and I created – I don’t know if I should go as far as calling it a facilitator’s guide, but I created a handbook for me with highlights and notes and those types of things, and eventually out of that built an operational textbook for the students.

Linda said that she did something similar but indicated how she uses them to plan the facilitating techniques she will use as well. She said she was fortunate to have been mentored by a seasoned human resources professional and learned about color-coding from her.

I use a magic marker, color coded system, which I use to this day. If I want to ask a question, these are my notes. I highlight those in yellow because you need to plan those questions, there’s a reason you ask the questions, they don’t come off the cuff. If I have a visual aid, I use a pink magic marker. If I have a group project or an individual study thing, I use blue. So, that’s what I do.

Stacie had a system too but admitted,

I wish I used a better system because my books are so marked up, but, I’ll capture usually just a pencil note. I’ll capture entire paragraphs with the brackets, so say this stuff is good. But if there’s a line, a specific line, I’ll underline it. If there is that whole, whether it’s a couple of pages or a paragraph, if that whole thing has meaning that I know I can use in training I will put a star. And I will typically rank it somewhere between 1, 2, and 3 stars. Because when I scan back through that thing, I want these to jump out. And it’s my own level of a “wow,” versus a “this is kind of cute” assessment.

David said that in addition to using highlighting and sticky notes while reading, he also uses them to mark where updates need to be made in his presentations, because of the new knowledge he gains from participants while conducting training.

*Extensive Professional Libraries.*

Since the participants were continuously in pursuit of new books and material and had a tendency to highlight as they were reading, it made sense that they had extensive libraries. Most of them had large bookshelves (most had more than one) filled with books. As Stacie said, “I have a training library that would choke a horse. I save everything.” Shirley said that her first step in developing a class on business writing years ago was to do a literature search for the latest material. Once she identified what she needed, she said, “I bought my own library of books.” This was typical of the participants interviewed.

Elaine said that she is always looking for new materials and adds new books and materials to her library in unique ways.

I use a lot of magazine articles. I have 97+ notebooks of topics... and every time, if I'm at KU Medical Center or at Lear and they're throwing out any kind of training materials or magazines, or old books, [I pick them up] and I buy tons of books at garage sales. So I'm always archiving and sitting down and reading.

George, with his 40 years of experience, stressed the value of building a professional library.

At this point, it would be hard pressed [for me] to be involved in a course that I didn't already have some files on. It's more like, in my memory, in my recent memory, I have not gone to a new slate... So maybe there's a new course, but I've got 20% of the data here, 30% of the data here, 10% is new.

This on-going desire to add to the professional libraries was evident, as the participants wrote down the titles of books that were mentioned during the interview. The participants also wanted to share their books. If they spoke about a book, they would go and get the book from



their bookshelf to share with the researcher. In preparation for the interview, many of the participants had already pulled out books that they wanted to talk about in addition to the latest books they had sitting on their desks that they were in the process of reading.

*Observing Other Trainers to Improve Personal Performance.*

Another way the participants continuously pursued knowledge was by attending seminars and observing other trainers. Linda goes to seminars that aren't even necessarily in her content area. She said that she "goes, takes copious notes, and tries to figure out what the trainers are doing and how they do it." Stacie said that she is a constant learner in every aspect of her life, and attends seminars on an ongoing basis.

When I attend a seminar, I am the best participant. I take rigorous notes. I understand the models. It's just how I learn. But what I'm gaining in that frequently is a "Aha, where was this when I was a newbie, and I was pulling my hair out and working 16 hours?" So, I do that constantly.

Unlike Stacie, George, flatly said, "I'm not a good audience." He then explained what he does when he observes other trainers.

I try to, I say, "What are they doing? Have they got something you can use? What can you steal from them? What didn't work?" I just always seem to do that. I can't help but see it through that filter. I'm almost analytically uninvolved when I'm sitting there. If it's something that I really need content on, that I don't have, then I may be. But mostly, I would be analytically disengaged. If they told stories that were hilariously funny, I probably wouldn't laugh. But what I'd be doing is say[ing], OK, what was the Timing? What were the critical parts of that story? How can I adapt that story to this content?

Shirley made a more conscientious effort to attend seminars and observe other trainers than any of the other participants. She also used tapes and CDs to improve her practice.

Over my 25 years, I'd take every opportunity to attend seminars... It's not just for a specific class. I might look at it from at least two different perspectives. One is, I'm looking for a new nugget, but secondly, I'm always critiquing the training and delivery and the facilitation process. So from that perspective, it's always helpful... I recall that I took a class I thought was weak on content and practice. But I became resolved to not do the same, to have more content and to have more hands-on, and I want people to leave knowing, with a new skill... And

I get ideas on how, what's out there, how others do it. I think you have to know the market...

Another resource that I use is actually tapes or CDs. And that's another way of, of not just reading material, but hearing how people would describe principles, describe it, and it's just helpful, again, to hear how others might share the material. Not that I'd do it the same way, but ... I also use tapes, by the way, so that I can use my car time – CDs now, but in those [early] days it was tape. I'm just looking at it all.

Shirley admitted that she has even taught other trainers to look for material, ideas, and tips when they observe other trainers. She said, "I always tell them, you put that under the category of research. You're always researching, every opportunity."

Martha shared how she used another trainer's activity to enhance one of her own training classes years ago.

One of the most effective things that I used in my diversity training was something that I picked up from a trainer at a workshop I went to on communication. I didn't know where I'd use it, but I really loved it and thought it was just the coolest thing I'd ever seen, and I went to the trainer and, I said, "This is incredible; can I use this?" He said, yes, and in my workbook I wrote, "I talked to him on this date and he said I could use this if I need to." I still have that workbook. It's probably 15 years old now, maybe 13. But I have used that in so many different environments... I just asked him and he said, "Sure, you can use it."

As for observing other trainers, Elaine said, "I love to watch the great ones because they are where you learn." Rose said that she watches other trainers "to see if they have any materials or ideas that she can adapt for use in her training programs," and Will said he observes other trainers "not only to get information, but more to pick up how they crafted the information for a particular targeted audience."

Tim said that soon after he became a trainer, he started paying attention to what other trainers did, but in the situation he shared, he and one of his newer trainers learned what not to do by attending a poorly presented American Red Cross cardiopulmonary resuscitation (CPR) certification class. He said,

It was terrible... We tried, you know, tried to look at the bright side. And we got through it OK, but it was interesting, even the new trainer could see that some of the things we'd talked about in terms of development and visual aids, and learning styles and so forth, weren't there...he recognized it right away... the trainer just didn't use very good methodology for training adults.

David said that when he observes other trainers, he has his pen out, so he can jot down useful things he sees. He went on to talk about the use of other people's material, saying,

As you know, in training, we're kind of like college football coaches. There is no monopoly. College coaches, they'll send their stats to each other off-season to learn different defenses and all the rest, where in corporate America, you'd never allow that to happen. But I see trainers taking notes like crazy and sometimes they try to hide them. And people will come to a course, and they're gonna take that material back with them. I always tell them, it's not copyrighted, take every bit of it, use it, call me if you need it.

He shared how he used the technique to develop a Total Quality Management (TQM) training class.

TQM was going crazy and the management people didn't know it, and said it was a fad. I was running into it with my clients, and they kept saying, "Why aren't you guys teaching it?" So, I wanted to learn it, because you really couldn't talk to any business without really being comfortable with it. So, I went to classes from some of the aircraft [companies], I attended some [of] Cessna's stuff on it and some others. So I attended the training, then read some of the most recent books, and just developed a class on it.

Frank, who has written a Train-the-Trainer book, looked at both the positive and negative aspects when he observed other trainers.

I also look for things not to do. Not consciously, but I see things that people do that don't work and it just kind of reminds me, don't do that. So there's both the pro and the con... I've been in classes, and somebody used some interactive technique and I would take that and use it in another class. If it worked, fine; if it didn't work for me then I figured either I must not have quite captured it, or the other person, or this group doesn't want to do that kind of stuff. So, either way, we won't do it any more.

Many of the participants said it didn't necessarily have to be a trainer they were observing to learn tips from. They said that it could be a person giving a speech, someone giving

a presentation in a meeting, or even their pastor. Cheryl's comments reflected most of the other participant's thoughts on observing other trainers.

I'm always, whether it's the preacher or whether it's another trainer or a professional speaker, you're always, at least I am, always trying to learn. Your mindset is split-screen, what you're learning but then how could you use what you're learning. "Which of my current clients might benefit from that kind of information, and/or, how would I be at presenting this kind of information, and what would I be doing different if it were me up there?"

All of the participants understood an ethical issue was involved in using someone else's material. Some, like Martha, received permission to use the other trainers' material, and others merely picked up tips or ideas on how to improve their own practice. David spoke directly to the issue.

George has a saying that really alleviated my concern about that. There are a lot better trainers, so this is not arrogance, but he used to say, "They can steal my material, but they can't steal my style." The fact of the matter is: I assume most trainers are like me. I use very, very little of another people's actual material. I use very little pre-bought materials. I can't do it. But I do like stories. I take anecdotes that I will fit to a similar anecdote, and I will customize them.

*Knowledge and Abilities Improved with Experience.*

The participants indicated their knowledge and abilities improved as their experience in the training field increased. According to the participants, efficiency in learning and program development, confidence in their abilities, knowledge, teaching abilities, and their willingness to admit they didn't know something were affected by the experience they gained over the years.

Several of the participants said that the biggest difference between their first and most recent training program was an increase in efficiency. Tim said he was "able to put the program together faster," and Elaine said that she "covered ground quicker...did it more efficiently, with more purpose and understanding, very comfortable. There was no trepidation, no worry, no concern." Jennifer said,

I'm a lot more efficient with it. I read faster; I pick out quicker; I bone up on little pieces; I don't get in-depth as much. I get enough that I feel comfortable in confidence with the subject matter that I can at least talk intelligently about it.

Karen also said that she doesn't waste as much time now gaining knowledge and developing programs.

I'm better able to zero in on what I need, and I'm better at knowing the resources available to me, where to go to get them. And I'm not nearly as overwhelmed because I have a system in place that includes preparation and practice and comparing it to other successes that I've had. So there's a process in place.

Marie, Cheryl, and Raymond indicated that their efficiency increased because of the Internet. Marie said it was the number one thing that made her more efficient. Cheryl said,

The Internet's been the [most drastic] change in being able to do research. The fact that you can Google it – whatever. It's one of the first things I'll try now. It really is. You can use it to find SMEs, use it to figure out what books you need to be reading, or whatever is going on.

Raymond said that the Internet was a great asset but that he also has more resources now than when he started in the field. He didn't know about Executive Book Summaries or the Internet and didn't call the authors of the books he was reading if he had questions. Raymond said, "So, there's a lot of changes from the first time I started just stumbling through it."

Confidence was an issue all of the participants were concerned about. It was a driving factor in their pursuit of knowledge. They didn't want to stand in front of an audience without knowing their subject. Chris said he doesn't stress about training quite as much as he did the first time he taught a class, and his "training processes are more deliberate now."

Dawn, who was one of the participants who used a program-planning model to describe her learning process, said that she is more confident in deviating from the process now that she has more experience. She said, "I think you cling pretty tightly to that [process] in the beginning. The more comfortable you get, you are more able to adjust and fluctuate."

Interestingly, Frank, who was the other participant who used a model to describe his learning process, also spoke about how experience increased his confidence.

I'd say mainly just not worrying to death because I know more of what I am doing. I had experience, I'd done it before, so it was doing the stuff that the first time you don't even know you're supposed to do. You just sort of do some of it by accident. Now I know that there's a system that you can use and you can follow, but that system won't yield the right results. If the process hasn't been more efficient, hopefully, it's more effective at the end result.

Three of the participants spoke about how their increased knowledge made a difference in their ability to develop and present training programs. Shirley said,

I'm not studying at Ground Zero.... the difference now is that everything I read I relate it to what I already know, or what I thought previously, and it gives me a different evaluation and thought pattern. It's a different way of developing content.

Carrie admitted that her masters degree in adult education has improved her training abilities.

I think in the most recent trainings I had more formal – I know I said earlier that my masters degree didn't really help me, but maybe that's not true. I guess I had more formal education in some of the fundamental principles of training and development. But I think I also had a lot more experience, so I had learned a lot by myself of how to go about doing things. So I think, I'm having a hard time saying what exactly I did differently; I just think I knew more about how to start and how to go about it. It wasn't so overwhelming.

