

**A multiple case study of professional development and perspective change within the
Cooperative Extensive Service**

by

Judith Myers Levings

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Agriculture Education

Program of Study Committee:

Michael S. Retallick

William W. Miller

Gregory S. Miller

Nancy K. Franz

Denise A. Crawford

Iowa State University

Ames, Iowa

2014

Copyright © Judith Myers Levings, 2014. All rights reserved.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	v
LIST OF TABLES	vi
NOMENCLATURE	viii
ACKNOWLEDGMENTS	ix
ABSTRACT.....	xi
CHAPTER 1. INTRODUCTION	1
Background and Rationale	1
Purpose and Research Objectives	6
Epistemological Framework	6
Assumptions.....	7
Conceptual Framework	8
Definition of Terms.....	10
Significance of the Study	10
CHAPTER 2. LITERATURE REVIEW	12
Introduction.....	12
Learning Theory.....	12
Learning concepts	13
Knowledge categories	13
Types of learning	14
Meaning-making and experiences	15
Individual transformational learning.....	17
Phases of transformation.....	18
Role of experience and a disorienting dilemma.....	20
Critical reflection and discourse	20
Action	22
Measurement of transformational learning	23
Group or organizational transformation.....	24
Summary	26
Professional Development	27
Definition	27
Types of delivery	28
Traditional.....	28
Non-traditional.....	28
Framework	30
Effective delivery.....	32

Teacher education literature components and supports	32
Human resource development literature components and supports	35
Transformational learning literature components and supports.....	36
Designing TL experiences	37
Cooperative Extension Professional Development.....	39
Summary	41
CHAPTER 3. METHODOLOGY	43
Introduction.....	43
Research Design.....	43
Case selection.....	45
Case 1: Facilitation course	46
Case 2: Partnership course	48
Overview	49
Phase 1	51
Phase 2	55
Phase 3	58
Phase 4	59
Trustworthiness and Rigor	62
Researcher Role/Personal Motivation	64
CHAPTER 4. FINDINGS.....	67
Introduction.....	67
Summary of Methods/Analysis	67
Demographics	68
Case Descriptions	70
Facilitation course	70
Partnership course	72
Course description similarities and differences	74
Findings: Objective 1	75
Survey results.....	75
Themes	77
Affirmation	79
Common language	80
Skill building.....	83
Role perception	86
Confidence	88
Transfer/Action	90
Self-awareness	93
Learning and perspective change.....	95
Process of becoming transformed.....	96
Findings: Objective 2.....	96
Survey responses	97
Interview findings	101
Participant interviews.....	102

Summary of course supports	103
Supports before the courses	103
Supports during the courses	103
Supports after the courses	105
Design team members interviews	105
Supports before the courses	106
Supports during the courses	108
Supports after the courses	109
Summary	109
CHAPTER 5. IMPLICATIONS AND RECOMMENDATIONS.....	111
Summary	111
Discussion and Implications	112
Overarching Considerations.....	120
Limitations	124
Future Research	125
Implications and Recommendations for Practice	127
Implications for Cooperative Extension Service	131
Closing Remarks	133
APPENDIX A. SURVEY QUESTIONNAIRES.	135
APPENDIX B. PROTOCOLS AND SECONDARY ARTIFACTS	152
APPENDIX C. AUDIT TRAIL OF THEMES.....	157
APPENDIX D. PERSPECTIVE CHANGE PRACTITIONER CHART.....	159
REFERENCES	160

LIST OF FIGURES

	Page
Figure 1.1. Conceptual framework of supports to foster change	9
Figure 2.1. Four learning types	14
Figure 3.1. Research plan	50
Figure 4.1. Supports attributed to a person influencing a change in belief, value, opinion or expectation as a result of participation in the facilitation or partnership course	98
Figure 4.2. Supports attributed to a course assignment influencing a change in belief, value, opinion or expectation as a result of participation in the facilitation or partnership course.....	99
Figure 5.1. Framework for professional development for perspective change	121
Figure 5.2. Transformational learning components for perspective change in professional development	123
Figure 5.3. Primary functions for learning for perspective change in professional development by time and players	129

LIST OF TABLES

	Page
Table 2.1. Example of transfer of learning framework applied to professional development experiences for individual and organizational change	32
Table 2.2. Methods fostering the components and supports for transformational learning that are supported by research	40
Table 3.1. Demographics of the facilitation cohorts	47
Table 3.2. Demographics of the partnership course cohorts	49
Table 3.3. Frequency and percentage by course for study population and survey respondents	57
Table 3.4. Analysis technique, definition, and attribution	60
Table 4.1. Response rate	68
Table 4.2. Demographics for facilitation and partnership course respondents	69
Table 4.3. Facilitation cohorts by date offered, number of participants, and type of Extension employee participating	71
Table 4.4. Partnership cohorts by date offered, number of participants, and type of Extension employee participating	74
Table 4.5. Rates and percentages for course participants indicating to what extent the learning concepts or discussion from the facilitation course challenge their thinking	76
Table 4.6. Facilitation course challenges	76
Table 4.7. Partnership course challenges	77
Table 4.8. Themes identified in the facilitation and partnership courses that characterize learning leading to individual transformation or perspective change	78
Table 4.9. Top four facilitation and partnership skills responses were engaged in since participating in the course	84

Table 4.10.	Learning supports identified by facilitation and partnership course participants, arranged by total combined responses and ranked for each course	100
Table 4.11.	Supports identified by course participants provided before, during, and after the courses	102
Table 4.12.	Learning supports identified by design team members as being provided to course participants before, during, and after the course	106

NOMENCLATURE

CES Cooperative Extension Service

TL Transformational Learning

PD Professional Development

ACKNOWLEDGMENTS

I am grateful to my major professor, Dr. Michael Retallick, for accepting me as a student and for being patient with my progress. He kept me motivated by quickly reviewing drafts and helping me become a better writer and researcher.

I am thankful for my original graduate committee: Drs. Chuck Morris, Cornelia Flora, Greg Miller, Denise Crawford and Nancy Franz, for their patience, support, advice and suggestions. Thanks also to Dr. Wade Miller, who was added to my committee after a committee member retired.

I am grateful to the individuals of my organization who provided support for this research. The design and data collection were completed while I was employed at the Iowa State University Extension 4-H. I am thankful for the input by Dr. Charles Morris, my supervisor at the time of data collection, who encouraged me regarding scientific inquiry and supported me with official time and staff assistance while I worked on this study. The analysis and writing were completed while I was employed at the University of Florida 4-H. I am also thankful to Drs. Nick Place and Brian Myers, at the University Florida Extension for allowing me to take personal leave to write the dissertation. The extended period of time provided enabled me to complete this endeavor.

Other key individuals include: Nancy Franz, former Associate Dean and Program Leader for the Iowa State University Extension Families unit, who was a consummate cheerleader throughout my journey. I also want to thank the Partnership Course design team colleagues: Tamie Bremseth, Sam Grant, Marisue Hartung and Anita Harris, who offered

encouragement and were willing to be interviewed to provide input in instrument development.

Thanks also to the following special individuals: Phyllis Mondt for transcribing each transcript and assisting me with communicating with interviewees, Diego Thompson Bello and Saul Abarca-Orozco for conducting interviews with design team members, Sam Grant for assisting with evaluating the pilot survey data, and Jane Lenahan for designing graphics. Special thanks to my editor, Pat Hahn, who improved the overall quality of my presentation.

Finally, a special thank-you to my family, whose support was constant and essential. Randall, my spouse, not only encouraged me, but he also served as a coach in my effort to write each chapter. Having finished a dissertation in just over one year prior to my completion date, his knowledge and assistance were welcomed and crucial. Our children, Anjeanette and Seth, and my grandson, Keegan, have sacrificed the time and attention they deserved. My hope is that I have served as a role model that, through hard work and perseverance, you can accomplish any goal you set.

ABSTRACT

This multi-case study explored individual and organizational perspective change by analyzing two long-term, management-supported professional development courses within the Cooperative Extension Service (CES). Data sources consisted of a survey of course participants, and interviews of selected participants and course designers. More than one half of the participants in both courses self-reported a perspective change, although only 5 of the 16 participant interviews revealed premise reflection—a necessary condition in this study for a perspective change. Seven learning themes were identified, five of which were similar to the transformational learning phases identified by Mezirow (1991). The two themes not similar to Mezirow's findings were affirmation and common language/shared meaning. These themes have implications for making perspective changes within organizations. Learning supports most frequently identified by participants were self-motivation, peer support, and instructor support. Learning was found to be insufficiently supported before and after the PD experience. A finding that emerged from cross-analysis was a process called liminality—a period of ambiguity where learners are caught between rejecting the introduced learning concepts and transforming their perspective. Recommendations based on the findings provide may guidance to future CES professional development managers and practitioners on how to affectively design professional development for perspective change in future courses.

CHAPTER 1. INTRODUCTION

Background and Rationale

The pace of change in today's organizations and businesses has never been greater (Burnes, 2004; Kotter, 1996). Organizations who can keep pace with or use the momentum of the change process will survive and possibly thrive (Senge, 1990). A plethora of books and articles have been written describing how organizations have transformed themselves from a position of stagnation to a viable entity producing products or services that are in high demand by their clients and by society (Collins, 2005; Kotter, 1996). Many of these same books provide insight into the strategies needed to keep pace with change or to harness the momentum of change to put organizations on solid ground far into the future. This organizational change process is achieved using a variety of interventions, most in combination—such as learning solutions (professional development), performance solutions (management action), and change solutions (altering the organization's culture) (Gilley, Dean & Bierma, 2001). In the social sector, such as governmental organizations whose mission is educational based, learning solutions tend to be the preferred intervention of change (Collins, 2005). Through professional development, social sector organizations hope to improve the knowledge and skills of their employees to perform job tasks, as well as assist in helping the organization transform.

Transformational change in organizations refers to changing the way people in the organization perceive their roles, responsibilities and relationships (Walton, 1999). This type of change requires organizations to change their cultural norms, values, beliefs and assumptions under which an organization functions, such that major changes in the way

people perceive, think and behave at work are achieved (Cummings & Worley, 2009). “It involves reshaping the culture and design elements of the organization and it goes well beyond just making the organization better or fine tuning the status quo” (Cummings & Worley, 2009, p. 506). To create organizational transformation, many change theorists believe that the individual is important to the process, but not directly creating the change. Change in these theories is created by management action where the focus on the individual is addressing employee’s attitudes and resistance to change (Burke, 1992; Conner, 1992; Cooperrider, Peter, Whitney, & Yeager, 2000; Kotter, 1996). Although this is important, “not all change scholars attempt to describe the internal change process individuals go through to adjust and accept organizational change” (Henderson, 2002, p. 188).

A theory that can assist organizations to understand the internal change process employees go through to adjust, accept and even create organizational change is the theory of transformational learning. As defined by Mezirow (1991), transformational learning is:

...the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrative perspective; and finally, making choices or otherwise acting upon these new understandings. (p. 167)

Transformational learning has been redefined by Cranton (1996, p.2)

“transformational learning occurs when an individual has reflected on assumptions or expectations about what will occur, has found these assumptions to be faulty, and has revised them” (p. 2). Transformational learning is about changing an individual’s perspective through cognitive and affective processes that enables a more open world view that helps to frame decisions. It is often used synonymously with perspective change. In this study

transformational learning included a broader construct that embraces learning that leads to a perspective change.

A perspective change is different from a change based on learning new knowledge or skill, and it is also different from a behavioral change (Cranton & King, 2003). Learning new knowledge or skills does not entail having to change assumptions about your work, or your views and beliefs about yourself and the world. The research in the area of professional development that measures what is learned is predominantly focused on change in knowledge, skills and behaviors (Broad & Newstrom, 1992).