An interesting outcome of the increase in knowledge and ability was the willingness of the participants to say, "I don't know." Marian said that now she "asks a lot more questions – a lot more questions. I'm not afraid to share what I don't know, and I am more efficient now than I was with the first one." Zoe said,

Gosh! I probably am now more comfortable in saying that I don't know anything about that subject. After you've had enough years of experience and you meet enough trainers that are all in the same situation that you are, you come to know that everybody has to go through a process to be able to develop course curriculum and to be able to train. So, I think I'm a lot more comfortable going to people and bouncing ideas off of them and finding out what they know and seeing if they're willing to share what they've done, that sort of thing. Whereas before, I

would probably hide the fact that I didn't know that much about it, just trying to do it all on my own.

Linda was the other participant who said she learned that it was permissible to admit you don't know something.

Whether it was the unconscious incompetence, or youthful "I think I can do anything," I don't know what it was, but I wasn't smart enough to say, "I don't know." And I didn't have enough confidence to go to a client and say, "I'm not the best person to do this, it's not my area of expertise." That's a big difference.

Two other participants talked about how their increased experience has changed their teaching practices. David said, "Probably, I had much more dominance in my thinking of 1) keep it simpler; 2) don't use as much material, and 3) heavier in participation." Martha said,

Almost everything I do now is much more situational, real time, and less out of a book. I have the broader base of that knowledge, but I have also found that people are more receptive to learning when you can tie it to individuals and their experiences than, this author in his book said this. They are much more open to hearing from real life situations.

Stacie said that "everything" has changed since she did her very first training program. She said, "the resources available were so very different, the Internet, level of experience, life experience. Just confidence level and ability to facilitate were worlds apart...there's no comparison." She went on to provide a description of what she experienced with her very first presentation, which is probably similar to other trainers' first training session. In Stacie's case, it was 10 minutes long, and she spent more than 40 hours preparing for it.

I almost quit the job when I was 28 years old because I thought they'd fire me. Yes, I got sick for a good three weeks before. I thought about going in and quitting every day. But when I presented it and it was at a large meeting with a very high level group, and I thought the whole time, I was so well prepared. But I thought the whole time, "I've blown it. I don't have to quit because they're gonna fire me." And I came off the stage, because it was a Las Vegas showroom, and passed this guy that I really didn't like, he was just a snob, he was a Harvard MBA – I hope you didn't go to Harvard – but he had all of the typical snob behavior that goes along with that. And I thought, of all the people that I want to not see at this moment, it's him. And as he passed me, he turned and said, "You really are a polished speaker." And when I got out of eye range, I mean my jaw

just dropped and I thought, “You know, I’m never gonna put myself through this again. I’m going to acquire what I need to not make myself suffer.”

Finally, Julia said that over the years she has learned to ask more questions, so she understands things better. Then she added, “and you’ve got a lot more ego at 30 than you do...”

### *Understanding of the Importance of Adult Learning Principles*

During their interviews, many of the participants talked about concepts and theories associated with adult learning. They mentioned such things as being in touch with the learner, learner-centered teaching, and taking the experience of their audience into consideration. Most of those who talked about concern for their learners as adults tended to have either more experience in the field, a degree in adult education, or both.

#### *Reach Out and Touch the Learner.*

One theme many of the participants stressed throughout the interviews was the need to provide training that learners could use when they left the classroom. In order to do that, the participants said they had to be able to “reach out and touch the learners.” The participants used several different ways to describe how they “touched the learners,” but they all had the same intent. Shirley believed that providing great training involves more than just having content and context expertise. She added a third dimension in which she believes trainers must have expertise.

I think you have to be process experts, too. Just because somebody has a CPA doesn’t mean they can teach somebody else how to read a financial statement, in lay terms. So, it’s not just dumping my expertise. So, to me it’s a combination; it’s almost a triangle of the content, the context, and the process. And then it’s finding a way to simplify and communicate it. Simplify the content. Become the knowledge expert but don’t sound like it. Be able to simplify it and meet the participants where they’re at.



Shirley went on to say, “as I am learning, or reviewing, or deciding, collecting the material and deciding what I’m going to include, I am always thinking, how will I present or how will I deliver? It’s just sort of a subconscious application, I think.”

What Shirley called “process expertise,” George called “style.” He said, “Content expertise is vital. It’s crucial, it’s important, you’ve got to have it,” but he spent more time and effort on style than on content. When he spoke of style, he meant,

What the instructor does, and their presentation, and even their movements and their nonverbals and their involvement with people, and all those little nuances, kind of soft, intangible things that are hard to describe...the content is the easy part. Content is everywhere. There’s no reason to lack content on any topic or subject. The hard part is the style.

Stacie said that trainers should research what experts in that field have to say about the subject they’re training, validate whether the piece of research is really a good fit for their target audience, and then pick and choose from there based upon their audience’s needs. But she went on to say,

Now, what I think brings power to a program, though, is identifying what, and this comes from either life skills or some basics of experience prior to training, what link I can make between what the experts are saying and which models really do scream at what my audience is needing. That’s the tough part. That link is where it happens. It’s where you chose the exercises that you develop. It’s where you chose the models and the verbiage, and you have so much choice out there now that you never had before. But you can truly look at a ton of stuff and only use 10% of it because you are making that link between this very solid and accurate and good and quality information, but, “Is it right for the message that I’m trying to get across to the audience?”

Elaine explained how she wanted to interact with her learners based upon emulating the actions of other more experienced trainers in the field.

When I saw really good trainers, when I saw Shirley and when I saw Mary Anne, or David, or George, because they connected and they touched, and they turned lights on. I want to turn lights on. So my drive to turn a light on and get an “aha,” is to make sure I connect with them, and as the Methods Director Chris said, touch them. So that’s what drives me to try to do what I can do to touch them.

Julia shared her thoughts on adult learning from the aspect of working with trainers who only possessed content expertise.

What I have learned over time working with content experts is that their idea of delivery is just to stand and tell you about it. That works for some content delivery, but mostly with adults, that doesn't. They need to be able to participate in it, and they need to experience it. So, I would take the knowledge and work with them. OK, so how are you going to deliver this, and how are we going to create activities that pull people to the information instead of push it on them, which is kind of my description of what I call experiential learning, pull them to it.

Linda said that in order to make sure her training programs are meeting the needs of her audience, she validated them with subject matter experts and professionals in the field. In addition, she said her own instincts let her know if she was meeting the audience's needs.

I can kind of tell, some of this isn't scientific, some of it's a gut feel, I have to be honest. Because I can tell by the level of frustration in myself and confidence, and I can see that in my team. If you have that frustration, you don't know where it's coming from... But I guess just being in the profession long enough you kind of know that's where it's coming from.

Tim doesn't have a degree in adult education but still used terms, such as learning styles, teacher-centered, learner-centered, it's different for adults, and "What's in it for me?" He explained how attending a Train-the-Trainer class and self-education changed his ability to connect with his learners.

When I became a trainer, I was with a company called TCI that had a trainer certification program that I attended. It was just a one-week, but it taught [me], and I learned so much from that. I actually had taken on the job of a trainer and worked six months as [a] trainer before attending this. And I realized some of the things I was not doing right, and I realized some things that blindly I was doing right. I had really no instruction other than observation and so forth. But the certification helped me a lot in terms of learning styles. And I'd gone out and researched and educated myself to a point, too. But the organization I work for has provided a lot of support for learning how people learn and different styles and techniques and so forth, and my trusty old correspondence courses, and the Internet, of course, too.

David made the following comments about trainers' responsibility for understanding and applying the principles of adult education in their training programs.

I think it's just – if you go through a Train-the-Trainer seminar, or you read Train-the-Trainer, it is hard to debate the basic principles of it. If you're an adult, you've been around, you've been through too many hours of formal education, if you'll just take it at its word and use the principles of adult learning, you're just gonna stay away from that. Now, all of us are products of the lecture method, and I still fall into the trap. And I think the other difference is, and I still, I teach college on adult learning principles. But I have peers here who view adult learning and participation as a way of getting out of work. They don't understand, even now, that the easiest by far method to teach class is lecture. But it is much more time consuming and even more labor intensive, and mentally exhausting, to teach a good participative class.

In addition to providing the introduction for this theme, Shirley's thoughts also provided the closing. She attended a training development class for trainers where they provided an example of a memory expert who walks into a room, quickly learns everyone's name, and recites them back. According to Shirley, "The first emotion the audience experiences is 'Wow, he's an expert!' The second emotion is 'I could never do that.'"

So the idea is not to shine the light on the trainer, of, "look how smart I am," but to be able to turn the light back on the student in terms of enabling—presenting in such a way that it builds on the student; the student's ability, the student's energy, and the student's getting it. So that when they walk out they say, "Wow, look how much I learned today!" instead of, "Wow, look how smart that trainer is."

*Delivering a Training Program Doesn't Mean You're a Trainer.*

Most of the participants said that just because a person has content expertise, or even the title "trainer," it doesn't mean they are a trainer. The person who is truly, as David says, a "professional trainer," is much different from someone who merely delivers, or presents training programs. The participants passionately shared very personal, and lengthy, stories to convey their feelings about the difference between "professional trainers," and those who merely present training programs. Marian, who was one of the most respected and modest participants

interviewed, offered the following descriptions. She used the prepackaged training programs a major restaurant chain uses to train their employees to explain.

They're all slide-driven. You don't have to know anything about the topic. All you do is you just pretty much read off the slides and just hope that nobody asks you a question. That is not a trainer, absolutely not, that is not a trainer...

Marian went on to share the following as an example of what she believed "professional trainers" do differently.

I love the people over the years that would come up and say, "Marian, your training is so good because you have so many years and so many experiences that work as illustrations for specific scenarios or situations, or concepts or theories. And you never know what you're gonna use out of your cadre of experience until the participant asks the question"...But, that's the difference; being able to illustrate what it is that you're teaching.

Marie said that "A trainer is able to interact with the people and pick up and know whether they're grasping it or not." She continued,

Someone that's just delivering a training program, flipping slides, and saying this is this, and this is the process, and not really caring whether they're getting anything or not, and really don't know other than reading what's on the slides, or whatever, don't even know what they're even talking about.

George went further and said that he believes there is a significant difference between a teacher, a trainer, a presenter, and an explainer.

There are a lot of people that can explain something [but] still can't teach it. But there are a lot of people that know something, but can't explain it, also... the person that reads the PowerPoint off the board, that's deadly. That's not doing anything except wasting time.

David said that he asked a student one time, "What is the average MBA class?" The student said, "The average MBA class at this university is 45 hours of lecture supported by 450 PowerPoint slides." David went on to say, "I think there's a lot of truth to that... a presentation is different than training; I understand that, but... a lot of trainers fall for that, too. So I think the

overuse of technology is a threat to the trainer.” He then shared the following story about technology and being asked by a client if they could videotape his training presentation.

I am sometimes asked, “Can we tape you?” And I know exactly what the agenda is, and they do too. “If we capture this training module on tape, we don’t have to have him out again on it.” And I always say, “Absolutely.” And their jaw almost literally drops. They say, “We can’t believe you’d let us.” And I’ll tell them, “Why wouldn’t I do that – am I just that altruistic?” The answer is no. I know it will fail. Good trainers will never be replaced by technology. I don’t understand why. The first time I came into contact with it was in 8<sup>th</sup> grade algebra, when they took the best algebra teacher in the Oklahoma City school system and put her on TV, I can tell you I didn’t learn algebra. I think the flesh and blood trainer will never be replaced if they’re a true trainer.

As a master certified trainer, Raymond spoke about the certification programs the different companies have from a personal perspective.

[One] way to become a trainer, and it doesn’t work, is to go through the certifications. I’m a master trainer in two programs [sic], on one... I did them enough that I was quite expert in them. I am probably the least qualified, worst master trainer in the other program [sic] because I didn’t do it... Those three days that you go through to learn doesn’t give you the knowledge that you need to go in and have credibility in delivering and teaching those classes.

Cheryl discussed the packaged training programs, but she talked about them based upon the learner’s needs.

I understand the need for canned learning programs to systematize things and have everybody learning basically the same stuff, but the trick is, not everybody learns the same way and not everybody is going to get it in the same amount of time. If that’s your goal, to get them to get it, then you’re gonna have to deviate from plan to be able to meet each individual learner’s needs... You just have to take a different approach depending on their style, what they need, whether they’re more a reflective learner or more a participative learner, or if they learn better from listening or they learn better from reading. You just have to take all of that into account and the “Let’s go through the [canned training] program” doesn’t allow you to do that.

Shirley also said there is difference between a trainer and someone who merely delivers training programs.

I will often refer to, when I teach Train-the-Trainer, that we want to learn how to facilitate other people’s discovery, help other people discover, instead of –

we're not dump trucks. We're not just dumping information in somebody's lap. But how can we facilitate other people's discovery because when they discover it, they'll have an easier time connecting it, they'll be motivated to connect it with what else they know, and have a better chance of implementing it or using it, whatever that means.

Greta has hired a lot of trainers over the years and said,

I think the key to training is that not everybody can train. And I think content mastery is 50% of it, but the other 50% of it is being able to communicate what you know... I have hired enough people in my time that are really good content experts, that are really bad trainers. And it's a rotten experience for all of us. It's not even a good experience for that person. People that are content savvy, that are really good in what they do, really truly, all of them believe they can teach it. They just can't...

I think for trainers, it's the emotional involvement. And I think that very often people that train with passion, they are, they can't hide it; it's a dead giveaway. Almost the same is true of people that know the content but have no passion. You can't hide that either.

### *Reflection*

The participants had various reactions to their participation in the study; however, the fact that it caused them to reflect upon both their profession and how they learned dominated their answers. Their comments are categorized into the areas of process, coaching, expertise, self-awareness, and the impact being in the field has on the trainer's life.

More of the trainers talked about how participating in the study caused them to reflect upon their learning and training development processes than any other theme. The following comments are reflective of most of the participants. Dawn said,

My reaction to the interview is positive... I think for me, it was just having to revisit some of the things that I hadn't thought about for a while. So, thinking through – I don't know if I've really ever sat down and been questioned about my process and how I go about doing that, so [I] probably just learned what that was today.

Marie said that it made her think about all of the things involved in developing training.

I guess – I didn't really look at all the dynamics in the process of what I had, or making a plan, kind of. I knew I had to look at who my audience was and

the subject matter, and all of that kind of stuff, but I guess it just made me think more about the steps that you have to take, and made me look more at how I do things.

Martha reflected upon the process, but from a more global perspective.

It just kind of reminded me of how vague training could be. It's different in every environment. It was kind of nice going back and reflecting... because you don't think about the process that you're using all the time when you're going through it.

Karen thought about the process in relation to how others think about the training profession.

Anytime I really put any thought into this is that there is a system to this; it's not a serendipitous, anybody can do it profession. And I think often, the perception is, anybody can do it. If they have style and personality they can teach, or they can train, and that's not true.

For Will, it was not only thinking about his process, but since he is so conscientious of what he does and how he does it, it made him reconsider how he does things. He honestly, yet jokingly remarked,

Having me describe a process, I'd never thought of it in those terms. Now, I'm wondering if my methodology was flawed. It doesn't seem as cogent and sensible as it did at the time, and yet it may well be. Now I'm second-guessing everything I've ever done. Thank you so much.

David used different words to describe his reaction to the interview. He said that it was positive, but instead of using the concept of process like the other participants, he looked at himself as the product.

I don't know that I had ever reflected back on whatever training product I am. I don't think I'd ever reflected back on it in this kind of detail. It's kind of interesting. It also brings up some curiosity of, I don't know whether you're in the position to say it yet, but how my behavior compares to other trainers.

Zoe, who teaches communications classes, also commented about how her answers compared with the other participants, but from a much different perspective.

I can tell by your facial expressions that I've probably answered questions similar, either to what you would have answered or to what other trainers would have answered...it's reaffirming to know that you're not the only one out there who wakes up in the middle of the night.

Linda thought about how participating in the study and going through the interview will help her be a better coach.

Well, it's been a long time since I've thought about exactly how I do things. And now, you know, honestly whenever I do stuff like this, I think it makes me a better coach to people that are younger and just starting the process because I just think, well that's common sense. Even though I know it isn't, I don't think I have enough patience. This is really making me realize that as I coach new trainers and stuff – not like I know everything, I don't want to act like some arrogant individual, but you know, you've got to pick up a few things, I hope, if you're in the profession. So, it's making me realize that there's a process and there's a way to do it and it's making me more aware of that, and knowing that I can improve on my coaching ability a little bit more.

Carrie reflected on how long she's been in the field and her view of herself as an expert.

Well, it's been actually very interesting to go back and reflect...these are some things from my prior experience. I think it's good to stay connected to what you've done in the past and revisit it from time to time and see how you've learned and grown. So, one of the reactions was, wow, how time has flown by. I've been doing this kind of stuff for quite a while now. I think a lot of times I don't think of myself as being an expert, or being well qualified, or well experienced. But when I reflect on some of the different things that I've done, you know, I am.

Four of the participants described how participating in the study increased their self-awareness. Julia said,

It just kind of brought home...[and made me] realize how much I tend not to do book research, and how much I rely on hearing things from people and talking to people. Some of it's, it's what they call mother wit, and just being able to think about how people figure stuff out, how people operate.

Stacie said that her reaction was

...a self-awareness. So many things we do routinely, we don't challenge ourselves to think about why we take the actions and how we started a project, so I feel good about sharing my success. I feel good about the level of questions that required me to think deeper about learning.



Greta said,

It's fun to reflect. I mean, I've got enough under my belt now that it's not so new that I don't know what I've experienced. I've made some pretty sound decisions about what I feel comfortable doing, don't feel comfortable doing... I think that your statement about the passion, the way you said it, the way you described it was revolutionary, but not surprising, because I know where my passion lies. I lose it occasionally because of my daily job. So to sit and talk about the passion is almost enough to reinvigorate me. It's interesting.

Raymond used Howell (1982)/Pike's (1994) Levels of Competence to discuss how participating in the study affected him.

It brought me to the conscious, unconscious, competence level, I honestly had not ever thought consciously about this process. It's one of those things where I was unconsciously unskilled. It was only by talking through it that I have it. I couldn't have gone in there and pulled out for you what my process was.

Lastly, Tim said that his participation caused him to reflect on his time in the profession, but more importantly, on how much it can consume your life.

I think it's a great thing. As most trainers probably enjoy talking about their profession and their accomplishments. I guess, what's come to light is how long I've been involved as a trainer and probably just how ingrained it is in my being. My daughter reminds me of this often, and I probably fail to recognize that... It probably has helped me to take a little time out sometimes and appreciate what's going on around me.

### *Summary*

In summary, this chapter introduced the 24 trainers who participated in this study, their characteristics and profiles, and the common themes discovered in the process they used to acquire knowledge. A profile of each participant was presented to provide insight into the breadth of training experience possessed by the training professionals interviewed for this study. The common themes and findings on the three research questions under study were presented extensively using quotations from the interview transcripts.

Twenty-six common themes were identified during the study, which were placed into six categories. The six categories are learning is self-directed; the training and development process

becomes part of the trainer's life; needs assessment is essential to knowledge acquisition; knowledge acquisition is a continuous part of the trainer's life; understanding adult learning principles is important; and reflection is essential.

The self-directed learning category comprises a plan for learning; either a linear-interactive-linear learning process or an interactive-linear learning process; knowledge acquisition is part of the program planning/training process; along with the use of a variety of resources, such as SMEs, printed materials, the latest books by stars in the field, and interaction with more experienced trainers. The next category is the training and development process becomes part of the trainer's life. The needs assessment is essential to knowledge acquisition category consists of: you don't know what you don't know, and content expertise isn't enough; you also need to have context/culture expertise.

The category, knowledge acquisition is a continuous part of the trainer's life, was characterized by a continuous pursuit of expertise, identification with Howell (1982)/Pike's (1994) Levels of Competence, the continuous search for new books/material, highlighting and sticky notes everywhere, extensive professional libraries, observing other trainers to improve personal performance, and knowledge and abilities increasing with experience. Understanding the importance of adult learning principles consists of reaching out and touching the learner. Moreover, being able to deliver a training program doesn't mean you're a trainer. Reflection is the final category.

## Chapter 5

### Summary and Discussion

The final chapter of this study on the process trainers use to acquire the knowledge they need to develop and present training programs for which they have limited or no content expertise includes a restatement of the research problem, a review of the research methodology, and a summary of the results. Also included is a discussion of the findings in relationship to prior research, the implications of the results with suggestions for practice, and recommendations for future study.

#### Restatement of the Research Problem

Trainers often find themselves in situations where they are required to train on material for which they possess little or no content expertise (Long, 1983; K. Slemp, personal communication, March 1, 2003; Watkins, 1989). Compounding the problem is the fact that trainers are expected to be content experts when presenting material (Brookfield, 1990; Draves, 1984, 2000; Galbraith, 1990; Houle, 1984; McArdle, 1993; Parish & Necessary, 1996; Slusarski, 1994; Symonds, 1968). Spear (1988) conducted the initial research into training professionals who found themselves in the situation of having to develop training programs with little or no previous content expertise.

This study provides in-depth information, from participants' perspectives, for understanding, describing, and explaining the process trainers use to acquire the knowledge they need to develop and present training programs. Additionally, the common themes of trainers' knowledge acquisition processes were identified and recommendations of the participants for other trainers in regard to acquiring knowledge were reported.

## Review of the Research Methodology

The phenomenological inquiry research tradition was used for this study, because there was little research on the topic and because it was process oriented (Patton, 1990; Strauss & Corbin, 1990). It is a qualitative design that uses purposeful sampling to find information-rich participants for the study. To ensure investigator competence, interview protocol was tested and the types of proposed purposeful sampling procedures were determined appropriate through a pilot study. Minor changes were made to the semistructured interview guide as a result of the pilot study.

Criterion, snowball, convenience, and maximum variation purposeful sampling was used to identify potential participants located the central United States geographical area for the study. Once potential participants were identified, the researcher contacted each of them personally to determine if they met the criterion and were willing to participate in the study. Personal interviews were held with the 24 trainers who agreed to participate in the study using a semistructured interview guide (Appendix A).

Each interview was tape recorded and transcribed by a professional transcriptionist. The data was then analyzed and categorized using the constant comparative method to identify common themes and patterns. Interviews continued beyond the point of thematic saturation and 24 interviews were conducted instead of the 20 that had originally been planned so that highly recommended participants could contribute to the research. Final interpretation of the data collected and implications of the results began once thematic saturation had occurred and the interviews were completed.

According to Lincoln and Guba (1985), trustworthiness is used to measure validity and reliability in a qualitative study by establishing credibility, transferability, dependability, and

confirmability. Member checks, referential adequacy, and peer review were used to ensure the credibility of the findings. Member checks consisted of providing participants the opportunity to clarify, correct, or enhance their transcript and the researcher's interpretations to ensure the participant's perspective was properly represented. Referential adequacy was achieved by tape recording all interviews so they could be examined later and compared with the written data. Peer reviews were conducted with four other researchers (Appendix B). Thick descriptions are provided to allow readers the opportunity to make decisions for themselves on the transferability of this study to their own situations. A properly managed audit trail will be maintained to establish dependability and confirmability.

### Summary of the Findings

The characteristics and profiles of the 24 trainers who participated in this study were presented to provide insight into their demographics and breadth of experience. The sample consisted of 16 women and eight men ranging in age from 28 to 67 years old. Seventeen had graduate degrees, five had bachelors degrees, and two had less than an associates degree. Four of the participants had authored or co-authored books on communications, facilitation, leadership, management, supervision, team building, or training. Their individual experience ranged from one to 40 years, with a total of 455.5 years. Their areas of expertise included fiber optics cable installation, customer service, homicide investigation, banking, manufacturing, hotel operations, and religion. All of the participants except one became trainers after achieving expertise in another field.

The findings of this study reflect the common themes that emerged in response to the three research questions on the nature the process trainers use to acquire knowledge, the common factors that facilitate the acquisition of that knowledge, and how the common factors influence a

trainer's acquisition of knowledge. The common themes identified were self-directed learning, the training and development process as part of the trainer's life, needs assessment is essential to knowledge acquisition, knowledge acquisition as a continuous part of the trainer's life, understanding the importance of adult learning principles, and reflection.

### *Self-Directed Learning*

The most common theme that emerged from the interviews was the presence of self-directed learning. Self-directed learning was a part of the trainers' lives.

#### *A Plan for Learning.*

Seventeen of the 24 participants indicated that they had a plan of how they would proceed with their learning; however, they spoke more about how they designed the program instead of how they gained the knowledge. As the interviews progressed more probing questions were asked, it became clear that they didn't really have a plan. Seven of participants said they didn't have a plan for learning but were able to describe how they acquired knowledge.

#### *Linear-Interactive-Linear Learning Process.*

Six of the participants indicated that they thought their learning was linear in nature. The process is typified by structure in the beginning, a chaotic middle, and a structured ending. The participants indicated that although they preferred a linear process, they realized that it wasn't a very realistic expectation. They said that once the process began, it would invariably send them in another direction, because they would soon find out that one factor affected another, and that one affected another, etc. Consequently, they would try to take the new information and put it to the side until it fit into their process. Their process gained more structure closer to when they were to teach the class.

*Interactive-Linear Learning Process.*

The interactive-linear approach was typified by what appeared to be a nonsensical “grass catcher” gathering of knowledge followed by a funneling of the information into a logical order. Those participants who were extremely random in their learning admitted that they forced themselves to put the information into a linear form at some point during the process.