Fostering a change in perspective requires a different kind of professional development that challenges staff to see new realities and helps to create the flexibility of mind to become more open about possibilities. This is not to say that learning knowledge and skills is not important. The issue is that organizations are conducting “professional development” using the same methods they would to change employee knowledge and skills, when the outcome needed to reach their goals is a perspective change. The instructional methods and support needed for perspective change may look different and may be better achieved through transformational learning.

The Cooperative Extension System (CES) is a governmental social sector organization. CES is the “world’s largest non-formal educational organization and is widely recognized for its success in addressing the concerns of a changing society,” (Seevers & Graham, 2012; p. vi). CES is organized as a federal, state, and local government-funded partnership and was created to provide land-grant university (LGU) research-based resources to the local level (NIFA, 2013). Keith Smith, Director of Ohio State University Extension, was asked to provide a vision and speak to the future of Extension in the book *Education*

through Cooperative Extension (Seevers & Graham, 2012). In his remarks, he listed four challenges CES faces. One of these challenges listed was “continually challenging ourselves” (p. xiv).

Smith further explained: “...extension leadership and personnel must learn to embrace working outside of their comfort zone ... we must challenge ourselves to do many things that Extension has not traditionally done so we can survive well into the future” (p. xiv). An Extension human development specialist, Clark (1987) argued that in order for the Extension System to survive and flourish it must invest in professional development that helps the organization advance and grow in new directions. Clark independently recognized that professional development is more than developing skills and new knowledge. It is development for organization growth.

Neither Smith nor Clark provided specific examples on how to create the conditions for staff to challenge themselves or the “status quo”. The type of changes Smith identified and the professional development Clark identified are consistent with transformational learning. Other scholars within the CES have even called for transformational learning as a primary goal of the CES and have suggested that before Extension staff can foster perspective change in clients they must first experience transformational learning (Blewett, Keim, Leser, & Jones, 2008; Franz, Garst, Baughman, Smith & Peters, 2009; Grudens-Schuck, Cramer, Exner; & Shour, 2003; Thering, 2007). In his book, *Education for Consciousness*, Paulo Friere (1974) critiqued the role of Extension staff: “...the role of the educator is not to ‘fill’ the educatee with ‘knowledge’ technical or otherwise. It is rather to attempt to move towards a new way of thinking in both educator and educatee, through the dialogical relationships between both” (p. 112).

This new way of thinking has been equated to transformational learning or a perspective change. Several studies have examined professional development and transformational change in various settings, such as with executive leaders and teachers in schools, higher education and the health care profession (Ciporen, 2008; Gravett, 2004; King, 2002a; King 2002b; King 2009b). The research has concentrated on the practice of fostering transformational learning in a variety of settings; some of which includes professional development (Taylor, 2000, 2007, 2012). There have been a few studies conducted in the past that examine transformational learning within CES (Blewett et al., 2008; Franz, 2003; Franz et al., 2009; Grudens-Schuck et al., 2003; Rockwell, Jha, & Krumbach, 2003), although these are not specifically focused on professional development. As noted by Franz et al. (2009), insufficient attention has been paid to whether CES has provided and promoted transformational learning conditions and how to improve conditions to better promote personal, group and organizational change.

A study has not been published that has explored perspective change or transformation within professional development using CES as the setting. Understanding how organization-wide courses are developed and administered to staff, and the type and level of learning and change that occurs, can provide insight into how organization-wide change through PD can best be administered. My interest in creating meaningful professional development opportunities for staff that transform the Extension organization, grounds this study.

Purpose and Research Objectives

The current study attempted to understand how professional development (PD) within the Cooperative Extension system could be developed to create the type of thinking and actions that can transform individuals and organizations. To accomplish this research, the study explored perspective change by analyzing two long-term, management-supported professional development courses.

The following objectives were developed to carry out this research:

- Describe and compare perspective change in two professional development courses designed to make organizational change.
- Describe and compare learning supports that foster perspective change in two professional development courses designed to make organizational change.

These objectives are important because administrators and managers need to know how professional development can best be implemented to make lasting organizational changes.

Epistemological Framework

The research objectives as outlined lend themselves to listening to the perspectives of staff who participated in or designed the PD opportunities. The objectives call for an understanding of how perspective change or transformation can occur when staff are developing PD experiences for other staff; and when staff participants are engaged in learning before, during and after the PD experience. Qualitative research is “...useful for describing or answering questions about particular, localized occurrences or contexts, and the perspectives of a participant group toward events, beliefs or practices (Gay & Airasian, 2000, p. 202).

Assumptions

Identifying possible assumptions/propositions (Yin, 2003) is an important step to the overall success of a study. Propositions are assumptions about what the researcher believes about the phenomena they are studying (Yin, 2003). They can come from the literature, the researchers' own experience, theories, etc. Propositions also serve to place limits on the study's scope (bounding it), and lead to the development of a logical conceptual framework that guides the data collection and analysis (Yin, 2003).

The following assumptions were made:

1. The support extended to staff attending the professional development experience before, during and after the experience enhances or detracts from conditions for a perspective change.
2. Course designers within Extension unconsciously design and implement the course to affect conditions for a perspective change.
3. During or after the course staff change a belief, value, opinion or expectation which leads to perspective change.
4. A perspective change or transformation may or may not occur within all staff.
5. Fostering a perspective change is constructivist in nature.
6. Perspective or transformational change triggered in a professional development experience may not be of the same magnitude as an epochal transformation that changes one's entire world view.

Conceptual Framework

Miles and Huberman (1994) stated that the purposes of conceptual frameworks are to: bound the study; describe the relationships between the logic, theories, and experience identified by the researcher; and to organize the study's constructs for use during data collection and analysis. Conceptual frameworks are iterative—changing as the study evolves (Yin 2004).

The conceptual framework developed for this study originated from my experiences and a literature search on professional development, organizational change, and transformational learning. This conceptual framework provides a model of how professional development can be constructed to foster changes in organizational and personal perspectives. This study concentrates on the learning supports provided to course participants immediately before, during and within one year after the experience as shown in Figure 1.1.

The literature is unclear about the specific definition of support and uses the terms factors, components and supports interchangeably. For this study supports include all types of factors and components that can lead the learner to change or revise/transform a perspective such as curriculum materials, instruction, encouragement, prior beliefs, coaching, colleague discussions, etc. For the purposes of this study “perspective change” which is internal to an individual was defined based on the work of Mezirow (1991). The pre-professional development (before) box shown in Figure 1.1 identifies that the employee and the organization (management) need to be ready to engage in perspective change activities. Individual readiness is defined as having the attitude to embark on change, perceiving there is support for the change, and self-efficacy with regard to the change (Desplaces, 2005).

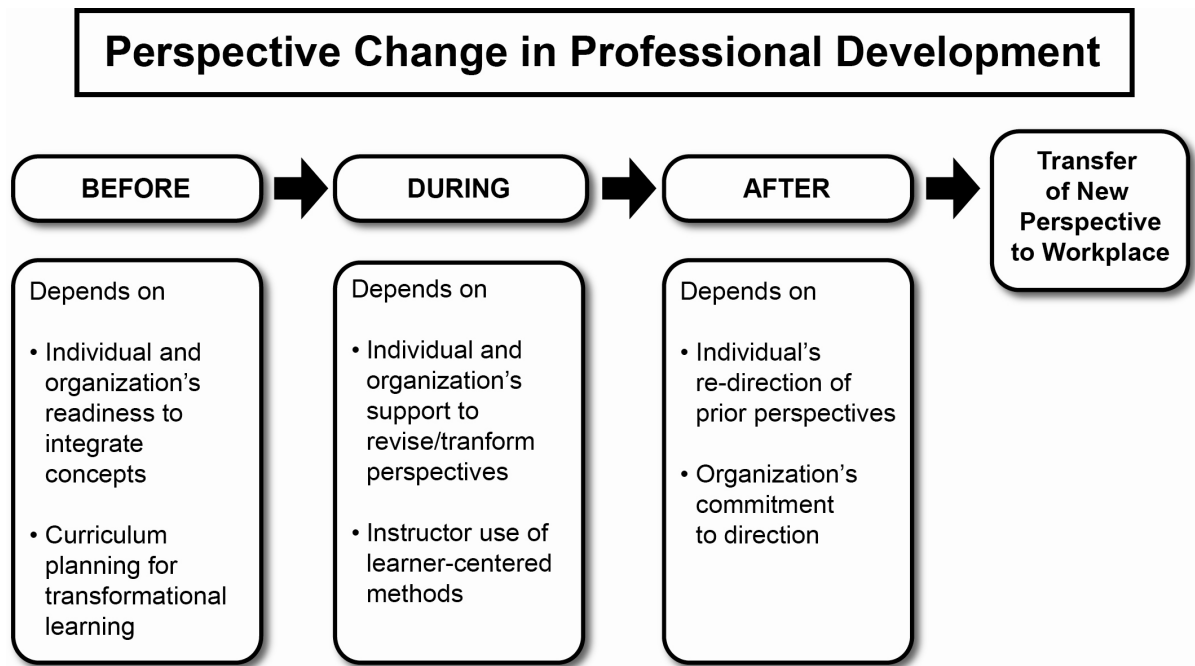


Figure 1.1. Conceptual framework of supports to foster change informed based on research by Broad and Newstrom (1992)

Organizational readiness is exhibiting the motivation to invest in PD through providing time, funds, and encouragement for employees to engage in the PD (Lehman, Greener, & Simpson, 2002). During the PD experience learning for perspective change is best fostered by a constructivist approach to learning (Weimer, 2012). Constructivism is when participants experience a dilemma that challenges them and where they are given the time and forum for colleagues to engage in meaningful discourse about the challenges, in a safe trusting environment. This is identified as learner-centered approaches (Weimer, 2012).

After the PD experience perspective change depends on participant's re-direction of prior learning so that they are actively making workplace changes. This also depends on the commitment or support of the organization to continue to change in the direction presented in the PD experience.

Definition of Terms

The following terms were defined for use in this study:

Challenges: Concepts, processes or issues that disorient or are in conflict with pre-existing personal beliefs, values, opinion or assumptions.

Learning: "...the process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in knowledge, skills, values and worldviews" (Merriam, Caffarella & Baumgartner, 2007, p. 277).

Perspective change: A change in a belief, value, opinion or assumption triggered by a challenge that precipitated a more open and aware viewpoint (a transformation) (Mezirow, 1991; Cranton, 1996).

Professional development: A planned experience designed to create changes in knowledge, attitudes, skills, behaviors or perspective that results in professional and personal growth and improved organizational effectiveness. This is a modification of the Merkle and Artman's (1983) definition to incorporate perspective change as described by Mezirow (1991) and Cranton (1996).

Transformational learning: "...the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrative perspective; and finally, making choices or otherwise acting upon these new understandings." (Mezirow, 1991; p.167).

Significance of the Study

According to Borko, Jacobs, and Knoellner (2010), most of the existing research on teacher professional development has examined the relationship between professional development and changes in teacher knowledge and instructional practice. To date, no existing research has been conducted to understand the critical components of professional development and the presence of perspective change/transformative learning as a result of professional development in the context of CES. There is also no known literature that applies a case study design to understand how professional development experiences are conducted within CES. This research has the potential to give insight into how CES staff construct professional development and how staff and organizations are transformed by it. According to the Deloitte Index (2009), organizations that make investments in professional development, even during difficult economic times, will position their organizations to capitalize on growth opportunities when the economy rebounds. It is my belief that professional development is a critical “tool” that helps both employees and their employers to be successful. The study results can be used to assist CES PD practitioners decide when a perspective change is needed and how to create conditions that would help to maximize a perspective change through PD.