*Knowledge Acquisition - Part of the Program Planning/Training Process.*

Two participants actually used a copy of a program-planning model to describe the manner in which they acquired knowledge. One associated the discovery phase of her company’s model as the point where learning took place. The other used the Analyze, Design, Develop, Implement, and Evaluate model and said his learning occurred in the analysis phase. Both went on to use the other steps of their respective model to explain how they processed knowledge after it had been acquired.

*Use of a Variety of Resources.*

The participants used a variety of resources for learning, but subject matter experts (SMEs) and printed material were used twice as often as interacting within the organization and the Internet. Participants interacted within the organization by talking to people at all levels to learn about its culture. The Internet was identified as an integral tool that was used throughout the learning process to locate other resources. Other resources identified were the latest books by the most respected authors “stars” in the field, and interaction with more experienced trainers.

*The Training and Development Process Becomes Part Of Your Life – You Live It!*

Trainers continuously thought about the training programs they were developing/presenting as they went through their daily lives. Participants indicated that they thought about them while they were in the shower, in meetings, while driving, and had them

wake them up in the middle of the night. They “lived” the program and couldn’t “just turn it off.” Tape recorders, leaving messages on voice mail, having a pen and paper by the bed, and writing on the backs of papers and receipts were the most common means identified for holding on to the ideas that would pop into the trainers’ minds.

#### *The Needs Assessment is Essential to Knowledge Acquisition*

Numerous participants discussed how they gained knowledge while conducting their needs assessment. They said that was because many times in the training development process, the trainer doesn’t know what he or she doesn’t know, doesn’t know what he or she knows, and doesn’t know what he or she needs to know about the subject. The assessment also helps trainers gain knowledge about the context/culture of the organization in which the training will be conducted.

#### *Knowledge Acquisition is a Continuous Part of the Trainer’s Life*

This theme was characterized by identification with Howell (1982)/Pike’s (1994) Levels of Competence, the continuous search for new books/material, highlighting and sticky notes everywhere, extensive professional libraries, and observing other trainers to improve personal performance. This theme was also characterized by the continuous pursuit of expertise and the trainers’ knowledge and abilities increasing with experience.

#### *Continuous Pursuit of Expertise.*

When the participants were contacted, most said that they didn’t feel like experts. All of them were continuous learners and spent as much as 20% of their day in the pursuit of new knowledge. Their desire for learning was so ingrained that they even stayed abreast of new material on subjects they no longer presented. Participants used terms such as “dangerous,”



“deadly,” and “fatal” to describe the failure to continuously learn. As Shirley said, “the best students are teachers...the best teachers are students, as well.”

*Knowledge and Abilities Increased with Experience.*

According to the participants, efficiency in both learning and program development; confidence in their abilities, knowledge, and teaching abilities; and their willingness to admit they didn't know something, changed as they gained experience. Several of the participants said that the biggest difference between their first and most recent training program was an increase in efficiency.

*Understanding of the Importance of Adult Learning Principles*

Most of the participants mentioned concern for their learners as adults; however, those who spoke about the importance of using adult learning principles tended to have either more experience in the field, a degree in adult education, or both. Terms such as facilitation, learner-centered teaching, and experience of the learner were repeated throughout the interviews. The participants stressed the importance of being able to “reach out and touch the learners” so that learners would use the material when they leave the classroom. “Process expertise” and “style” enabled the trainers to “reach out and touch their learners.”

The participants also passionately said that “delivering a training program doesn't mean you're a trainer.” They said the “professional trainer” is much different from someone who merely delivers or presents a training program – they do more than just read off of slides, or PowerPoint. They relate with their audience and know their material well enough to change it mid-stream to meet the needs of the audience. As one participant said, it is building upon the students' abilities; so that when they walk out of the classroom, they say, “Wow, look how much I learned today!” instead of, “Wow, look how smart that trainer is.”

## Discussion

This research expands the knowledge base in adult education, including knowledge acquisition, self-directed learning, and program planning, and by exploring the nature of the process trainers use to acquire the knowledge they need to develop training programs on subjects for which they have limited or no previous content expertise. Because this research looked at what trainers do before developing training programs, it enhances the literature in human resource development and training by giving trainers with a better understanding of how to achieve content expertise. In this section, the findings will be discussed regarding the three research questions on the nature of the process trainers use to acquire expertise, the common factors that facilitate the acquisition of the knowledge, and how the common factors influence trainers learning.

Initially the trainers had difficulty describing the process they used to learn new material before developing and presenting training programs. Two reasons for the difficulty emerged. First, it was a process they hadn't thought about, and second, acquiring knowledge is behavior, and people don't routinely think about their behavior. Generally, people go through their daily lives without ever giving much thought to the processes they use until someone asks about them. As Reilly (1952) suggests, "People are not interested in processes. People are interested in results. People will never know what 'you've been through.' People don't care.... how difficult it was for you to arrive at something worthwhile. They want to know what it will do for *them*" (p. 54, emphasis in original). Therein lies the problem for the trainers in this study – people don't think about processes. All of the participants admitted that before receiving the phone call asking them to participate, they really hadn't thought about how the process they used to prepare themselves for developing and presenting classes – they just did it. They were "unconsciously

competent” (Howell, 1982) of the processes they were using. Once the participants reflected on how they acquired knowledge, their passion for their learners and profession came through as they shared their learning experiences. The following discussion provides insight into the common factors that influenced the trainer’s acquisition of knowledge.

### *A Plan for Learning*

Brockett and Hiemstra (1991) suggested that self-directed learning frequently lacks any guiding model or plan, which did indeed characterize the learning plans of the trainers who participated in this study. When Martha was asked if she had a plan for her learning, she said, “My plan is to learn everything I can.” Martha’s comments reflected the descriptions most of the trainers gave for their learning plans. All of the trainers could describe in vivid detail how they learned the knowledge they needed to develop training programs, but when it came down to it, there was no indication that any of them, except perhaps one, had what could actually be called a plan. That even included the trainers who indicated that they had a plan and the one trainer who said she “had to have a plan.” Zoe was adamant that for her to learn, “it had to be a process,” she had to see a result, but the plan she used was actually the course outline, which provided her with a guide to help her through the process.

As the other trainers described their learning plans, it became apparent that their learning plans and training development processes were almost one and the same. Moreover, for most of the trainers, the two processes were mutually supportive. This also substantiated Spear’s (1988) assertion that learners tend to describe their learning “in the chronological order in which events took place even though they are not sequentially related” (p. 218). The tendency to describe the two processes simultaneously is also part of the nature of the training profession. In order to develop training, trainers often have to take very disorganized information and put it into a

structured format that facilitates learning, which was the way 18 of the 24 trainers in this study described their learning processes. That phenomenon may also explain that while all of the trainers had difficulty describing their plan for learning, none of them had difficulty explaining their self-directed learning processes.

### *Self-Directed Learning*

Analysis of the interview data identified self-directed learning as the most common means the trainers used for acquiring knowledge. The literature on self-directed learning focuses primarily on the linear (Knowles, 1975, Tough, 1971, 1979) and interactive (Berger, 1990; Danis, 1992; Danis & Tremblay, 1985, 1988; Mocker & Spear, 1982; Spear & Mocker, 1984, Spear, 1988) models. Spear and Mocker (1984) suggested that self-directed learning is not a clearly deliberate, well-planned, and linear series of episodes, “because self-directed learning occurs in a natural environment dominated by chance elements and is in contrast to the artificial and controlled elements which characterize formal instructional environments” (p. 9). The results of this indicated that the trainers actually used a combination of both the linear and interactive models in their pursuit of knowledge. The results did, however, reinforce Spear and Mocker’s (1984) assertions about the influence of the natural environment on self-directed learning, demonstrated by their use of the nontraditional needs assessment, the training and development process affecting their lives, their use of resources. As stated above, none of the trainers used a strictly linear, or interactive self-directed learning process.

### *The Learning Processes*

Danis (1992) defined learning processes as “the various possible interactions of a series of interdependent components which lead to the acquisition and/or application of new knowledge” (p. 48). The trainers’ learning processes were either linear-interactive-linear, or

interactive linear. Linear is a term taken from Tough (1971) and Knowles' (1975) original work on self-directed learning and represents a clearly deliberate, well-planned, and step-by-step series of episodes with a linear pattern. Interactive is the term used by Mocker & Spear (1982), who postulated that rather than preplanning, learners tended to select from limited alternatives that occur fortuitously within their environment and that structure their learning. The six trainers who said that they preferred a linear process indicated that even though linear processes provide a level of comfort to them, it was not very possible. They said they started out linear, but with no way to predict or plan where the next sources of information might come from, it was extremely difficult to stay on a linear path. As Frank said, you don't get very far in the learning process before you find out that one thing interacts with another, and that interacts with another and so on. Will, who preferred the comfort of a linear process, said when new information was presented, "you have to absorb it, and it may cause you to rethink, backup, revise, [or] modify what you've done to that point, but that's the whole purpose, to insure that you have the most accurate information." As Spear (1988) suggested, fortuitous occurrences in the environment divert the learner along the way.

The trainers spoke about how they would be doing research in one area, and something in another area would pique their interest, and they could get so involved looking into the new area that it might be hours before they got back to what they were originally doing. The new path may or may not have had anything to do with the originally planned pursuit of knowledge. The trainers reported that when they got sidetracked, it was usually because they found something that related to another program they were working on or were going to be presenting in the future. At other times, it had absolutely nothing to do with either one, it just piqued their interest, so they pursued it.

Two other things could divert the linear-oriented trainers from the acquisition of knowledge. The trainers said that reflecting on how the new information related to their past experiences and what they already knew diverted them from their linear process, but any connection they could make between the newly learned information and their previous knowledge significantly increased their understanding. The Internet was identified as the other source of diversion, but unlike reflection, which was seen as an aid to understanding, the Internet was sometimes mentioned as the source of frustration for linear-oriented learners. They said that while it could be a valuable resource, it was easy to get distracted because of the way it presents information. Additionally, it offers such a plethora of information that it was easy to get bogged down trying to determine which information was of value and which wasn't.

The linear-interactive-linear process could be depicted as two funnels put together with the large ends touching and the two small ends facing in the opposite direction. Information initially enters the learning process in a very structured form. Then as the process continues, information comes in more randomly from numerous sources, so the path widens allowing more information to enter. Then as the learning process continues, the new information is structured into a more linear process for use in developing training.

Eighteen trainers indicated that they preferred a more interactive learning process. In general, they were more random and expressive in their thoughts than the linear-oriented trainers. The interactive-oriented trainers said that they enjoyed the challenge of gathering and processing large amounts of information all at once. When these trainers described how their process worked, they said that if they were learning something about the first part of a program and new information came in that affected the last part of the program, they had no problem taking the new information and working on it right then, and then going back to the first part

when they were finished with the new information. This was in contrast to the linear-oriented trainers who would write a note to remind themselves to work on the new information later and continue with what they were originally doing.

Most of the interactive-oriented trainers said that they weren't very good at comprehensive things that required them to stay focused on a single area for a long time. Thus, they would read something in one place, and then in another place, and then in another place, and eventually the light bulb would come on. They said that things didn't always make sense at first because they were taking in information from so many places. But, eventually, after they had processed the information, everything would come together and make sense. In some cases, assimilation occurred very quickly, but in others, the trainers reported that it could take a couple of years before what they had learned made sense. As Cheryl said, "You'd memorized it, you[d] know what you were supposed to do, but the why and the why it worked the way it did, did not make sense until later. And I'd sit there and go, "Wow, that's why that does that. How cool is that." On the negative side of her randomness, Cheryl said that one time she actually thought it would be a good idea to teach a class in a random manner. Unfortunately, it was a Time Management class, and "it was a dismal failure."

The interactive-oriented trainers agreed that at some point during the process of acquiring knowledge, a fair amount of linearity occurred. However, they reported that it usually didn't occur until closer to the actual presentation of their training program. Several of the interactive-oriented trainers described their process as looking like a funnel. In the beginning, they didn't know where the information would come from, or even what it meant, so the large end of the funnel represents the first part of their learning process. Once they started analyzing the information and making sense out of it, the funnel started tapering down as the information was

filtered, categorized, and processed. The small end of the funnel represents the part of the learning process just prior to delivering the training program.

Interestingly, the difference between the linear-interactive-linear and interactive-linear oriented learners could also be seen in the trainers' preparation for the interview and their overall behavior throughout the entire interview process. First, the trainers who said they were linear-oriented had their demographic questionnaire completed before the researcher's arrival. Most of them had typed their form and had a copy of their resume attached. However, very few of the interactive-oriented learners had their questionnaire completed and started filling it out after the researcher's arrival, just prior to the start of the interview. Additionally, when the interactive-linear oriented learners filled out their form, they wouldn't fill it out from top to bottom; instead, they would jump back and forth between the questions. They would fill in one answer that required them to write a narrative and then go to a question where they could just circle an answer, and then jump back to a question that required them to write a narrative again.

During the interview process, the behaviors of the linear-oriented trainers compared to the interactive-oriented trainers were noticeably different. It was evident by their offices and the way they answered questions during the interview. Upon entering the offices of the linear-oriented trainers, the neatness and orderliness was immediately noticeable. Items such as books, papers, and pens, were all stacked and situated very neatly. It was totally opposite for most of the interactive-oriented trainers. Their desks and tables looked almost chaotic. There were books, and papers scattered everywhere. One person's table had about twenty books scattered across it; they were open and closed, and had sticky notes sticking out everywhere. There was no logical order whatsoever to the way the books were arranged. Of interest though, regardless



of the interactive or linear orientation of the trainer, when they were asked a question about where to find something, they immediately knew where to locate the information.

The other significant difference between the interactive- and linear-oriented trainers was in how they answered questions during the interview. The linear-oriented trainers answered the questions in a more straightforward manner. They shared some stories, but primarily, they would answer the questions by responding with direct responses or explanations. It was different for most of the interactive-oriented trainers. They had a tendency to provide a direct answer to the question and then follow it up with a story about a situation they had experienced that would clarify or reinforce their answer.

#### *Use of a Variety of Resources*

Contrary to the myth that self-directed learning is an isolated event, Brookfield (1986) asserts that, "no act of learning is fully self-directed if this is taken to mean that the learner is so self-reliant that he or she can exclude all external sources or stimuli" (p. 48). Long (1989) believes the essential dimension of self-directed learning is control, which a learner can exert either in solitary, informal, or traditional institutional settings. In other words, solitude is not a necessary condition of self-directed learning (Kerka, 1994). This was the case for the trainers in study. They all interacted with various people, including SMEs, people in the organization they were providing training for, and other trainers to gain the knowledge they needed to develop their training programs. This bears out Tough's (1979) belief that learners seek help and subject matter from a variety of acquaintances, experts, and printed resources.

Finding competent help is one of the major problems in self-directed learning projects (Cross, 1981). Throughout the interviews, the trainers substantiated Cross' belief through their relentless verification of resources. They refused to take resources at face value and would

check to see if they were still up-to-date or if more recent resources were available. As Will recommended, “Pay attention to the authors of research and/or agencies that sponsor or produce the research to insure that there is credibility and validity.” Raymond took his verification process further than anyone else in the study by personally contacting the authors of the books he was reading to clarify what they meant in their writing, and if the book discussed changes that had been made in a specific organization, he would ask them if the changes they had made were still working.

In the more recent program planning literature (Cervero & Wilson, 1994a, 1994b, 1998; Goodson, 1991; Mabry & Wilson 2001; Sork, 1996, 2000), the use of resources and the socio-political and ethical issues involved in developing training is discussed. The trainers understood that and talked with those who asked them to develop or present the training to see if they have any ideas on how the training should be conducted or if they have any specific resources that they wanted used. This is a crucial step in program development because many times those who requested the training already have an idea of what they want or how they want it done. Many times, this is a result of the person having either participated in, or seen another training program that he/she wants emulated. It is almost impossible for the trainer to provide a training program that meets the needs of the organization if the person requesting the training has a vision of what he/she wants and doesn't share it. You can't meet needs if you don't know what those needs are. As Goodson (1991) suggests, program development is essentially a social activity in which people negotiate with each other in answering questions about a program's form, including its purposes, content, audiences, and format.

Martha shared another reason for asking the person who requested the training for resources, which could prove beneficial for the trainer,

Some of the clients I worked with... have tons of resources available. And some of them have stuff that they've purchased, but they've never used, and it's like, let's see if we can get some of our money out of this now, and work it into your program. It's amazing what people have, big organizations have, but they've not used... I also use them to come up with case studies because why spend your time trying to think of what could happen?

*The Needs Assessment is Essential to Knowledge Acquisition*

Bergevin et al. (1963) suggested that the program planning process helps adult educators learn a great deal about resources, techniques, and the subject under consideration. However, the literature review revealed no connection between program planning and the trainer's acquisition of knowledge. The results of this study help provide that connection through the participants' use of the nontraditional needs assessment to gain knowledge. Cervero and Wilson (1994a) said, "If planners are to understand and improve planning practice, an obvious question arises: What do program planners do?" (p. 13).

Knowles (1980) suggested that one of the things program planners do is diagnose the needs for learning. The trainers indicated that they diagnosed the needs for learning through a needs assessment, but as George suggested, "it was not a traditional needs assessment." It is an assessment that provided insight into context or culture of the organization and the needs of its learners, but, more importantly, it assisted trainers in acquiring the knowledge they needed to develop successful training programs. The context or culture was described as the type of business, the leadership, the communications throughout the organization, their goals, successes, failures, and problems of the organization.

Danis (1992) defined context as the external factors within the learners' environment that facilitate, inhibit, or modify the acquisition of new knowledge. Caffarella and Merriam (1999) suggested that the learner's situation and the learning context are as important to the learning process as what the individual learner and/or instructor brings to that situation. Context takes

into account two important elements: the interactive nature of learning and the structural aspects of learning (Merriam & Caffarella, 1999). The need for context expertise was a constant theme throughout the interviews. Shirley said training development consisted of a triangulation of three different types of expertise: content, context, and process. The use of the triangle analogy suggested that without any one of these types of expertise, the training would fail. Cervero and Wilson (1994a) addressed the issue of context by suggesting that adult educators are no longer planners who apply a standard set of principles and procedures to any situation, rather they are real people trying to make judgments about what action to take in a concrete situation.

In his system of education design, Houle (1980) asserted that “any episode of learning occurs in a specific situation and is profoundly influenced by that fact” (p. 32) and “the analysis or planning of educational activities must be based on the realities of human experience and upon their constant change” (p. 32). Candy (1991) supported Houle’s contention, but he described it as the social, or cultural, context from which people make meaning. Candy and other authors believed social context, or culture, should be the starting point for learning (Brookfield, 1993; Hiemstra & Brockett, 1994). In order to determine the organization’s culture and make meaning out of it, Greta said, “You need to talk to the people that are going to be doing the learning. That’s more critical than talking to the people that hired you to do it.” All of the trainers said that they used their needs assessment to both gain knowledge for themselves and improve the training programs for their learners.

Chris suggested that the needs assessment should begin with the question, “What is it that people want that’s not happening now?” Cameron and Quinn (1999) provided the answer. They cited numerous studies where the most frequent reason given for failure of planned organizational programs was neglect of the organization’s culture. In response, they developed

the “Competing Values Framework” model, which helps trainers understand and diagnose organizational culture. The culture is diagnosed through the use of the Organizational Culture Assessment Instrument, which consists of a series of questions that are used to assess the current and preferred culture of the organization. The results provide trainers with a graphic depiction (Figure 5.1) of where the gaps are between the current and preferred states for the organization’s culture.

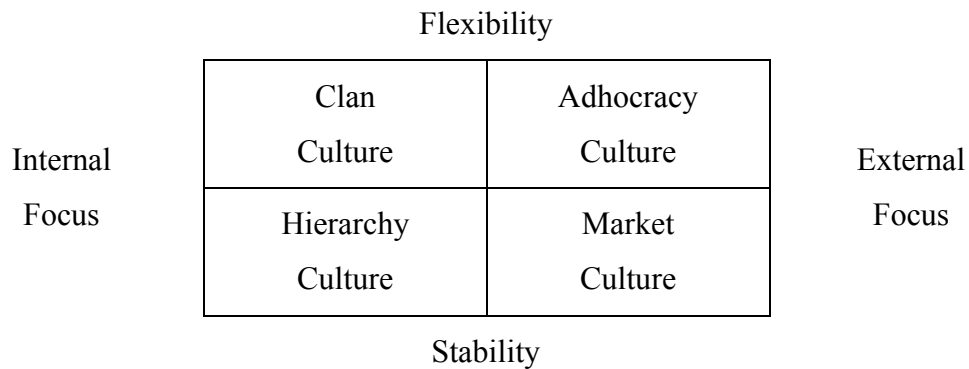


Figure 5.1: The "Competing Values Framework" Model

The Hierarchy Culture values strict compliance to standards without deviation. The Clan Culture is human relations oriented and values teamwork, participation, and professional development. The Market Culture values competitiveness, productivity, and win at all costs. The Adhocracy Culture values a very dynamic, entrepreneurial, and creative workplace.

Cervero and Wilson (1994a) believed that “the essential problem confronting program planning theory in adult education is that it does not adequately account for the important things real educators do in everyday practices” (p. 28). The trainers in this study provided insight into what real educators do, and further dissemination of their nontraditional form of needs assessment across the field could prove beneficial in adult education.

### *Knowledge Acquisition is a Continuous Part of the Trainer's Life*

The trainers in this study were continuous learners. Their learning was manifested in several ways, but pursuit of expertise and concerns about competence and confidence were the most prevalent.

### *Pursuit of Expertise*

Benaïm (2002) suggested that someone with expertise possesses great knowledge, skill, and experience in a particular field or subject and is a lifelong learner who continuously asks questions and adds to their knowledge base. In this researcher's opinion, Benaïm defines the trainers in this study, but the findings suggest that expertise is an illusive, and often, deniable term. Even though none of the trainers in this study said that they considered themselves experts, several of them obviously were, considering the number of people who recommended them for the study and the way the other trainers talked about them during the interviews.

The adult education literature stresses the importance of information being shared by adult educators with expertise in the subject (Brookfield, 1990; Draves, 1984, 2000; Ennis et al., 1989; Galbraith, 1990; Houle, 1984; Knowles, 1970, 1980; Margolis & Bell, 1986; McArdle, 1993; Parish & Necessary, 1996; Spear & Mocker, 1984, 1989; Symonds, 1968; Wlodkowski, 1999). If one is an adult educator and has expertise in a subject, does that mean that the person can teach, or in this case, train? Many authors (Abella, 1986; Cadwell, 1995; Kirkpatrick, 1993; McCain, 1999; McLagen, 1978; Nadler & Nadler, 1991; Noe, 1999; Pike, 1994) have provided guidance and "how to" books on developing and presenting training, but does reading a book give someone the expertise they need to be able to train? One of the trainers said,

Anybody who is going to be a trainer or who is going to develop curriculum, or be a training manager, the first thing that they need to do is to learn instructional design and the basics of just developing a course. Once they have

that, if they're not a subject matter expert on any particular subject, I think they can grasp anything enough to put a course together and teach it.

Is that true? If someone can develop a course, does it mean they can teach it? What expertise does it really take to develop and present training? Since training organizations are suffering downsizing, McCain (1999) authored *Creating Training Courses (When You're Not a Trainer): Quick Course Design, Development, and Delivery for Subject Matter Experts, Managers, and other Nontrainers* for ASTD. In it, he listed the qualities and skills that need to be considered when selecting someone to create and deliver training courses. The qualities and skills were management experience; technical and professional experience within the area; depth/breadth of experience within the organization; years of experience in the area and the organization; depth of content knowledge; degrees in the field; internal reputation/credibility; industry recognition and knowledge; verbal and nonverbal communication, and listening skills; professional image; structure and direction; and facilitation skills. Of interest, content expertise and facilitation skills comprise only about 10% of the total points available for selection.

Wlodkowski (1999) suggests that expertise in adult educators boils down to three things: 1) they know something beneficial for adults, 2) they know it well, and 3) they are prepared to convey or construct it with adults through an instructional process. This was certainly true for the trainers who participated in this study; however, their concepts of expertise reached far beyond knowledge and facilitation. They were asked what recommendations they would make to someone who was put in the situation of having to develop and present a training program without having previous content expertise. Rather than try to justify what is or isn't expertise in the training field, the recommendations of the trainers are provided. They have been categorized according to Shirley's triangulation of the three types of expertise: content, context, and process.