CHAPTER 2. LITERATURE REVIEW

Introduction

This chapter provides the theoretical context for this study, as well as information that is useful to understand the study findings and analysis. The theories include those that help to understand learning, transformational learning (TL), and professional development (PD).

This review has four sections. The first provides a definition for learning and reviews basic concepts about knowledge, the role of experience in the learning process and the types of learning that lead to learning change. The second provides a definition for individual transformational learning and reviews the phases, and discusses the research supporting the importance of three of the phases (a disorienting dilemma, critical reflection and discourse). It also includes a section on group or organizational transformational learning. The third provides a definition and reviews types of professional development. This section also introduces a professional development framework informed by “transfer of learning” research and provides a research review of the components and learning supports that can foster transformational learning. The last section examines the Cooperative Extension Service (CES) literature on professional development and transformational learning, components/supports that foster professional development.

Learning Theory

There are various ways to define learning. An individual’s choice of definition reflects their philosophical stance on learning and knowledge and serves as a guide in making teaching decisions. Learning is often narrowly defined in practice as “the acquisition of knowledge or skills through experience, study or by being taught” (*Learning*, n.d.). A view

of learning is desired for this study that recognizes the process as broader than cognition, skill development, and the individual. Another definition of learning recognizes the Piagetian process of learning through assimilation and accommodation and the connection to experience such as in this definition provided by Mezirow (2000): "...learning is the process of using a prior interpretation to construe a new or a revised interpretation of the meaning of one's experience in order to guide future action" (p. 5). Although this definition provides detail on the learning process it does not overtly recognize the involvement of both emotions and cognition.

A definition that is more open to other dimensions of learning that was used for the current study is: "...learning is a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in knowledge, skills, values and worldviews" (Merriam, Caffarella, & Baumgartner, 2007, p. 277).

Learning concepts

To understand how adults learn and navigate the learning process three major concepts are presented. The first concept is that not all knowledge is the same. The second is that there are four distinct types of learning, and the third is that all knowledge is not the same and that meaning is filtered to inform perspectives.

Knowledge categories

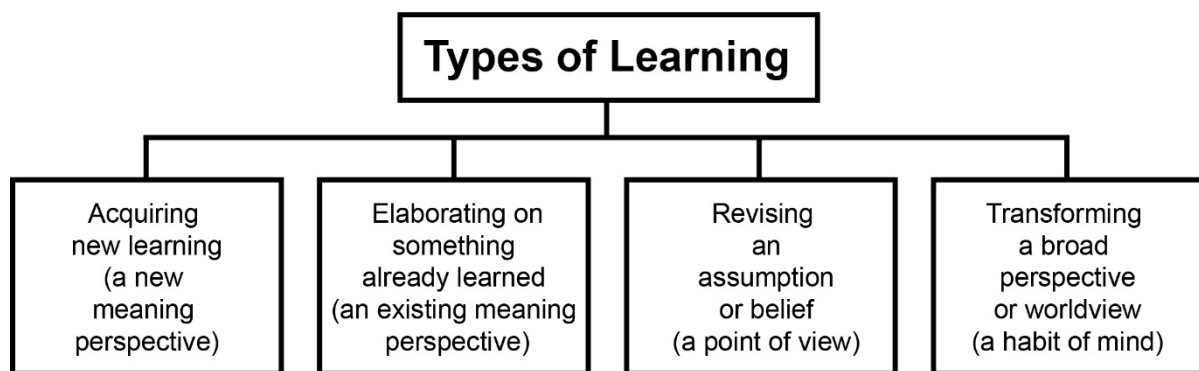
Knowledge can be viewed as three distinct categories according to Habermas (1971). The first category is instrumental or technical knowledge. Instrumental knowledge is objective and it allows individuals to predict and act upon observation, and to control and

manipulate the environment. The second category is communicative knowledge.

Communicative knowledge is subjective and results from individuals deriving meaning from shared viewpoints and arriving at consensus. The third category is emancipatory which results from questioning instrumental and communicative knowledge. Emancipatory knowledge is derived from critically questioning ourselves and the social systems in which we live, in order to develop a more open, discriminating and innovative perspective about the world and our place in it. The learning that is needed to attain emancipatory knowledge is what Mezirow (1991) identified as transformative learning.

Types of learning

The second concept needed to understand how adults learn and navigate the learning process is that there are four distinct types of learning: (a) a person *acquires* new learning from an experience; (b) the learning *elaborates* on something already learned; (c) the learning *revises* or transforms an assumption or belief; and (d) learning *transforms/revises* a broad perspective or world view (Figure 2.1).



(Modified from review articles on transformative learning by Mezirow, 1991, and Cranton, 2006.)

Figure 2.1. Four learning types

To understand the processes involved in each type of learning, it is important to understand that learning is a process of making meaning that involves both cognitive and affective processes. Although originally applied to cognition, Piaget's concepts of assimilation, accommodation and disequilibrium theory, can be applied to understanding the process of acquiring, elaborating, revising and transforming a perspective (i.e., meaning perspective, habit of mind and/or points of view). For instance, assimilation refers to making new meaning of something based on pre-existing understanding (Piaget, 1977) or meaning perspective (Mezirow, 1991). This corresponds with the first type and second type of learning of acquiring new learning or elaborating on existing knowledge. Accommodation can refer to revising and transforming existing perspectives in light of new information or experiences (learning types three and four). Disequilibrium can refer to when our perspectives don't match up with the new knowledge or experiences. When an individual struggles (cognitively or emotionally) they seek to return to a state of equilibrium. If the individual is open to other's interpretations they may revise and or transform their perspective. Mezirow (1991) expanded the ideas of Piaget (1977) to go beyond cognitive understanding of how people learn. He provided an understanding of how adults have integrated learning through the years in such a way that they have developed perspectives that serve as lenses and filters for how all information is taken in, how it is viewed and how it is acted upon.

Meaning-making and experiences

The third concept needed to understand how adults learn and navigate the learning process is that people learn through making meaning of experiences and this meaning shapes

future meaning. Adults through years of learning and acculturation have developed a structure of assumptions called a meaning perspective that acts as a filter for guiding unconscious and conscious decisions and understandings (Mezirow, 1991). This meaning perspective consists of sets of assumptions called a habit of mind (Mezirow, 1991).

Everyone has several sets of assumptions or habits of mind that serve as another filter for interpreting meaning from experiences. Habits of mind include such things as customs, religious doctrine, self-concept, tastes, attitudes, judgments, voting preferences, etc. People have moral/ethical habits of mind, philosophical habits of mind, aesthetic habits of mind, epistemological habits of mind, etc. Within each habit of mind are sets of beliefs, values, feelings and attitudes called points of view. People are less aware of their points of view than they are of their habits of mind and meaning perspectives. A person's point of view (of which one has many) also serves as another filter about how one thinks and feels about information.

Cranton (2006) stated, "...learning occurs when an individual encounters an alternative perspective and prior habits of mind are called into question" (p. 23). Once an individual's prior habits of mind and points of view—which represent beliefs, values, opinions and expectations—are questioned and the alternative perspective is accepted/modified then the individual has undergone a perspective change. According to Dirkx (2000), perspective change can result from every day occurrences as well as through critical events that occurs in one's life. Learning becomes transformational through a process of examining, questioning, validating and revising our perspectives (Cranton, 2006).

Individual transformational learning

According to Mezirow (2000), transformative learning refers to the “...process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets or meaning schemes) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action” (pp. 7-8). Transformational learning involves participation in “...constructive discourse to use the experience of others to assess reasons justifying these assumptions, and making an action decision based on the resulting insight” (Mezirow, p. 8). Learning for transformation differs from other types of learning in that its primary purpose is to transform/revise an existing perspective. A perspective is changed when individuals question their beliefs, values, opinions, or assumptions in light of new information that does not fit with the way they currently think and the new information is accepted (Mezirow). Perspective change is an outcome of transformational learning and has been difficult to define and identify in others because it has been examined in so many settings and is contextual to the setting (Clark & Wilson, 1991; King, 2009a). The definitions of Mezirow (2000) and Cranton (2006) help to frame perspective change and start the discussion on what perspective change may look like in other settings.

The degree of perspective change has been described as epochal or incremental in the literature (Mezirow, 1991). Much of the literature emphasizes epochal transformation, a sudden and dramatic change in a person. This type of transformation is triggered by an extreme life event such as death of child, a cancer diagnosis, or an event that rattled the person’s most core beliefs. According to Dirkx (2000), changes in perspective are not always attributable to a major event; most of what occurs is incremental. Incremental

transformation is a progressive series of transformations in similar points of view—culminating in a changed habit of mind. Both epochal and incremental transformation can result from conscious critical reflection or from mindless or unconscious assimilation (Mezirow, 2000).

Phases of transformation

Mezirow's (1975, as cited in Kitchenham, 2008) seminal research was designed to identify factors that impede or facilitate women's progress in college re-entry (as cited in Kitchenham, 2008). Mezirow (1991) concluded that the women in the study had undergone a personal transformation and identified ten phases that the women in the study experienced to reach a personal transformation:

1. Experiencing a disorienting dilemma;
2. Undergoing a self-examination with feelings of guilt or shame;
3. Critically assessing one's assumptions and beliefs;
4. Recognizing that one is not alone- that others have gone through a similar process;
5. Exploring options for new roles, relationships and actions;
6. Planning a course of action;
7. Acquiring knowledge and skills for implementing one's plans;
8. Practicing the new role;
9. Building competence and self-confidence in new roles and relationships; and
10. Re-integrating into one's life based on the conditions dictated by one's new perspective.

The phases are not assumed to be linear, nor does each phase need to be experienced before a transformation occurs (Mezirow, 1994). The phases of transformation are a subject of continued research – Mezirow’s own and the contributions of other scholars – and have been outlined in several review articles and books (Cranton, 2006; Taylor, 1997). In review of the transformational learning literature Taylor (1997) identified a number of studies that confirmed most or all of Mezirow’s 10 phases, and seven studies that identified the process as “recursive, evolving and spiraling in nature” (p.5).

Brock (2010) used the Learning Activity Survey (LAS) developed by King (2009b) combined with her own questions to quantify the incidence and phases of transformational learning with 256 undergraduate students. In this study she found that all ten phases appeared to be present and that critical reflection was the key to the transformational learning process. She also found that almost one-half of the students had a transformational change by the end of the first semester, but by the end of four semesters two thirds of the students reported a transformation. This study helped verify that transformation can result from a sudden change in perspective or can be incrementally experienced.

Debate has continued on the relevance of particular steps of transformation, but most research has expanded upon the meaning of particular steps. An example includes the work of Tisdell (2003) who questions that anger, guilt and fear as described in the second phase of TL are the only emotions associated with transformation. In her research she identified pleasure as an emotion, although the bulk of research continues to support the emotions described by Mezirow (1991).

Role of experience and a disorienting dilemma

Without an experience that triggers a disorienting event there can be no transformation (Mezirow, 1991). In a review on the components that foster transformational learning in post-secondary education, Kasworm and Bowles (2012) found two categories of experiences that precipitate perspective change. These categories include: (1) experiences where participants engaged directly with others unfamiliar to themselves or of another culture, or (2) experiences based in experiential learning focused on portfolios or prior learning assessment. Studies that highlight transformational learning in higher education and other settings include such experiences as service learning (Angelique, 2001; Kiely 2005) internships (Carson & Fisher, 2006), outreach to communities (Lange, 2004), alcoholics anonymous (Devereux, 2012), literature (Jarvis, 2012) or cross-cultural encounters (Donahue, 2009). These types of experiences serve as a catalyst for a disorienting dilemma, and stimulate critical reflection by providing the opportunity for examining firmly held assumptions and beliefs of self and others. This self-reflection is supported by authentic conversations in a trusting community of co-learners, and the individual's own attitude of exploration (Kasworm & Bowles, 2012). Students who engaged in prior learning assessments found that reflecting upon and validating their prior learning experiences was transformative as well (Stevens, Gerber & Hendra, 2010).

Critical reflection and discourse

Research has suggested that critical reflection is the most important step to the transformational learning process (Brock, 2010; Mezirow, 1994; Mezirow, 1998). Some scholars have criticized Mezirow for using the term critical reflection because the term

connotes only cognitive dimensions of learning (Taylor, 2003). Transformational learning is also argued to be tied to emotional, spiritual and situational learning dimensions (Dirkx, 2000; Tisdell, 2008). Mezirow (1998) addressed this concern in later peer reviewed publications by referring to critical reflection as reflection including emotional and spiritual elements, as well as other ways of knowing.

Three types of assumptions are important to critical reflection (Brookfield, 1995). These include assumptions about paradigms (how we structure the world), assumptions about what we think should happen (prescriptive), and assumptions about how the world works and how it may be changed (causal). Changing these types of assumptions through critical reflection and critical self-reflection is central to the process of transformative learning. According to (Mezirow, 2000), critical reflection involves the objective reframing of the assumptions of others and self-reflection is the subjective reframing of our own assumptions.

Reflection can be broken down into three types that help to determine the presence and extent of critical reflection and critical self-reflection (Mezirow, 1991; Cranton, 2006). These types are: content, process, and premise reflection. Content reflection is about questioning the assumptions one has about how to do something, process reflection is about questioning the process of solving a problem or causation, and premise reflection is about questioning the validity of our own assumptions and taking action. In order for these reflection processes to be considered transformative the processes must lead to a revised perspective that an individual acts upon. In a study of reflection among teachers, Kreber (2004) found that premise reflection was the least common reflection type identified and that experienced teachers were more likely to engage in this type of reflection than new teachers. Her study suggested that it is important to intentionally help educators understand why they

are engaged in work activities or the premise behind their work. Helping teachers become good at what they do may need to begin with why they are doing what they do, rather than begin with how to do their jobs or what to teach.

Critical reflection is dependent upon having meaningful discourse through dialog with others in a trustful environment. According to Mezirow (2000), discourse is “dialog devoted to searching for a common understanding and assessment of the justification of an interpretation or belief” (pp. 10-11) As further explained by Taylor (2007), transformation results “through trustful relationships that allow individuals to have questioning discussions, share information openly and achieve mutual and consensual understanding” (p. 179). Studies that speak to trusting relationships as important to the perspective change process include an exploration of learning companions (Cranton & Wright, 2008); co-workers (Sandlin & Bey, 2006) and significant others (Jokikokko, 2009). Eisen (2001) found that “peer dynamics” are important in fostering TL within a professional development experience. “Peer dynamics” are characterized by seven qualities: trust, non-evaluative feedback, nonhierarchical status, voluntary participation and partner’s selection, shared goals and authenticity.

Action

Action is an integral and indispensable component of transformative learning (Mezirow, 1991, p. 209). The type of action taken depends on the “nature of the dilemma” (Mezirow, 1997, p. 60). According to Cranton (2006), “...even the act of perception makes for change” (p. 171). By undergoing a perspective change a worldview has changed and, thus, the actions made on a daily basis result from this new perspective. Several studies have

identified impacts or actions based on an individual's perspective change (Bennetts, 2003; Carson & Fisher, 2006; Gravett, 2004; King, 2009b; Lange, 2004). These studies identified changes individuals have experienced that have altered how they view the world and how they are acting as a result of the change.

Measurement of transformational learning

A variety of approaches are used in the research to make a determination if transformational learning or a perspective change has occurred. The articles that identified the presence of a perspective change, used Mezirow's (1991) definition of transformational learning (TL) as a basis for the identification. In a study conducted by Stevens, Gerber, and Hendra (2010), the presence of a perspective change was determined by reviewing interview transcripts using Mezirow's definition of transformational learning, "habits of mind" and "points of view". King (2009a) created an assessment tool called the Learning Activity Survey (LAS) that quantitatively identified participant's perspective transformation based on the 10 steps of TL. In their review of TL literature, Taylor and Snyder (2012) questioned the construct and factorial validity of King's method, citing that there is a lack of statistical evidence to demonstrate validity and reliability. They questioned the development of the instrument based solely on "reconstruction of the terminology" founded on Mezirow's ten phases of transformation (p. 47).

In a study of reflective learning development in health counseling during a three-year nurse's education program, Liimatainen, Poskiparta, Karhila, and Sjogren (2001) determined the presence of transformative learning by using a coding scheme based on the work of Mezirow. This coding scheme included seven levels of reflection divided into two

categories; conscious reflection and critical consciousness. Conscious reflection referred to when an individual questions the process and content or how something is happening. Critical conscious reflection referred to when individuals ask themselves “why questions” or are looking for reasons and consequences of perceiving, thinking or action. This method is similar to a method based on seven stages of reflective judgment described by King and Kitchner (1994). The method has been criticized by Kember (2010) as being too difficult to use by non-professionals. Kember (2010) provides an approach to determining the level of reflective thinking using Mezirow’s definition of critical reflection. This approach identifies perspective change by analyzing written journal passages for content, process and premise reflection. Other procedures for determining the presence of a perspective change have been used (Colaizzi, 1973; Powell, 1989), although the coding procedures were not clarified in these studies.

Group or organizational transformations

Transformative learning “is a profound and lasting kind of learning and should be the goal of educators and educational institutions” (Weimer, 2012, p. 442). Transformative learning and organizational learning have generally been studied as separate concepts, although both learning theories are grounded on learning at the individual level and the processes of learning are similar. The primary phases of a transformational learning experience are experiencing a disorienting dilemma, critical reflection, discourse and dialog, and action (Cranton, 2006). A learning organization is “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually

learning how to learn together” (Senge, 1990, p. 3). Thus, a learning organization is comprised of the systems, principles, and strategies that engage staff to “learn and produce as a collective entity” (Marquardt, 1996, p. 19).

Senge (1990) outlined five disciplines for organizations to follow to become a learning organization: systems thinking, personal mastery, mental models, building a shared vision, and team learning. Senge’s premise was that organizations are made up of individuals who have the ability to create and change mental models or perspectives. These individuals can change their meaning perspectives about their jobs, influence others, and thereby groups can consciously or unconsciously change the existing organizational culture and norms.

Applying transformational learning processes to reach organizational goals requires a transformative pedagogy and content, but research on the effectiveness for these organizational transformational programs is rare (Cannon, 2010). Studies that looked at TL in the workplace (Choy, 2009; Kasl & Elias, 2000; van Woerkom, 2004) are examples of learning situated directly in the workplace where teams actively made changes to workplace problems, through engaging in critical reflection and discourse. Organizational change was triggered through individuals reflecting about how they perceive their roles, providing feedback, sharing opinions, and challenging “group think” in a study conducted by van Woerkom (2004). These activities helped individual employees learn as well as stimulated questions that challenged existing organizational culture or practices. In their case history of group learning, Kasl and Elias (2000) identified not only critical reflection as a necessary process for groups or organizations to engage in, but also discernment as a component as well. Discernment “generates insights about current reality and images of new possibilities”

(p. 231). In an executive leadership case study, Choy (2009) revealed that employees who experienced a perspective change used knowledge acquired during the course to influence decisions throughout the organization. Choy also posited five themes that may be beneficial for creating professional development for TL: subjective relevancy of the content; direct and active learning experiences; varied media; trustful relationships; institutional support to act on new understandings; and workplace features that supported and facilitated transformational learning.

Based on the understanding that organizations and groups, such as individuals are systems that can learn, Kasl and Elias (2000) have expanded Mezirow's TL definition:

Transformational learning is the expansion of consciousness in any human system, thus the collective as well as the individual. This expanded consciousness is characterized by new frames of reference, points of view or habits of mind as well as by a new structure for engaging the system's identity. (p. 233)

Summary

This section of the literature review provided a theoretical overview of learning that aides in understanding how an adult transformation or perspective change can lead to organizational learning. A definition of learning attributable to Merriam et al. (2007) was provided that honors a constructivist viewpoint and recognizes that learning is greater than cognition and making change in knowledge and skills: "...learning is a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in knowledge, skills, values and worldviews" (p. 277).

Three major learning concepts were provided that help to understand how adults learn and navigate the learning process. These concepts included that not all knowledge is the

same, there are four distinct types of learning, and that meaning-making is based upon sets of assumptions that filter how individuals make interpretations. This section also reviewed Mezirow's view of transformational learning and how experience with a disorienting dilemma, critical reflection and discourse, and action upon transformation are critical processes individuals go through to make a perspective change. The section also included reviews of research on how organizational learning is tied to individual transformation using the work or concepts of Senge (1991); van Woerkman (2004); and Kasl and Elias (2000). The next section builds upon this information within the professional development setting.

Professional Development

Understanding the distinctions between types of learning (acquiring, elaborating, revising and transforming knowledge) and what components and supports can effectively assist in designing professional development are important for personal, professional and organizational growth. This section provides an overview of professional development (PD) literature, beginning with how PD is defined. The overview includes: a review of traditional and non-traditional PD methods; an introduction to the 'transfer of learning' framework; and a review of the components and learning supports that foster learning for revision and TL in the fields of teacher education, human resource development, and transformational learning.

Definition

Professional development has been defined within the literature in various ways. Many definitions (Bowie & Bronte-Tinkew, 2006; Bryan and Schwartz, 1998; Woodard & Komives, 1990) have identified the end result of the experience as staff growing professionally and personally, and that a set of experiences or a single experience fosters this

growth. Cooperative Extension Service (CES) literature supports this definitional approach by defining PD as “...an approach to growth and development of Extension workers” (Garst, Baughman & Franz, 2014 (in press). A missing element from these definitions is the outcome of organizational growth, along with individual growth. Merkle and Artman (1983) addressed this through their definition: “...professional development is a planned experience designed to change behavior and result in personal/professional growth and improved organizational effectiveness “(p. 55).

Types of delivery

Traditional

Most PD is offered in a traditional way- through workshops, in-service training, conferences, institutes and courses within teacher education usually conducted in a face-to-face environment (Loucks-Horsley, Hewson, Lover, & Stiles, 1998; Seever & Graham, 2012). According to Loucks-Horsely (1998), criticisms of using traditional PD delivery methods include that the PD is not sufficiently long enough for effective learning, colleagues who could support each other in learning are not taking it together, content offered is not increasing staff knowledge, and the PD is not fostering meaningful changes in employee work that result in impacts to client practices. Although there are many criticisms of the traditional PD approach the vast majority of organizations use this approach (Bierma, 2001).

Non-traditional

Non-traditional PD delivery methods have been recommended to address the criticisms of the traditional methods (Loucks-Horsely et al., 1998). These non-traditional methods include online, mentoring/coaching, peer observation, study circles, and

communities of practice or networks (for developing expertise within a specific subject matter). These non-traditional PD delivery methods are also promoted in the teacher education, human resource development (HRD) literature, as well in CES.