### *Content Expertise.*

- You have to be humble enough to seek knowledge... You just really truly do... training isn't about the trainer, it is about the people in the class.
- Don't try to tell people you know everything and that you're the expert. It doesn't work... There are some people that end up failing in this business because they feel and act as if they are expert in everything... Admit you don't know it, and start from scratch and go out and start learning. People want to help you learn. It's complimentary to go to them and say, "You're the expert, tell me." If you go to people and say, "Help me out with this, I just need..." they're anxious to help.
- Really narrow what all you have to learn, find the authors who seem to be well respected in those areas, read everything that you can get your hands on... then do live interviews with people who have done it well and asking, What do you do? How do you do it? What kinds of problems did you run into? Have you gotten over those?" can be very helpful.
- Gather every bit of knowledge that you can in the amount of time that you can... if you've got fifteen hours, spend that fifteen hours getting knowledge from as many sources as you can whether it is research books, interviews, whatever you need to do to gather that knowledge... And then, take all that knowledge, put it in your head, and mull on it, and then ask yourself a question... "What did I like about that? And what didn't I like about that? Because sometimes a negative can be a positive.
- Verify the credibility of the subject matter experts.
- Use subject matter experts, but learn as much as you can so that you're understanding what the subject matter experts are talking about. I mean, you have to know enough to connect with them and to relate to them and to know what they're talking about... You need your subject matter experts to give you the experience, because otherwise it's just book stuff. And unless you have practical experience around it, or how it's really applied, or what it really looks like, then it's just book stuff and you won't connect with people.
- Use your resources and be creative. Find a subject matter expert, and it would kind of depend on how they learn; if you need that kind of support.
- Remember, no matter how prepared you are; there's always room for improvement and to learn something.

### *Context Expertise.*

- Follow the Analyze, Design, Develop, Implement, and Evaluate model and then, number one, get a real clear idea of what the request is. Number two, after you get that clear idea, define it to yourself in such a way that you can have a problem



description, or some way of actually thinking about it in a concise sort of way. Number three, become real expansive in your thinking.

- First of all, find out what it is that the client wants their participants to know, find out your client's objectives, but also find out what the people have already been taught about the subject, or who your audience is and how much they already know. Then begin to build from there... then begin to build your research file.
- Really do the front-end analysis, get to know the people, talk to people, this is their environment. Find out what their issues are. And a key part, too, sometimes is separating the training issues. There are some things training won't fix.
- Talking to the people that are going to be doing the learning is more critical than talking to the people that hired you to do it.
- Immerse yourself as totally as you can in the subject matter... put yourself in the trainee's shoes, observe other people that are doing it... And then make sure that you maintain some connection to the real world for whatever the subject matter is so that you're not just out here pontificating theory with no connection to the real world.
- Listen! Listen to your audience. Find out as much as you possibly can about them and their needs because then you can link up what their greatest need is...if you are truly listening, if you're asking the right questions and digging deeper and asking for specifics, what does it look like, what behavior do you want to turn around, it's going to shape what you go after... And, don't come across as an expert, ever, even if you are...

#### *Process Expertise.*

- You have to have passion, if you don't have the passion; you've got to develop it. If you don't, it can be kind of self-destructive. You just may not see success at the end of the road.
- Go watch somebody. Just go look at what they do, how they do it. Watch the whole thing. Look at their materials, look at how they handle themselves, look at how they dress, look at how they use humor.
- If you're training on a topic, do all the homework, all the reading and all the rest. But as a last confident level – understand you don't have to be an expert, but you do have to be an expert of how to get others learning... also understand the basic principles of adult learning, and utilize the expertise that's in the room, after you've done all the rest of your homework, make sure you have that expertise.
- Content and context expertise are both so important. And then it's finding a way to simplify and communicate it. Simplify the content. Become the knowledge expert, but don't sound like it. Be able to simplify it and meet the participants where they're at.

- It's very important that you have examples and experiences from people who have actually been out experiencing whatever it is that you're trying to train...let people know that you've done the research and can relate to them through that process. If you haven't had the experience yourself, you're gonna have to find credibility somewhere, but it's gonna be a lot more difficult to come by without that. People are a lot more accepting when they know you're considering exactly what they do on a day-to-day, their issues, and their concerns.
- Don't present yourself as the expert. I think as soon as you do, that someone will try and prove you wrong. Find unusual ways to get the information... find situations in which whatever their subject is, is happening. If they want to talk about health care, stand around the emergency room, and watch what really happens there. Hang out at the doctors' office and ask people how long they sat in there before they saw somebody, and find different ways other than just the research. Because a lot of stuff, I don't think gets into the research, some of the real life situations.
- If they don't walk out of the room at least looking at something different, they haven't gained anything and you haven't done your job. You need to be able to spin it so that they can see something different. It's like a crystal in your hands and you can look at it several different ways. Make sure you see a different way to view what you do, how you do it, and how you affect people.

As the trainers have noted, expertise has several facets. Based upon their comments, trainers need expertise in audience analysis; needs assessment and analysis; interpersonal communications, interviewing; determining context or culture; determining content; program planning; instructional system design; process, style, facilitation, or presentation skills; and evaluation. Their comments supported Hiemstra and Sisco's (1990) belief that all of the content expertise the instructor might possess is of little use if the instructor isn't very skilled at sharing it with others. Therefore, trainers need content expertise, context expertise, and the ability to facilitate learning (Knowles, 1980, Margolis & Bell, 1986; Watson, 1979). Considering the trainer's recommendations, Zielinski's (2001) job description/help wanted ad, presented in the literature review as being "realistic, albeit humorous," doesn't seem to be such a stretch after all, nor does it seem that humorous.

### *Competence and Confidence*

Competence and confidence are extremely important for trainers; these two attributes provide learners with the sense that trainers know what they are doing (Margolis & Bell, 1986). The trainers understood the importance of competence and confidence and were continuously pursuing them. They knew that when they were presenting training, their own knowledge, skills, and reputation were on the line. As Houle (1972), stressed, “the entire career of the educator is judged by some balancing out of the relative successes and failures of all the programs he designs and conducts” (p. 34).

In general, trainers with more experience in the field indicated that they were more confident of their abilities than those who had less experience. However, regardless of their experience, none of them took their role as a trainer for granted. Even those with years of experience, who had been training the same class for years, still spent several hours the evening before training sessions going over the material to ensure that they were prepared. The trainers’ concern about competence was also seen in the amount of time they spent preparing for the classes that they described for this study. Their preparation times ranged from four hours to 34 hours per classroom hour, with a mean of 13.92 hours. Overall, the more experience the trainers had in the profession, the less time it took them to acquire the knowledge they needed to develop/present a class.

Based upon Howell (1982)/Pike’s (1994) Levels of Competence, the trainers were all at different levels, dependent, once again, upon their experience in the field. None of the trainers were at Level 1, Unconscious Incompetence. A few of the trainers were at Level 2, Conscious Incompetence, but only for specific items, such as computer-related issues like developing PowerPoint presentations. When it came to computer skills, it was the more experienced trainers

who admitted that they would “rather not deal with it.” They went on to say that they could have someone else do the computer work for them in a fraction of the time it would take them to do it themselves. George told a funny story that exemplified Conscious Incompetence. One question in the interview was intended to determine if self-directed learning was part of their every day lives. When George was asked the question, which was about working on a car, he answered, “Cars! Not my thing!” He went on to share the following story.

I’ve got to be interested in it, and I’ve got to have a talent in it. If I don’t have a talent in it, I’m not interested in it. At this age [67], I’d given up the notion a long time ago that you can be anything you want to be. You’ve got to be what you’ve got in you. So, I’ve changed a tire in an automobile before, but it’s been a long time. I had a flat at a field trial several years ago. Well, I’ve got a trailer and a horse, I can’t drive that. So, I’m saying, “Damn, this tire’s flat.” Before you know it, there’s two or three people over there. I’m saying, “You know, I don’t even know where the instructions for this are. I don’t know where the jack is.” Well, the short story is, about three or four men changed the tire and I was watching them.

George’s story demonstrates Conscious Incompetence and Level 3, Conscious Competence. His Conscious Incompetence was the lack of knowledge about changing the tire, and his Conscious Competence was using his understanding of human behavior to get the other men to change the tire for him. All of the trainers were consciously competent in many areas. Moreover, more than half of the trainers shared experiences that fell into Level 4, Unconscious Competence. Most of the examples had to do with gaining insight while co-facilitating with another trainer. The other trainer would tell them that they had done something that was very effective, and they weren’t even aware of what they had done. When that happened to Raymond, he identified it as Unconscious Competence, which he described as knowing how to do something but not knowing it well enough to tell somebody else how you did it.

Level 5, Conscious Unconscious Competence, could be seen in more than half of the trainers in this study. At this level, people know what they do, know why they do it, and are able

to explain it to others. All of the trainers with years of experience teaching Train-the-Trainer programs spent most of their time at Level 5. A professor, in discussing the meaning of Conscious Unconscious Competence, equated it to learning about a lock. He said, “If you really want to know about a lock, then you learn how to pick it instead of just being able to describe what it is.”

The pursuit of expertise, competence, and confidence was never-ending for the trainers. They considered it a vital part of their profession. According to them, they owed it to those attending their training.

*The Training and Development Process Becomes Part Of Your Life – You Live It!*

Lindeman (1926) stated, “the approach to adult education will be via the route of *situations*” (p. 8, emphasis in original), and this held true for these trainers as well. The beginning of the self-directed learning process is characterized by reaction to a triggering event/situation (Danis, 1992; Spear, 1988; Wlodkowski, 1999), and for the trainers, the triggering event caused such a change in them that they would think about the training program all the time. Shirley admitted, “The subconscious is certainly at work, because when I’m thinking of a new program, developing it, it’s churning. I know it is.” However, Rose (1985) suggested this phenomenon is beneficial because “a high proportion of all learning takes place at the subconscious level” (p. 2). Perhaps the best example of how significantly the training development process affects trainers’ lives can be seen in David. He said,

When I’m developing a program, “I live with it!” I don’t turn it off. If it’s gonna be a two-week period or a three-week period, or a four-week period, it’s gonna be on my mind pretty darn constantly. I’ll spend windshield time with it, all the rest. I’m not able to turn it off very well.

As previously stated, the trainers in this study were passionate about being trainers and their responsibility to their audience. Whenever someone is passionate about something, that

passion stays with him or her wherever they go. That characterizes the trainers in this study. Their work kept them awake at night, made them forget to get off at their turnoffs when driving, and caused them to have thoughts come to them when they least expected it. Spear (1988) identified this phenomenon as “fortuitous action, which is action in which the learner acts for reasons not related to the learning project and encounters something which contributes to it” (pp. 212-213).

### *Understanding the Importance of Adult Learning Principles*

Knowles (1980) said that teachers of adults have two primary roles, first to be content specialists, and second, to be facilitators of the learning process. One of the common themes in this study supports Knowles’ (1980) view, but the trainers insisted that there is much more to being a good trainer than having content expertise. Their view was “Just because someone has content expertise, doesn’t mean they can teach.” As Hiemstra and Sisco (1990) indicated, they had no quarrels with the idea of maintaining expertise, but if the learner was bored; or spent more time trying to figure out how to please the instructor than in learning, or if the instructor couldn’t share expertise with others, then what was the value of all the knowledge the instructor might possess? David said,

You don’t have to be an expert on the material. You just have to make sure you provide the environment for learning, and that is by drawing on other people’s learning that is already in the class. And I guess that’s perhaps a crux of adult learning. But the one thing I would say is that if you were training on a topic, that doesn’t dismiss you from doing all the homework, all the reading and all the rest. But as a last confident level – understand you don’t have to be an expert, but you do have to be an expert of how to get others learning on the table.

The literature confirms David’s beliefs about teaching. For example, Hight (1950) suggested that “[T]eaching is an art, not a science... Teaching involves emotions, which cannot be systematically appraised and employed, and human values, which are quite outside the grasp of science” (p. vii). He goes on to say that good instruction consists of knowledge of the subject;

personal love of the material; and a high regard for learners. Some of the other essential qualities and personal attributes that distinguish good instructors from poor ones are exceptionally wide and lively intellectual interests, a good sense of humor, a well developed memory, a strong sense of will-power or determination, and a limitless store of genuine kindness (Hight, 1950).

Other more recent authors have provided their views on the qualities of a teacher. Knox (1986) suggested a strong relationship between effective instruction and effective learning. He believed there were pertinent characteristics that contribute to effective instruction, including aspects of an instructor's personality such as enthusiasm, humor, and clarity of expression, attitudes toward learners and their subject, as well as their expertise. Knox (1986) believed effective instructors should look for ways to use their instructional style in conjunction with individual learning styles. By matching the two styles, learners were more likely to learn effectively.

Caffarella (1988) said the teaching process involved assessing students' learning needs, designing and carrying out appropriate strategies and techniques, and the skill to evaluate what had been learned. When people take on the role of teacher, they, by definition, have an adequate knowledge base. There are also those elusive qualities that make teachers really good – enthusiasm for their subjects, respect and caring for their students, and commitment to helping students learn.