The online delivery method is commonly used for delivering PD in all types of organizations (Donovant, 2009; Senyurkli, Dworkin & Dickinson, 2006). According to Loucks-Horsley (1998), if designed well, online professional development can address some of the weaknesses attributed to the traditional approach. The research pertaining to the factors that specifically foster transformational learning in an online environment has been reviewed by Smith (2012). Smith noted that the majority of literature on fostering TL in an online environment is based on what is known about fostering TL in face-to-face environments, an understanding of constructivism, and from unpublished accounts. She identified one study that directly examined TL in an online environment. Her analysis indicated that it is possible to foster TL online in four ways:

“...(1) intentionally designing the online experience using strong pedagogy; (2) intentionally using a learner-centered approach in instruction; (3) intentionally attending to student interactions and discussion concerning issues or problems in a safe environment; and (4) intentionally attending to student’s ‘ability to engage in self-reflection’ .” (p. 411)

Deficits in using an online environment for developing a perspective change have been identified. Killeavy and Moloney (2010) created a study designed to explore whether maintaining a diary online would encourage the use of reflective journaling and if sharing reflective online journals would encourage peer group support. Their findings revealed that students did not engage in the type of critical reflection or discussion that would lead to transformational learning, and that reflection was often superficial. These researchers suggested more time be allowed to instruct students on how to create reflection and

discussion of the type needed. Another criticism was that the technology inherent in an online environment often becomes a distractor. This may be resolved once participants learn the technology (Dringus, 1995; Soules, 2000).

A body of scholarly work that supports the premise of creating a “learning organization” using non-traditional methods (workplace and situated learning) is not included in this study. Although these practices hold promise within all organizations including CES, the focus of this study is how to improve the traditional PD face-to-face approach or online approach. From a practical standpoint traditional methods are still the primary method to deliver PD within CES (Seevers & Graham, 2012), and these delivery methods could be designed to incorporate many components that foster learning for transformation.

Framework

Models for planning professional development experiences that can incorporate all or many of the effective professional development components and learning supports are “transfer of learning” models. In these models, transfer is defined as learning that involves the application, generalizability, and maintenance of new knowledge and skills (Holton, Bates & Ruona, 2000). For transfer to occur “learned behavior must be generalized to the job context and maintained over a period of time on the job” (Baldwin & Ford, 1988, p. 63). There are many transfer of learning models, some of which include: Baldwin and Ford (1988); Holton (2005); Kirwan and Birchall (2006); and Kozlowski, Gully, Brown, Salas, Smith, and Nason (2001).

A transfer of learning framework developed by Broad and Newstrom (1992) organizes learning supports into three phases—(1) before, (2) during, and (3) after the

professional development experience. The framework also incorporates the players who affect the facilitation of transfer-the managers, trainers and trainees. This transfer of learning framework has advantages. It is simple to understand, and it illustrates who is responsible for specific supports and when the supports should be introduced. This approach can incorporate current research, and can also accommodate future research, as well as incorporate only those supports or components specific to an organization.

Table 2.1 illustrates the framework and how specific components can be added to support learners through the PD experience. The types of activities Broad and Newstrom (1992) recommend during each PD phase include activities that help reduce barriers to the learning transfer process. Examples of the type of activities are provided in the cells in the table.

This approach has applicability for practitioners who want to incorporate components that foster transformational learning and incorporate supports that fall under control of the instructor as well as ‘others’ such as management and colleagues. By doing so the professional development practitioner can better support perspective change within individuals and organizations.

This transfer of learning framework contributes to understanding how organizational supports are helpful to the learning process. This approach focuses on the individual transfer of knowledge and skills back to the work environment.

Table 2.1. Example of transfer of learning framework applied to professional development experiences for individual and organizational change

Role players	Time period		
	Before	During	After
Manager	Example: Select employees who directly benefit and involve them in the PD planning to increase buy-in	Example: Monitor and encourage participation	Example: Provide opportunities to practice new skills and set expectations for further growth
Trainer	Example: Conduct orientation for managers so they are better prepared to encourage and serve as coaches for participants during all phases of the PD process	Example: Provide appropriate learning activities	Example: Provide feedback and refresher sessions
Trainee	Example: Find a support group to engage in PD together	Example: Fully engage in PD experience	Example: Continue peer relationships and practice skills

Adapted from Broad & Newstrom (1992).

Effective delivery

This section reviews the research on effective professional development delivery within the field of teacher education, human resource development, and transformational learning. This section is divided into four main sub-sections. The first subsection reviews effective PD delivery components identified from the teacher education literature. The second subsection reviews effective PD delivery components identified by human resource development literature. The third subsection reviews the components and learning supports that foster transformational learning. The fourth subsection reviews the Cooperative Extension Service professional development literature as it relates to effective PD delivery.

Teacher education literature components and supports

Over the past 20 years there has been a growing body of scholarly work on professional development, teacher learning and teacher change (Richardson, & Placier, 2001). A pivotal research study conducted by Garet, Porter, Desimone, Birman, & Yoon

(2001) provided strong evidence for professional development components that effectively impact teacher learning. This study used a sample of 1,027 math and science teachers who participated in Eisenhower-funded professional development experiences. The teachers self-reported increases in knowledge and skills and changes in classroom practices. The study identified five components that fostered learning transfer:

- Content: Providing specific content (knowledge and skills) being taught and how students learn that content. This has been shown to have large effects on student achievement (Kennedy, 1998).
- Active learning: Providing activities where teachers engage in “meaningful discourse, planning and practice” (Garet et al., 2001). These activities can include: 1) opportunities to observe others teaching or be observed by other staff followed by feedback; 2) opportunities to plan how to implement the learning and/or review student work; and 3) opportunities to practice leading discussions, presenting sessions and writing.
- Coherence: Providing a connection with a “wider set of opportunities for teacher learning and development” (Garet et al. 2001). This includes building upon other professional development activities, aligning the content and pedagogy taught with organizational reforms and policies, and encouraging communication among teachers who are informed about reform efforts. Communication can reinforce solutions to issues and provide motivation from a sense that organizational change needed can be achieved.
- Sufficient duration: Providing PD spread over a sufficient amount of time to encourage practice and feedback, and of sufficient length to provide opportunities for

discussion and reflection over assumptions and misconceptions concerning the content and how students learn the content (pedagogy). There is growing research that supports professional development that consists of 20 or more hours (Desmoine, 2009).

- Collective participation: Providing a PD design that facilitates employees from the same working team to participate together. The advantages include that the group will develop a shared common understanding of the content, instructional methods and how students learn, as well as help to sustain the intervention through modeling and discourse.

Since the study conducted by Garet et al. (2001), other researchers have corroborated these findings in the formal teacher training literature (Borko, Jacobs & Koellner, 2010; Desmoine, 2009). Research on out-of-school time professional development for educators found similar components for PD effectiveness (Metz, Burkhauser, & Bowie, 2009). The studies that have supported the components outlined by Garet et. al (2001) have been challenged by Hill, Beisiegel, and Jacob (2013), based on the lack of use of experimental-control methodologies. Many of the studies have been based on teacher self-reports combined with student achievement test data.

Other components of effective PD identified in the research literature include the role of curriculum materials and implementation; high expectations of the facilitators; professional identity; and the use of student work in professional learning (Desmoine, 2009). These components identify what practitioners need to provide attention to when developing PD experiences, especially when the goals of the learning experience involves changing beliefs and perspectives, such as in school reform/organizational change efforts.

Human resource development literature components and supports

The literature from the field of human resource development (HRD) provides knowledge about the components and learning supports needed to foster and transfer learning. In a study that surveyed HRD professionals concerning the barriers to the transfer of PD concepts, a rank-order list was derived (Newstrom, 1985). These barriers include the following, in order of importance:

1. Lack of on-the-job reinforcement
2. Interference from the immediate environment
3. Non-supportive organizational climate
4. Professional development lacks practicality
5. Professional development content is irrelevant
6. Change would be uncomfortable
7. Separation from the trainer
8. Poor delivery of PD program
9. Negative peer pressure.

A point made by Newstrom (1985) was that the top three barriers were all attributable to the organization (managers and supervisors) and the learning environment. Barriers 4, 5, and 8 were attributable to the professional development itself (instructors and designers) and barriers six, seven and nine were attributable to the participant. There is research agreement about the importance of managerial support (Birdi, 2005; Broad & Newstrom, 1992; Cheng & Ho, 2001; Haslinda & Mahyuddin, 2009; Holton & Baldwin, 2003) and evidence for direct supervisor support having the most influence over the behavior of employees has been identified (Holton & Baldwin, 2003).

Other learning supports that affect training effectiveness include such things as departmental climate (Birdi, 2005); peer support, and employee's attitudes (Haslinda & Mahyuddin, 2009). Other factors that have been identified as contributing to learning effectiveness are those of a psychological nature such as motivation, self-efficacy and perceived control of the learner (Saks & Haccoun, 2007). Tasi and Tai (2003) revealed in their study on motivation that staff who were specifically appointed to attend a professional development experience had better attitudes than those staff who attended on their own free will. This may suggest that there is value in including supports before the professional development begins. Guskey, a leading PD researcher, spoke about the importance of organizations supporting staff afterward to implement changes learned through PD. "I found that things were done right from a training perspective, but educators were then sent back to organizations that did not support them in what we asked them to do" (Krieder & Bouffard, 2005, p. 2).

Important to understanding what kind of learning supports may most effectively impact learning transfer is considering context of the organization. According to Broad and Newstrom (1992) applying the same learning supports across all organizations does not consider the differences and variables inherent in organizations. Identifying PD learning supports should be based on barriers identified by stakeholders and applied to the design before PD takes place (Broad & Newstrom, 1992).

Transformational learning literature components and supports

Support, as defined by King (2009a), is the "...process of providing emotional, psychological, physical or educational assistance to the learner by students or the faculty

when needed” (p. 17). “Support is not something that is added onto the transformative experience, but rather it is an integral part of the process” (Cranton 2006, p. 160). Support includes actions by an instructor that facilitate creating a climate of safety and nurturance as students work through issues they encounter from the perspective change process (Cranton, 2006). Cranton (2006) provided advice on creating trusting environments through becoming an authentic and genuine educator who can relate well to students and set up environments for peers to engage with and nurture each other. Ethically, instructors who provide learning experiences designed to help change perspectives should support the student through the consequences of these changes (Dirkx, 2003; Freire, 1973; King, 2005).

Although learning supports in the TL literature are focused on the role of the instructor Taylor (1997), in his review of TL literature, identified only one study that contributed to understanding the impact of others – supervisors, managers and peers- on the learning of educators. In this study, Gravett (2004) found that teachers who were successful in engaging in this form of teaching (dialogic approach) “attributed their relative success to the support of the management team and the mutual support, solidarity and empathy among teachers who participated in the process with them.” (p.267). In several studies King (2009a) examined the supports that help lead participants to a perspective change. In these studies support is encouragement from instructors, friends, and peers.

Designing TL experiences

Designing transformational learning experiences requires attention to a variety of details. These details involve identifying curriculum goals and outcomes, choosing or developing the curriculum, choosing instructional methods, and being intentional about the

supports to create safe environments for socialization (Kasworm & Bowles, 2012).

According to Weimer (2012), a constructivist or a critical theory perspective is necessary for the design and instruction for perspective change. Constructivist approaches include a large grouping of methods that help the learner make meaning based on their past experiences (i.e., case studies, simulations, role plays, discussion, and reflective writing). The radical and critical theory pedagogy approach includes using methods that empower the learner to make decisions about the learning process.

Experiences can be designed using a model that is strongly based in reflective processes. Cranton (2006) identified Kolb's experiential learning model as one such model. Kolb (1985) designed a model that guides the learner through a cycle beginning with a concrete experience, reflection on that experience, abstract conceptualization, and application of new insights. This model is consistent with the critical components of a transformational change (experience-disorienting dilemma, critical reflection upon assumptions, dialog and discourse, and action). Curricula have been written and evaluated on TL effectiveness. A curriculum called "Questioning the Big Assumptions," was used to study a medical school's curriculum change effort (Bowe, Lahey, Armstrong, & Kegan, 2003). The effort resulted in helping individuals "recognize and use unchallenged and deep rooted personal beliefs to overcome unconscious resistance to change" (p. 715).