Long (2002) suggested that “even though there are numerous other qualities, such as planning skills, content knowledge and so forth, critical to teacher's ability to develop a proper context, they usually flow from self-awareness” (p. 30). Self-awareness includes aspects of the teacher's self, with the five most critical being content knowledge; process knowledge

(observing, listening, and analyzing processes); knowledge of the students; knowledge of personal characteristics (abilities and personality); and knowledge of personal philosophy.

Cadwell (1995) believed that trainers don't necessarily have to be experts, but they must possess good communication skills, strong subject knowledge, strong on-the-job experience, patience, interest in helping other people learn, respect for others, and a sense of humor. He suggested that hiring the wrong trainer could cause training to fail.

As can be seen, the thoughts Hightet (1950) shared 55 years ago are still valid today. This reinforces two themes that were identified during this study. First, content expertise is not the most important attribute a trainer can have, and second, trainers need be able to "reach out and touch the learner." A numerical perspective of the positive characteristics of a teacher sheds some light on the subject. From their (Cadwell, 1985; Caffarella, 1988; Hightet, 1950; Knox, 1986; Long, 2002) lists of characteristics, about 20% of the characteristics of teaching related to content expertise, and the remaining 80% addressed the personal attributes of both teacher and learners.

All of the trainers in the study said they observed other trainers to improve their teaching, and said that sometimes they learn as much from observing a bad trainer as they do from watching a good trainer. The difference is simple: they learned what not to do from the bad trainer. Pike (1994) used his observations of another trainer to develop his Five Ways to Squelch Motivation. The five ways are have little personal contact; get participants in a passive mood and keep them there; assume the class will apply what is taught; be quick to criticize, and make participants feel stupid for asking questions in class.

To reinforce the importance of understanding adult learning principles and building the trainers' confidence, David further advised:



You don't have to be an expert. It's OK to make mistakes, and it's OK to say, "I don't know." The only thing that's not OK is not to be prepared as best you can for an adult learning experience. So, that would be my first response. Understand the basic principles of adult learning, and utilize that expertise that's in the room.

All of the trainers in the study realized they had a great responsibility for making the learning experience a success. They also said they couldn't do that without focusing on the learners' needs.

### *Beyond the Organizing Circumstance*

Because this study was partially based on identifying with Spear's (1988) *Beyond the Organizing Circumstance: A Search for Methodology for the Study of Self-Directed Learning*, this section will discuss briefly how the findings of this study relate to Spear's original work. His work focused on three areas: knowledge, action, and environment. The relationships of the findings are presented under the categories for each of the three areas.

Knowledge fell into two distinguishable categories: residual knowledge  $K(r)$ , which is knowledge the learner brings to the project as a residue from prior knowledge, and knowledge acquired  $K(a)$  during and as a part of the learning project (Spear, 1988). Residual knowledge  $K(r)$  was displayed as the trainers reflected on their past knowledge and experiences related to the topic they were training. After reflection, they always felt as though they had some knowledge, albeit from another area, that they could associate with the topic they would be presenting. As George said, "At this point, and it's more like, in my memory, in my recent memory, I have not gone to a new slate." Or, as Shirley said, "Just as a disclaimer, I don't think I've done anything that I'd say I had no information."

The acquired knowledge  $K(a)$  was evident in the trainers gaining knowledge from SMEs. As, Jennifer indicated, the knowledge she has gained from SMEs has caused her to rely on them more for her training.

Actually, the first time I used subject matter experts was for one of the classes that I really didn't know a thing about, and was part of a major program that was being rolled out... Ever since, in programs that I've had to do, I will go to subject matter experts...

Implicit in the knowledge categories is the learner's perception or judgment of the validity, value, adequacy, and pertinence of that knowledge. The trainers' valuation of their acquisition of knowledge was evident when they were asked, "Do you think the learning process you used adequately prepared you for developing/presenting the training program? If so, in what way(s)? If not, why? If you had it to do over again, would you do anything differently?" Will's response indicated his evaluation of his learning and represented the rest of the trainers' responses.

The process I followed worked for me in my learning. It may not be as efficient as it could be for other people, but in order for me to imprint the information and retain the information, I pretty much have to go through the steps that I outlined.

Spear's (1988) concept of Action in self-directed learning fell into three categories. One is directed action A(d) or action that is directed toward a known or specific end. The second is exploratory action A(e) in which the learner chooses to act upon a possibility without knowing what the outcomes may be, nor with any certainty that any useful outcome will ensue. Finally, there is fortuitous action A(f) in which the learner acts for reasons not related to the learning project and encounters something that contributes to it.

Directed action A(d) was displayed as the trainers contacted other trainers who had either attended or developed training on the same subject. Smitty, in seeking resources from his boss, illustrated this category.

I am impressed with the fact that my boss has been in training for a long time and she has a ton of books, so I went and got her books and studied them. She had gone to a five-day training session for "Train-the-Trainer" and she had gone to a three-day training session of "Training-the-Trainer"

Exploratory action A(e) was most often demonstrated by the trainers in their use of the Internet to locate resources. Cheryl said,

I do research on the Internet and what not. But, because there's just so much, the challenge in today's world is that there's actually so much information that you can get your hands on that it's trying to sort the wheat from the chaff and figure out what you really need.

As Cheryl indicated, "you're not sure what your results will be when you use the Internet," but it could be a useful tool. Raymond's method for exploratory action E(a) has changed because of the Internet.

In the olden days, I would go to the library, and that would be one of my first or second stops to start researching a particular subject. Now, of course, the first place is the Internet. And that is such a valuable resource. I mean, it's just cut days if not weeks out of some of the efforts to become experts in the topic that you're gonna have to go teach.

Fortuitous action A(f) was prevalent most often in the trainers when they were watching a television show, walking through a book store, or as in Julia's situation, she said, "...at a meeting... someone says something, and I think, wow, that really connects over here." Because Martha teaches diversity classes, fortuitous action A(f) occurs most often for her when she is reading the newspaper.

How I learned it, OK, well, that's how I've learned it. I mean, like I said, in this morning's paper was the article about how the mayor is definitely going to call it a Christmas tree next year... I sat there and I read that, OK, let's talk about that. How will our Jewish community answer that, and respond to that? How does that affect our Muslims?

Environment includes both human and non-human/material elements and consists of two categories (Spear, 1988). One is consistent environment E(c), which is characterized as being regularly in place and generally accessible on demand. The fortuitous environment E(f) provides chance encounters that could not be expected nor foreseen and yet occur and affect the learner and the project.

Consistent environment E(c) would be the extensive library most of the trainers in the study had compiled over the years. As Stacie said, “I have a library that would choke a horse.”

Elaine provides an example of both consistent environment E(c) and fortuitous environment E(f).

I use a lot of magazine articles. I have 97+ notebooks of topics... and every time, if I'm at KU Medical Center or at Lear and they're throwing out any kind of training materials or magazines, or old books, [I pick them up] and I buy tons of books at garage sales. So I'm always archiving and sitting down and reading.

Another example of fortuitous environment E(f) is the trainers observing other trainers.

Cheryl provides an excellent example of how observing another presenter sometimes creates a frustrating fortuitous environment E(f).

I'm always, whether it's the preacher or whether it's another trainer or a professional speaker, you're always, at least I am; your mindset is split-screen, what you're learning but then how could you use what you're learning. Which of my current clients might benefit from that kind of information, and/or, how would I be at presenting this kind of information, and what would I be doing different if it were me up there?

Spear's (1988) model proved to be useful in categorizing the actions of the trainers in this study. It would be possible to go through each of the 24 transcripts and categorize them based upon his elements for analysis of self-directed learning.

### Summary of Conclusions with Implications for Practice

Self-directed learning was critical in the trainers' pursuit of expertise; however, none of them mentioned the term. It wasn't even mentioned by the trainers who had a degree in adult education. As Spear and Mocker (1984) suggested, it was their environment that led to their self-directed learning. Because self-directed learning is so prevalent, more emphasis should be placed on providing learners with a better understanding of the process. It should be shared at all levels of education, in Train-the-Trainer programs, and as part of the certification process for pre-packaged training programs. Grow's (1991) Staged Self-directed Learning (SSDL) or

Hammond and Collins' (1991) Instructional models could be used to help teachers share knowledge about self-directed learning.

Grow (1991) developed the SSDL based upon his belief that the ability to continue learning may be the most important skill a human being can possess. He took key ideas for the model from Hersey and Blanchard's Situational Leadership model in which the degree of leader involvement is based upon the situation and the ability/maturity of the follower. Grow's model operates under much the same premise; however, the leader is the teacher and the follower is the learner. In the model, learners advance through four stages (Dependent, Interested, Involved, and Self-directed) of increasing self-direction and teacher's role and behavior should change as the learner progresses through the four stages.

Hammond and Collins (1991) offered a self-directed learning instructional model that includes the critical perspective through the examination of social, political, and environmental contexts that affect their learning. The goal is to empower learners to use their learning to improve themselves and those around them. In their model, the learner takes the initiative to: build a cooperative learning climate; analyze and critically reflect their own social, economic, and political contexts; generate competency profiles; diagnose learning needs; formulate learning goals (social and personal); implement and manage learning; and reflect and evaluate learning.

Kowalski (1988) suggested that the most significant finding of Sork and Buskey's (1986) comprehensive analysis of 96 different program planning models was the neglect of the specific roles and proficiencies required of adult educators. This remains true almost 20 years later. With the exception of Wlodkowski's (1999) questions for determining if an instructor knows something well enough to instruct others, no consideration in any of program planning models focused on adult educator's pursuit of content expertise. The findings of this study suggest that

knowledge acquisition is an integral part of the program planning process; therefore, the models should be modified to include the acquisition of knowledge. It should either be listed as a primary step or as a sub-category of the needs assessment step.

The trainers identified understanding the context or culture as one of the three important aspects of expertise for trainers, but McCain (1999) and Sork (2000) were the only authors who included the consideration of context, or culture, in their program-planning model. Therefore, determining the context or culture in which the training will be provided needs to be added to the program planning models.

The concept of the triangulation of content, context, and process expertise needs to be more widely distributed throughout educational, human resource development, and training environments. This could be done through teacher, HRD, and training professional organizations.

“Although needs assessment is accepted universally as a critical element of adult education programming, a good bit of the professional literature continues to be devoted to detailing how this process can be effective and to encouraging practitioners to use it” (Kowalski, 1988, p. 121). According to Kowalski, the sustained emphasis on needs assessment suggests that they are not being used, or at least not being used effectively. In contrast, the nontraditional needs assessment was essential for the trainers in this study. It is possible that there is a lack of understanding of the value of needs assessment for both program planning and knowledge acquisition. The alternative description needs assessment should be added to the program planning models.

## Research Recommendations

This phenomenological study has provided insight into the nature of the process trainers use to acquire the knowledge necessary to develop and present training programs for which they have limited or no previous content expertise. However, the study has also raised more questions. These questions may guide future research.

The first question is whether the findings of this study are unique to the 24 trainers from Kansas, Missouri, and Oklahoma who participated in this study. Replication of the study in other geographic areas, with different groups of trainers, or participants with different demographic characteristics would contribute additional information to the topic of self-directed learning.

The trainers in this study suggested there is a substantial difference between professional trainers and people who deliver pre-packaged training programs. Research could be conducted with members of that population and the findings compared with the findings of this study to determine if there is actually a difference between the two types of trainers.

Adjunct faculty members at some colleges are often asked to teach courses on subjects for which they have limited experiential knowledge and minimal, if any, teaching background. For example, someone who regularly teaches a presentation skills class might be asked to teach an interpersonal communications class because they are both related to communications. In reality, they will probably have to acquire more knowledge to teach the class. Therefore, this study could be used to research how adjunct faculty members acquire the knowledge they need to teach new classes.

With the increase in online classes at colleges and universities, context and process expertise are of concern (Draves, 2000). The knowledge acquisition process of teachers or

professors who have successfully taught online classes should shed some additional light on the issues involved. The findings may provide administrators with insight into the knowledge acquisition processes of teachers who have succeeded in the online environment. The administrators could then use the information to provide in-service training for teachers new to the online environment.

The literature indicated that self-directed learning is either linear or interactive; however, the findings of this study indicated that the processes weren't so simple. The trainers' processes were combinations of both linear and interactive, i.e., linear-interactive-linear or interactive linear. Further studies may determine if the learning processes discovered during this study are also descriptive of a larger population.

The learning processes identified in this study could also be researched to determine any correlation between the linear-interactive-linear or interactive-linear learning processes and learning styles. A similar study could also be conducted to determine any correlation between learning processes and personality traits.

Another question that arises involves the difference in the way the trainers with a linear-interactive-linear learning orientation answered questions and the trainers with an interactive-linear learning orientation answered questions. The trainers with a linear orientation answered the questions primarily with direct responses or explanations, whereas the trainers with an interactive orientation tended to provide a direct answer to the question and then follow it up with a story to clarify or reinforce their answer. Is there a correlation between learning orientation and the use of storytelling?

Further, the findings of this study and a reformatting of the semistructured interview guide into a Likert scale survey instrument could serve as the basis for a large-scale research



investigation using commonly accepted survey research methods. The research could be done through professional organizations, such as ASTD and Society of Human Resource Managers. Finally, the semistructured interview guide used in this study could be adapted for use in conjunction with Spear's (1988) original study to conduct further research into self-directed learning based upon social learning theory.

### Summary

In this chapter, the research problem, methods used, and findings were summarized. The findings were discussed in relationship to prior research and for their implications for the adult education, self-directed learning, program planning, human resource development, and training fields.

The summary of conclusions with suggestions for practice included teaching self-directed learning and triangulation of expertise at all levels of education, in Train-the-Trainer programs, as part of the certification process for pre-packaged training programs, and by professional organizations. Additionally, program-planning models should be modified to include how adult educators acquire knowledge and how they determine the context or culture in which the training will be provided.

Recommendations for future research were presented, including replication of this study in different geographical locations with different populations, conducting a similar study with presenters of pre-packaged training programs, adjunct faculty members, and teachers or professors teaching online classes. Research into how self-directed learning processes identified in the study and previous literature correlate with various learning styles is suggested. Additionally, the semistructured interview guide from this study could be used as the basis for a Likert scale survey instrument to conduct a large-scale study. Further research should be

conducted using Spear's (1988) model. Because this research looked at what trainers do to acquire knowledge and achieve content expertise before developing training programs, the findings of this study adds to the literature on adult education, self-directed learning, program planning, human resource development, and training.

In closing, according to Polkinghorne (1989), "the phenomenological inquiry research report should give an accurate, clear, and articulate description of an experience. The reader of the report should come away with the feeling that, 'I understand better what it is like for someone to experience that'" (p. 46). Hopefully, the voices of the trainers in this study have been sufficiently presented for others to understand what they have experienced.

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## Appendix A

### Semistructured Interview Guide

#### **Part 1**

Each interview will begin with an explanation of the research study, and clarification of the purpose, and intended use of the findings. The participants will be screened to ensure that they have developed and presented a training program for which they had limited or no previous content expertise. The following questions will be used as a guide for each interview. Since the interviews will be semistructured, the exact wording and order of questions may vary. Additional questions may be asked to probe areas that arise or to clarify information given.

#### **The Situation**

Describe as completely as possible how you achieved the content expertise you needed to develop a training program on a subject that you had limited or no previous content expertise. Include the steps you took and the resources you used.

#### **Time**

How much time do you think you spent overall achieving content expertise?

Was there a period of time when you did most of your learning? If so, when was that?

How much time do you spend now maintaining your content expertise?

#### **Evaluation**

Do you think the learning process you used adequately prepared you for developing/presenting the training program? If so, in what way(s)? If not, why? If you had it to do over again, would you do anything differently?

Was there any specific thing/event/person that made it easier for you to achieve content expertise? If so, what/who was it?

Was there any specific thing/event/person that hindered your achieving content expertise? If so, what/who was it?

#### **Prior Knowledge**

Describe the importance your previous learning situations played in your ability to achieve content expertise in this situation.

Can you compare the process you used to achieve content expertise with any other situation(s) in your career in which you made a deliberate effort to learn something new? If so, would you please describe one of them?

#### **Reflection**

What recommendations would you make to someone else who was put in the situation of having to develop and present a training program without having previous content expertise?



## **Part 2 - Follow-up Questions**

These questions are to be used as necessary to help the interviewee think about a specific area or clarify a point.

### **Process**

Did you have a plan of how you were going to proceed with your learning?

Do you consider the learning process you used to achieve content expertise to be linear, or nonlinear?

Are you continuing to learn the subject today? If so, what do you do now? Why do you continue?

If you were going to \_\_\_\_\_, please describe the steps you would take to learn how to do it.

Do you ever see a commercial for an upcoming television show or movie and watch it to see if you can learn something that can be used in your training?

Do you ever have an idea about a training program you are developing come to you while you are in the shower, at a meeting, driving, and/or have it wake you up in the middle of the night?

### **Resources**

What types of resources did you use as you gathered information on the topic? (Printed materials, people, organization, observation, Internet, etc.)

Which resources were the most helpful to you? Why?

Did you ever talk to the person who directed you to develop the training to determine what they actually wanted?

Did you ever talk to the person who directed you to develop the training to determine if they had any resources that would help you develop the training?

Did you ever talk to the person who directed you to develop the training about what you were learning?

### **Problems**

What problems did you encounter in your learning process?

What did you do about them?

### **Experience Questions**

What were your age, education level, and years of training experience when you developed/presented the first training program without having content expertise?

What were your age, education level, and years of training experience when you developed/presented the most recent training program without having content expertise?

What did you do differently during the most recent development and presentation than the first?

What is your reaction to this interview? Did anything new come to light for you?

## Appendix B

### Peer Reviewers

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## Appendix C

### Pilot Study Participants

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Vicki Plank, MBA  
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## Appendix D

### Participant's Cover Letter

Dear Participant:

Thank you for your willingness to participate in this research study by allowing me to interview you. As per our (phone conversation/e-mail), I will meet you at TIME, on DATE, and the LOCATION. As previously discussed, I am allotting a two-hour time block in which to conduct this interview. With your permission, I will be tape recording our conversation, as well as taking notes. If you find that any of these arrangements are not satisfactory, or you decide that you do not wish to participate in this study, please contact me as soon as possible.

I have enclosed several documents for you to review and/or complete prior to the interview. The first is an overview of the research study to help you think about the information we will be discussing. The second is a demographic information sheet that will provide me with some basic information and allow me to report on the characteristics of the participants in the study. If you do not feel comfortable providing any of the information, leave that line blank. If you wish, you may contact me prior to the interview for any clarification of the requested demographic information.

The third form is the Protection of Human Rights Release Form. This is required by Kansas State University to ensure that you, as a subject in this study, completely understand your rights regarding participation. This includes the:

- purpose of the study,
- motives of the researcher,
- protection of your privacy,
- confidentiality of your interview tapes, notes, and transcripts; and
- your right to choose not to participate in this study at any point prior to the defense of the dissertation.

Please read this document prior to the interview. I will review this information with you in person at the start of the interview. At that time, we will both sign the form and I will give you one copy for your records.

Lastly, I would like you to spend some time prior to our scheduled interview date thinking about your career as a trainer. How did you get to where you are today? Think about significant events, jobs, people, places, etc. Be prepared to talk in-depth about the training programs that you have been required to develop and present for which you had limited or no previous content expertise. Please think about the process and resources you used to acquire the knowledge you needed to achieve content expertise.

I look forward to seeing you on DATE.

Dan Johnson  
531 N. Wheatland Place  
Wichita, KS 67235  
(316) 721-2096 or (316) 641-1589 (Cell)  
[DJsKreativ@aol.com](mailto:DJsKreativ@aol.com)

## Appendix E

### Overview of Research Study into Trainers' Knowledge Acquisition Process

The purpose of this study is to investigate the nature of the process trainers use to acquire the knowledge critical to the development and presentation of training programs for which they have limited or no previous content expertise. The research questions are:

1. What is the nature of the process trainers use to acquire the knowledge they need to develop training programs when they don't already possess sufficient knowledge about the subject?
2. Are there common factors that facilitate the acquisition of the knowledge trainers need to develop training programs on subjects in which they are not already knowledgeable?
3. If these common factors exist, how do they exert their influence on trainer's acquisition of knowledge?

This research will study trainers, primarily residing in the Midwest, who have been required to develop and present a training program for which they had limited or no previous content expertise. The interviews will be done in person, with me coming to a location at a time and location mutually convenient. A one to two hour block of time will be needed for the interview, which will be tape recorded with your permission. Once the tapes have been transcribed and an initial analysis performed, I will send you a copy of your transcript and my initial analysis for your review. At that time, you may add additional thoughts and comments, correct errors and misinterpretations on my part, and ensure that the intent of your comments were accurately captured during the interview. It may also be necessary to follow up with you during the final data analysis when I am comparing all the interviews.

Your interview tapes and transcripts will be kept confidential. I will be the only person who knows your identity. Pseudonyms will be used to identify you during the interview and on the transcripts. Only the professional transcriptionist, my third party reviewer, and I will listen to the audiotapes and see the transcripts.

There will be no remuneration for your participation in this research. If you choose to participate, you have the right to withdraw from the study at any time prior to the oral defense of my dissertation.

## Appendix F

### Demographic Questionnaire

Name:

Contact Information for any possible follow-up questions:

Address:

Phone Numbers:

Email Address:

Positions Held: Indicate the type of locations where you have worked as a trainer [organizations, types of organizations (public, private, etc.), sizes of organizations, length of time in positions, accomplishments]. Use back of page if needed.

How long have you worked in the field of human resource development/organizational development/training?

What type of training programs have you typically developed throughout your career; i.e., leadership, technical, safety, etc.?

What is your educational background? Include any degrees or certifications you possess.

What technical/professional development training have you received; i.e., Train-the-Trainer, Instructional System Design, etc.?

Approximate age:

20-29

30-39

40-49

50-59

60-69

70 or above

Length of time spent working in the Human Resource Development/Organizational Development/Training profession.

1-5 yrs

6-10 years

11-15 years

16-20 years

21-25 years

>25 years

Preferred Pseudonym: To be used to maintain your anonymity in the written dissertation. (If you do not wish to choose an alias, I will select a name for you)

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## Appendix G

### Kansas State University Informed Consent Form

PROJECT TITLE: The Nature of the Knowledge Acquisition Process Trainers Use to Achieve Content Expertise

PRINCIPLE INVESTIGATOR: W. Franklin Spikes, III., Ed.D.

CO-INVESTIGATOR: Daniel P. Johnson, M.S. Ad. Ed.

CONTACT AND PHONE FOR ANY PROBLEMS/QUESTIONS;

W. Franklin Spikes, III

Professor, Department of Foundation of Adult Education

351 Bluemont Hall

Kansas State University

Manhattan, KS 66506

(785) 532-5873

wfs3@ksu.edu

IRB CHAIR CONTACT/PHONE INFORMATION

Dr. Rick Scheidt

Chair, Committee on Research Involving Human Subjects

1 Fairchild Hall

Kansas State University

Manhattan, KS 66506

(785) 532-3224

OR

Dr. Jerry Jaax

Associate Provost for Research Compliance and University Veterinarian

1 Fairchild Hall

Kansas State University

Manhattan, KS 66506

(785) 532-3224

SPONSOR OF PROJECT: College of Education

PURPOSE OF THE RESEARCH: This research will expand the knowledge base of the knowledge acquisition process of trainers, as well as, the literature on adult education, self-directed learning, program planning, and human resource development. It is hoped that the knowledge created from this research will contribute to the improvement of the professional development process of trainers.

PROCEDURES OR METHODS TO BE USED: A phenomenological inquiry design will be used to investigate the process trainers use to acquire the knowledge critical to the development and presentation of training programs. The population was selected because of the researcher's background in training and adult education. Criterion, snowball, maximum variation, and convenience purposeful sampling techniques will be used to identify trainers who meet the criterion of the study. Potential participants will be contacted by the researcher and asked to take

part in the study. Data will be collected via interview guide/semi-structured interviews until thematic saturation or twenty participants have been interviewed. The interviews will be tape recorded with permission of the subject. A professional transcriptionist will transcribe the tapes. Each participant will be asked to review the transcript of his or her interview to ensure that the transcription is accurate, and that the researcher interpreted the intended perspective of the participant correctly. Constant comparison will be used to analyze the transcripts of the interviews.

**LENGTH OF STUDY:** Approximately two-three hours for the interview; approximately one hour for review of the transcript of the interview. Possible follow-up questions either in person, via telephone, or e-mail during the final data analysis stage.

**RISKS ANTICIPATED:** None.

**EXTENT OF CONFIDENTIALITY:** Confidentiality related to all aspects of the data collected from each participant will be strictly maintained. The researcher will conduct the interview in a private location. The respondent will be asked to select a pseudonym to be used in labeling the data collection materials as well as in the transcript and final version of the dissertation. Only the professional transcriptionist, the third part reviewer, and the researcher will hear the tapes of the interview and see the transcripts. All data collection materials will be stored in a secured location. There is the potential that this research will be submitted for publication following the successful defense of the dissertation. In this case, the identity of the participants will continue to remain confidential.

**TERMS OF PARTICIPATION:** I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation or penalty.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

Participant Name: \_\_\_\_\_

Participant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness to Signature: \_\_\_\_\_ Date: \_\_\_\_\_