Instruction that fosters transformational learning is often equated with the term "learner-centered approach". According to Weimer (2012), learner-centered approaches are a set of "unorganized, eclectic collection of strategies" based in constructivist, radical and critical theory pedagogy. According to Kasworm and Bowles (2012) in their literature review, *Fostering Transformative Learning in Higher Education Settings*, transformation is

fostered through the components of: self-reflection; critical reflection; supportive social environment; use of the arts, literature and film; and holistic, affective and spiritual processes. My analysis of the literature identified five components of TL: (1) experience with a disorienting dilemma; (2) critical reflection; (3) dialog and discourse; (4) action (5) support. A list of specific methods supported by TL studies by component is provided in Table 2.2. A definition for each component is included earlier in this chapter. In respect to the differences between my list of primary components and the components identified in the Kasworm and Bowles (2012) review, I incorporated the use of the “arts, literature and film”; and “holistic, affective, and spiritual processes” in experiences and in critical reflection.

Cooperative Extension Professional Development

Much of the current PD experiences within Extension include one-day trainings, in-services, webinars, staff meetings, and mandatory types of online training (civil rights compliance, etc.). No published results of the effects of methods could be found, although researchers in other fields have validated the use of these types of PD delivery methods. Recently Lakai et al. (2012) conducted a study on the barriers and effective educational methods with Extension staff, and found that the staff -preferred PD delivery method is small group in-service trainings. The preference for small group decentralized PD fits with what other researchers (Bierma, 2001) are advocating today about best practices of PD delivery, but the one –day or short-term in-service trainings could be seen as a contradiction with the current research on cognition, learning and development (Stein, Smith, & Silver, 1999) and

Table 2.2. Methods fostering the components and supports for transformational learning that are supported by research

Phase/Component	Methods that instructors control	Attribution
Direct and immersive experiences	<ul style="list-style-type: none"> Experiencing a new experience outside of comfort zone Workplace problems; Action Learning; Collaborative Inquiry Use of Arts Literature Film and Drama Problem and conflict based learning 	<ul style="list-style-type: none"> Carrington & Selva, 2010 Choy, 2009; Watkins & Marsick, 1993 Walton, 2010; Clare, 2006; King, 2008, 2009
Critical reflection and discussion dialog	<ul style="list-style-type: none"> Reflective blogs, critical discussions, reflective essays, role-playing, simulated games, and cultural immersion. Action research projects Use of varied media- books to read and reflect upon journaling, written works to reflect upon an experience Collaborative writing projects Engaging in critiques or critical analysis Critiquing own metacognition Use of stories, music, arts, poetry Methods to facilitate whole person knowing Use of asking good questions techniques Instructor attention to when participants are “susceptible to or desiring a transformative experience” Creating trusting environments 	<ul style="list-style-type: none"> Kumagai, 2008; Lee & Green, 2004; Pasquariello, 2009 Gravett & Petersen, 2009 Jarvis, 1999; King, 2000; Burke, 2006 Burns, 2009 Glisczinski, 2005 Pasquariello, 2009; Tsang-Chang, 2008 Yorks & Kasl (2006) Heron (1992) Lange (2004) Lange, (2004); Berger (2004) Daloz (2000); Gravett (2004)
Action	<ul style="list-style-type: none"> Action planning; Acting upon new perspectives 	<ul style="list-style-type: none"> Cranton (2006)
Supportive Social Environments	Instructor Supported	Attribution
	<ul style="list-style-type: none"> Offering of quiet space Creation of a respectful climate High ethical standards Class discussion of life histories Importance of designer & instructor to guide the process 	<ul style="list-style-type: none"> Dirkx & Dang, 2005; Elsey, 2009 Mikhael, 2009 Sokol, 1998 Feller (2009)
	Other Supported	
	<ul style="list-style-type: none"> Management team encouragement Solidarity and empathy among peers Providing a safe environment for trust to form 	<ul style="list-style-type: none"> Gravett (2004) Gravett (2004) Gravett (2004)

with components that foster learning from the teacher education field (Borko et. al. 2009; Desmoine, 2009; Garet et al., 2001).

Much of the CES research on professional development focuses on identifying the competencies of a successful Extension employee or creating competency models (Benge, Harder & Carter, 2011; Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011; Cooper, & Graham, 2001; Ghimire, 2010; Stone & Bieber, 1997; Stone, & Coppernoll, 2004). Other research includes examination of training attendance (Mincemoyer & Kelsey, 1991); training need assessment (Conklin, Hook, Kelbaugh, & Nieto, 2002; Radhakrishna, 2001; Diem, 2009); participatory approaches (Fox & Carpenter, 2004); and mentors and/or coaches (Boleman, James, & Couch, 2002; Kutilek & Earnest, 2001).

No study published to date has attempted to study the results of a specific PD experience on the learning transformation of staff, how the organization supported staff with this transformation, and the effect of the PD experience on the organization using CES as a context. My concern as a past program administrator and employee, was to create meaningful professional development opportunities for staff that transform the Extension organization. This context grounds this study.

Summary

This section of the literature review provided information that assists in understanding how professional development can be developed to foster perspective change. A definition of professional development for this study was modified from Merkle and Artman (1983) to incorporate the concept of perspective change from Mezirow (1991) and Cranton (1996): A planned experience designed to create changes in knowledge, skills,

attitudes, behaviors or perspective that result in personal/professional growth and/or improved organizational effectiveness. This definition recognizes that perspective change can be a goal and that individuals and organizations can learn and benefit from PD.

A framework for PD taken from the transfer of learning field and those components and supports that foster learning and transformational learning in the teacher education, human resource development and transformational learning field was reviewed. The framework provides a practical way to view PD by illustrating who is responsible for the components and supports and when they should be introduced. The components of coherence, content, active learning, duration and collective participants are reviewed from teacher education for effective PD delivery. The human resource field contributes learning supports of manager/supervisor encouragement, self-motivation, and barriers to learning. The transformational learning literature has concentrated on identifying the components and supports during the instructional phase- on developing conditions for a critical event to occur and dialog and critical reflection to follow. These components and learning supports can be used in a variety of deliveries and settings- including traditional professional development and in online professional development.

CHAPTER 3. METHODOLOGY

Introduction

The objectives of this research were to: (a) describe and compare perspective change in two professional development courses designed to make organizational change; and (b) describe and compare perspective change learning supports in two professional development courses designed to make organizational change. This chapter presents the overall research design and details needed to understand how the research objectives were addressed and questions were answered. This includes a rationale for the methodology selected, details on how the cases were selected, specific details about the research design plan, and an overview of how trustworthiness and rigor were maintained. A research plan flow-chart describes four research design phases that detail methods, data sources, and procedures. In addition, a detailed description of the cases, the units of analysis for this research, are provided.

Research Design

A philosophical perspective, the research question and the maturity of the phenomenon should be considered when choosing a research methodology (Merriam & Kim, 2012). Research designs are based on implicit assumptions about what we believe knowledge is and the validity claims about knowledge (Creswell, 2007). The methods needed for this research are based on the assumption that understanding perspective change and what supports this type of learning is too complex and subjective to be conducted using only a quantitative experimental or descriptive design. The questions chosen for this study include those that ask about meaning and understanding from the perspective of the participants, consistent with a constructivist viewpoint on reality. According to Merriam and

Kim (2012), something as personal as the phenomenon of transformative learning lends itself to qualitative or constructivist research. In this study, I chose mixed research methods to honor the individual voices of participants by conducting interviews, and by triangulating those voices through asking survey questions.

The methodology for this inquiry was a multiple-case study design using mixed methods (interviews and survey data). The definition that, I believe, most sufficiently describes case study research was provided by Creswell (2007), “case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information, and reports a case description and case-based themes” (p. 73). A case study methodology was used because it allows comparisons between cases and individuals, allows for exploring existing theories from the data (lessening the impact of preconceived ideas), and allows the researcher to explore existing and new data in the form of artifacts, questionnaires, and interviews (Yin, 2003). Yin (2003) also stated that cases can describe a phenomenon, explore questions or hypotheses, and explain reasons why something is happening. Cases can be single or multi-case, with one or more embedded units of analysis.

A multiple case study approach was selected based on Yin (1994), and Eisenhart and Graebner (2007). These studies generally allow for more variability to be discovered, more relationships to be compared, and more opportunities for generalizations and a testable theory to be developed. When conducting multi-case studies, Stake (2006) recommended that 4-10 cases be studied, because 2 to 3 cases do not show enough interactivity between the programs to lead to qualitative generalizations. However, Yin (2003) contended that multi-

case designs are time-consuming and monetarily intensive, making them beyond the scope of novice and student researchers. Yin (2003) also stated that, given the choice, a two-case study is better than a one-case study, as the analytic benefits are much greater and if conclusions are similar generalizability has expanded greatly. The current research included two cases (two professional development courses) that could generate similar results, with the intent to understand the learning transformations occurring in the courses, as well as how this may affect organizational learning.

Case selection

This research study examined two Cooperative Extension System (CES) courses, one face-to-face and the other online. Neither course was designed with the explicit intent to increase perspective transformation. However, one could assume because of the length of the course, the nature of the course concepts being taught, and the support by administration/management that the learning was beyond that of knowledge gained or skill development. The intention of both courses was to assist staff with developing new knowledge and skills, and to broaden their conceptions about their roles and responsibilities in relation to the course content.

This study examined two cases, with each serving as a unit of analysis. The first case was a professional development course called *Strengthening Facilitation Training* (Facilitation Course). It was designed for all Iowa State University Extension employees. The second case was a partnership development course designed specifically for Extension 4-H and youth staff called *Grow 4-H: Building Partnerships to Benefit Youth* (Partnership Course). This course was designed by and primarily for Iowa State University Extension and

University of Minnesota Extension employees with 4-H responsibilities. The criteria for selecting the two professional development cases were:

The course...

- content was identified by Cooperative Extension managers as a core competency for Extension work;
- participation was supported and encouraged by Extension Administration;
- need was identified by Extension employees through needs assessments;
- goal was to change a process (a way of doing Extension work) rather than providing specific subject matter content; and
- took place over an extended period of time (i.e., multi-week, versus a workshop of a day or less).

Case 1: Facilitation course

The Facilitation Course was offered by the Iowa State University Extension system for all staff. The course was designed in response to a need determined by the organization's professional development (PD) committee and employee needs assessments. Six staff from the Iowa State University Extension PD committee became the design team for this course.

The goals of the course were to assist staff to:

- develop skills in and practice the art of facilitation
- build confidence in facilitating groups; and
- improve group decisions-making by reducing conflict.

The curriculum selected for this course was *Strengthening Facilitation* developed by the University of Maine Extension (Haskell, Cyr & McPhail, 2007). The course was chosen

based on its learner-centered approach and strong evaluation results according to design team members. The learning activities included group scenarios, case studies, simulations, and discussions. It was expected that participants would challenge their thinking regarding the use of facilitation skills in their work, and gain practical tools for leading groups through the decision making process. The course was taught face-to-face four times over a 20 hour time span in multiple ways for four employee cohorts. A cohort, defined for this study, is a group of people who received a full professional development experience using the course curriculum over a specified period of time.

Table 3.1 includes information about each of the course cohorts. The information includes the approximate date the cohort experience occurred, the number of participants who attended as a cohort, and the type of Extension employee that made up each cohort.

The timing of the delivery of each of the four cohorts varied by cohort. Cohort 1 met one full day per week for five weeks. The course was modified after the first cohort to accommodate the needs of the participants by reducing the time commitment. After cohort 1,

Table 3.1. Demographics of the facilitation cohorts

Cohort	<i>N</i>	Type of Extension Employee participating
1 – Fall 2011	15	Mix of county and state-paid staff from all Extension program units ^a
2 – Fall 2011	24	Regional Directors plus four campus staff.
3 – Spring 2012	10	Mix of county and state-paid staff from all Extension program units
4 – Spring 2012	16	Mix of county and state-paid staff from one Extension program unit

^a An Extension program unit is a sub-division that provides a specific expert based service (i.e., Agriculture, Communities, 4-H, Families, Business).

the other three cohorts were conducted on-demand by a sub-set of instructors. Cohort 2 met three full days consecutively. Cohort 3 and 4 met one full day each week for three weeks. This research examined all four cohorts, representing 65 participants.

Case 2: Partnership course

The Partnership Course was designed and offered by Iowa State University Extension 4-H and University of Minnesota Extension 4-H for all staff with 4-H responsibilities. This course was developed in response to a tri-state 4-H leadership gathering (Iowa, Minnesota and Wisconsin) that recommended building partnerships as a strategy to increase the reach of 4-H (Levings, Pleskac, Deidrick, Bremseth, Ehlers & Grover; 2007). Five staff from the two state 4-H programs became the design team. The goals of the course were to assist 4-H professionals to:

- develop and practice skills in building sustainable partnerships;
- build confidence in establishing and maintaining partnerships; and
- increase opportunities for youth to be involved in long-term programs on a local level.

The curriculum used for this course consisted of a 44-page toolkit and a ten week blended online course developed by the design team. The blended course included ten asynchronous learning modules and two live Adobe Connect webinars held over a 10 week period. The learning modules included individual and group assignments where participants engaged in scenarios, case studies, building a sales kit, and discussion board dialog. It was expected that participants would challenge their thinking regarding partnerships and club growth, as well as develop practical skills using the course tools introduced to build and

maintain partnerships. The nine learning modules, real-time webinars and course assignments engaged participants in more than 20 hours of instruction.

At the time of this study the course had been offered seven times and 173 4-H professionals had completed the course from eight Midwestern states. The first four cohorts served as the sample population to pilot data collection instruments, thus their data is not included in the study findings. This research examined the last three cohorts which occurred Spring 2011, Fall 2011, and Spring 2012, representing 109 participants. Table 3.2 provides information about each cohort that include the approximate date the cohort experience occurred, the number of participants who attended as a cohort, and the type of Extension employees in each cohort.

Table 3.2. Demographics of the partnership course cohorts

Cohort	<i>N</i>	Type of Extension employee participation
1 – Spring 2011	38	Mix of county- and state-paid 4-H employees. Mainly from Iowa and Minnesota with some participation from Michigan, Indiana, Nebraska, Missouri, Ohio, Kansas.
2 – Fall 2011	40	Mix of county- and state-paid employees. All from Iowa and Minnesota.
3 – Spring 2012	31	Mix of county- and state-paid employees. All from Iowa and Minnesota.

Overview

Figure 3.1 depicts the research process used in this study. The design was divided into four phases. The first phase consisted of developing and piloting the following instruments: a survey, a course participant interview protocol, and a design team interview

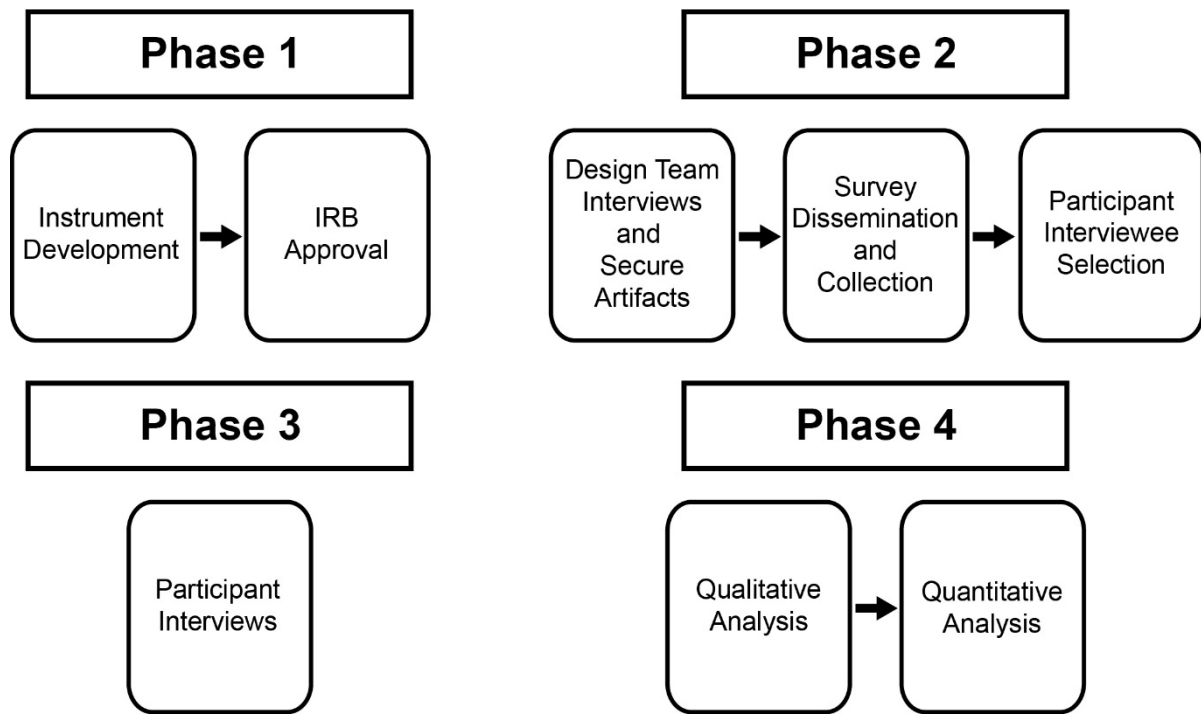


Figure 3.1. Research plan

protocol. In addition, Institutional Review Board (IRB) consent was secured. The second phase included interviewing design team members for both courses, reviewing secondary artifacts identified by the design teams, disseminating the survey instrument, and selecting interviewees based on preliminary survey analysis. The third phase included conducting participant interviews. The fourth phase included analyzing the qualitative data (participant and design team member's interviews, and open-ended survey question data) and select quantitative survey data.

Phase 1

Instrument development. The first activity under phase one included development of data gathering instruments. The instruments included a survey created specifically for each course, a participant interview protocol and a design team member interview protocol. These instruments are described in the sections below.

Survey instrument. Survey instrument development included identifying the objectives, providing information about the survey questions and the connection to the research questions, and presenting how the survey was developed and modified based on a pilot and expert review. The objectives of the survey instrument used for both courses were to:

- identify staff who had self-disclosed they had changed a value, belief or opinion as a result of the course to assess transformational learning,
- identify supports that may have fostered learning,
- serve as another data source to triangulate overall findings, and
- evaluate the course using questions identified by course instructors (which will not be presented in this dissertation).

The survey instruments consisted of four sections that requested qualitative and quantitative information (Appendix A). The first section in both surveys asked respondents to rate (using a Likert scale) their change in involvement, confidence, effectiveness and attitude (Questions 1-9 in the Facilitation course and 1-6 in the Partnership course). The facilitation course respondents rated change on the constructs of facilitation and being facilitative. Partnership course respondents rated change on partnership development.

The second section of the survey included questions to assess the skills and processes learned in the course, and the success participants experienced after the course was over (Questions 10-13 in the facilitation course and 7-10 in the partnership course). Two other questions in this section asked participants to assess attitudes before taking the course (Questions 14-15 in the facilitation course and 11-12 in the partnership course). The questions in section one and two evaluated the course for the course design team and enhanced understanding of the level of change that occurred.

The third section of the survey included questions to assess evidence of transformational learning and learning supports (Questions 16, 21-26 in the facilitation course and 13, 16-21 in the partnership course). Several of these questions were extracted from the Learning Activity Survey (LAS) developed by King (2009). These questions were designed to assess whether or not participants experienced a perspective change and what supports or help influenced those changes. Other questions in this section of the survey were designed to probe deeper into challenges participants faced that may have precipitated a perspective change (Question 18 and 27 in the Facilitation course and 15 and 22 in the partnership course). The questions also served to verify supports asked in the LAS questions.

The fourth section of the survey included demographic questions. These questions helped determine differences and similarities between individuals who experienced a change in perspective. In addition, these questions were used to identify participants to interview, along with the transformational change questions in section three.

After the instrument was developed, the design team and a departmental faculty member reviewed it. Changes were made and a pilot survey was sent to the first four

partnership course cohorts, which were not a part of this study. The questions were analyzed and revised to enhance face validity, clarity and ease of use for the final survey.

The facilitation course survey instrument was not finalized until after the facilitation design team member interviews were conducted. This was consistent with the accepted IRB protocol. The facilitation course questions were required to mirror the partnership course questions, but facilitation survey questions were different based on the constructs taught in that course. The final version of this instrument was not complete until just before survey dissemination in phase two.

Interview protocols. The second activity under phase one was development of design team and course participant interview protocols. Protocols fashioned after Creswell's (2007) suggestions were developed that included the questions and directions on how to conduct each interview. The course participant protocol (for both courses) is included in Appendix B. The participant interview protocol was designed first for the pilot. The protocol included eight specific interview questions.

- Questions 1 and 2 were designed to help make the interviewee feel comfortable with the interviewer and to help interviewees begin to recall the course.
- Question 3 asked about assumptions participants had before, during and after the course. This was asked to assess the nature of transformational change or perspective change that occurred as a result of the course.
- Question 4 asked how the assumptions may have affected attitudes about the course. This was asked to assess changes in attitudes as a result of the course.

- Question 5 was asked to discover struggles such as a disorienting dilemma often associated with transformational change and/or cognitive dissonance with course content.
- Question 6 was asked to understand the help participants received to work through any challenge or assumption changes.
- Question 7 asked interviewees to identify who provided help with the challenge to validate answers.
- Question 8 was asked to assess how transformation or perspective change may have impacted the interviewee's work.

The design team protocols (Appendix B) were designed immediately after developing the participant protocol. The design team questions conceptually mirrored the course participant questions with three exceptions. First, the design team was asked to describe the course. The second exception was that the design team was asked to respond to what they believed were participant assumptions and challenges, and how these changed during the course. The third exception was that the design team was asked about the supports or assistance they or others provided to participants. In addition, design team members were asked to provide copies of the curriculum, syllabus, evaluations and marketing materials they thought pertinent for the researcher to understand the course, and to provide content for Facilitation course survey questions.

Before the participant course interview protocol was administered, a small pilot was conducted to ensure face validity, clarity and ease of use. This pilot consisted of four people, two of which were experts who read through the questions to ensure they were consistent with the original research questions and two who agreed to be interviewed using the protocol.

The two that were interviewed had completed the partnership course but were ineligible for data collection because they took part in the survey pilot. Based on feedback some words were changed and directions for prompts were added to the protocol. For instance, the word “supports” has multiple meanings, and the word “help” used in combination with the word support seemed to provide clarity to the question. Originally the term “struggles” was used instead of “challenges”. The term, challenges, was suggested by both of the pilot interviewees.

Secure IRB approval. Prior to conducting this research, approval was sought and granted from the Institutional Review Board at Iowa State University. All procedures for participant selection and recruitment, and consent processes were followed.

Phase 2

Design team interviews and secondary source artifact identification. The first activity in phase two was to interview the design team members for each course (facilitation and partnership) and to secure any secondary source artifacts. The purposes of conducting design team member interviews were three-fold. The first purpose was to seek information to answer this study’s research questions and to verify participant interview responses to questions. The second purpose was to seek information to create case descriptions of each course. The third purpose was to create survey instrument questions made specific to the facilitation course survey.

In preparation for phase two all design team members received an email invitation explaining the course with an interview consent form attached. A follow-up phone call was made within a week of the email to set up an interview time and place. In this study, design

team interviews were held spring and early summer 2012. Five of the six facilitation course design team members were interviewed, and four of the five partnership course design team members were interviewed. These design team members had given consent to be interviewed as outlined in this project's IRB protocol. The reason one of the facilitation course design team members was not interviewed was because they had not responded to the invitation to participate. I was the only partnership course design team member who was not interviewed. I conducted the interviews for the facilitation course and the interviews for the partnership course were conducted by third-party interviewers with IRB approval. The reason for selecting third-party interviewers was because I was one of the original design team members of the partnership course and believed my insider role was too close to conduct a bias-free interview.

Interviews took place either in person or by phone based on the convenience of both interviewees and interviewers. Each interview lasted approximately 45 minutes to 1 hour. The interview protocol for both courses (Appendix B) was followed. Each interview was recorded and transcribed by a third-party transcriber, who had IRB approval. Secondary source artifacts provided as a result of interviews are also listed in Appendix B. These artifacts included copies of the curriculum used, syllabus, cohort schedules, and promotional materials. These created understanding of how the course was developed and to assess the similarities and differences between each course.

Survey Instrument Dissemination. The second activity under phase two was disseminating the survey instruments. The survey instruments were administered to participants in the facilitation and partnership courses the summer of 2012. This included 65 facilitation course participants and 109 partnership course participants who completed one of

the courses held either Fall 2011 or Spring 2012. The roster of participants was provided by Iowa State University Extension program directors, who gave permission to conduct this research. These participants were sent an email describing the research and consent process, along with a direct link to the Survey Monkey instrument. Embedded at the beginning of the instrument was a consent request. Participants consenting to be interviewed provided contact information. Three follow-up emails were sent to participants two weeks apart to increase the survey response rate (Dillman, 2009). Response numbers and rates for each course are shown in Table 3.3.

Table 3.3. Frequency and percentage by course for study population and survey respondents

	Course Participants		
	Facilitation	Partnership	Total
Population (<i>N</i>)	65	109	174
Survey respondents (<i>n</i>)	38 (58.5%)	41 (37.6%)	79

Participant interviewee selection. The final step in phase two was selecting facilitation course and partnership course participants to interview. The initial plan called for five participants from each course to be interviewed with more participants to be selected if the original five were not sufficient for analysis. This plan was consistent with the sample sized described by Lincoln and Guba (1985). Only those respondents who completed the survey and agreed to be interviewed by providing their name at the end of the survey comprised the pool of potential interviewees. From this sample 17 of 38 who completed the facilitation survey and 9 of the 41 partnership survey respondents gave consent to be

interviewed. Selection of interviewees was determined by who gave consent and a mix of survey question responses concerning change in beliefs and demographic information to get a mix of subjects. Three types of survey question responses assisted me in determining who to interview. The first was how the respondent answered whether or not they had changed a belief—a mix of yes and no responses was preferred. A mix of responses was needed to determine if acknowledging a perspective change on a survey was consistent with determining a perspective change through analysis of transcripts for perspective change. The second was how the respondents answered the open-ended question asking what challenges they had experienced as a result of the course. Answers that displayed evidence of a perspective change or change of assumption were preferred. Although not all respondents selected had filled out the open-ended question. The third type was how the respondents answered the three demographic questions: their place of work; position or job title; and years of service - a mix of answers was preferred. Selection was difficult because only nine of the Partnership survey respondents gave permission to be interviewed.

Phase 3

Participant interviews. The only activity under phase three was interviewing participants from both the facilitation and partnership courses. All participants selected to be interviewed were provided details about the process in an email. A follow-up phone call was made within a week of the email to set up an interview time and place. All selected participants agreed once again to be interviewed. Interviews were conducted spring 2013. Each interview took 45 minutes to 1 hour to complete and was conducted either face-to-face or by phone, based on the convenience of the interviewee. Six Partnership course and ten

Facilitation course interviews were held. The interviews were conducted by the researcher, audio taped and transcribed verbatim by a third-party transcriptionist, who completed IRB training.

Phase 4

Qualitative analysis. The analytic methods chosen for this study are those associated with grounded theory as described by Charmaz (2006). These methods include analytic strategies used during and after data collection such as writing memos, constructing codes from the data, cross-comparing the codes to make comparisons and themes, pattern matching and cross-comparing the cases (Table 3.4). Memos as used in grounded theory analysis are designed to provide a written record of the interviewer's first thoughts and thus are the first part of analyzing the data (Corbin & Strauss, 2008). The coding mechanism used was fashioned after Charmaz (2006) where a segment of data was named with a word or phrase, followed by sorting and organizing the more frequent initial codes into themes. The coding mechanism is based on being open to what is being shared by participants, instead of using a set of theoretical propositions to guide coding. After each interview, codes were cross-compared with the previous interview, adding more codes, creating categories and developing themes. According to Hatch (2002), pattern matching is an intuitive process that can occur during the time codes are developed or after themes have surfaced. Patterns are characterized by "similarity (things happen the same way), differences (they happen in predictable different ways), frequency (they happen often or seldom), sequence (they happen in a certain order), correspondence (they happen in relation to other activities) or causation (one appears to cause the other)." Cross-case synthesis according to Stake (2006) aids the

Table 3.4. Analysis technique, definition, and attribution

Technique	Definition	Attribution
Memos	Memos are a written record of the interviewer's first reactions and field notes of interviews, focus groups and artifacts and are the first part of analyzing the data.	Corbin & Strauss (2008); Charmaz (2006)
Initial coding	Breaking data down into discrete parts, examining them, and comparing them for similarities and differences. It is used in the first cycle of coding and the codes are tentative.	Charmaz (2006); Glazer & Strauss (1967)
Pattern matching	Comparing an empirically based pattern with a predicted one or comparing predicted outcomes based on propositions.	Trochim (1989); Yin (2003)
Cross-case synthesis	Comparing one case findings with another.	Stake (2006)

Researcher to understand the difference and similarities between the cases to make assertions about the phenomena being studied. Themes are compared between the cases with the research questions. These strategies aided the researcher in identifying codes, themes, patterns and relationships between each data source. This information was then used to cross-compare the results of these strategies between the courses.

Specifically, analysis included the actions of creating memos, developing and refining codes, identifying patterns through creating tables and identifying themes from the codes and patterns. A memo was created for each interview that included a brief overview and the researcher's initial reactions. Each memo was created within five days of the interview. After interview transcripts were provided by the transcriptionist I listened to each interview again and read through each participant's transcript twice. As I read through the transcript a third time I hand-coded each interview. An expert methodologist verified my coding scheme by coding the first transcript and by looking at my original codes and making suggestions. Transcript codes were then entered into NVivo 10 software (QSR International, 2013).

NVivo 10 is software for qualitative researchers that enables data (e.g., transcripts, surveys, documents) to be imported for ease of coding and finding patterns between data sources. Transcripts and open-ended survey data were imported and quotes that represented codes were highlighted and clustered into themes. The software allowed for ease in downloading final quotes for each theme.

Once the first three interviews were coded cross comparison of codes and quotes were repeated with each new interview. Open-ended survey question responses were also coded and results recorded in tables. These codes were also cross-compared with interview codes, adding more data and verification to the coding scheme. Data tables were also created for each case that consisted of interview questions, survey data and research question responses by each participant/respondent in order to find patterns across the data. The data tables proved useful to refine and verify codes for each research question. Codes were then clustered to create themes. Quotes representing each theme were copied from the transcripts and compiled into separate documents by theme for further review. This review included looking for evidence of a perspective change using a procedure developed by Kember (2010). Kember analyzed participant quotes for premise reflection. The expert validated my choice of themes and reviewed quotes to verify premise reflection.

Quantitative analysis. For the survey questions that pertain to this study descriptive statistics such as frequencies, averages, means and modes were extracted from the Survey Monkey question analysis. These data were also entered into the data tables with the qualitative data in order to see patterns across all data sources and to triangulate the qualitative data.

Trustworthiness and Rigor

One aspect that is not sufficiently covered in Creswell's case study definition (shared in the methodology section) is the use of both qualitative and quantitative data in case studies. Any and all types of data that help to shed light on the case and its propositions or issues are encouraged (Yin, 2014). Multiple-sources of data are encouraged, such as direct observations, interviews, focus groups, archival records, documents, discussion boards, surveys, and physical artifacts. According to Yin (2014) case study researchers should be familiar with qualitative and quantitative techniques and be familiar with data collection from a variety of sources. The purpose is to triangulate or establish converging lines of evidence to make your findings as robust as possible (Yin, 2014).

In my study I chose to: (1) conduct interviews with design team members and participants from both courses; (2) conduct surveys with all employees who had completed the course that were not part of the pilot; and (3) review secondary artifacts such as course materials and evaluations. Use of all of these data sources gave me more confidence about my analysis than one data source. The use of databases such as NVivo helped to keep the interview transcripts, researcher memos, and artifacts organized.

A number of researchers (Hodkinson & Hodkinson, 2001; Merriam, 1995) have identified the limitations of case study research that affect trustworthiness and goodness. These limitations include:

- A plethora of data that cannot be easily analyzed.
- A high investment of time and resources to conduct the research.
- Quality issues that relate to the experience and insight of the researcher and his/her ability to be objective.

- Issues of generalizability because cases may represent the unique or only one or a few phenomenon.
- Complex interrelationships are often difficult to represent and report in meaningful ways.
- Conclusions that are easily dismissed by those don't agree with the nature of qualitative data.

A majority of the limitations are concerned about trustworthiness (reliability) and goodness (validity). The high volume of data and the human resources in time and effort are believed to compromise reliability or trustworthiness. The reasoning is that researchers often have to make decisions about what they are going to analyze. In the defense of case study methodology and this research, methodologists are clear that bounding the study is important to reducing the volume issue. It helps to align questions, propositions and the conceptual framework with the data. This study was bound in three ways to improve trustworthiness. First, the two cases were a part of a program within an organization I was familiar with. Second, data sources included interviews and a survey as data sources instead of observations. Third, by confining analysis to the purpose and objectives of this study helped to bound the study.

The issue of quality as it relates to the experience and insight of the researcher and his/her ability to be objective, is an issue in quantitative research as well as in qualitative research (Hodkinson & Hodkinson, 2001). Researchers in both methodologies are “tools” because of their ability to connect the dots between the data, the propositions, and theories based on their own intelligent interpretation. This impacts the quality of the analysis and conclusions. In qualitative methods, colleague reviews and member checks are important to

maintaining a high standard of quality. In this research, quotes were used in the findings, as compared to a more subjective compilation of the interviews such as within a narrative. Member checks were conducted with a design team member from both courses. They reviewed course descriptions for this research.

Triangulation occurs with data, investigators, theories, and even methodologies (Feagin, Orum, & Sjoberg, 1991). Four types of triangulation were identified by Denzin (1984); methodological triangulation; data source triangulation (data remains same); investigator triangulation; and theory triangulation. Methodological triangulation was accomplished by using methods of data collection: a survey instrument; interviews; and secondary source artifacts. Collecting survey data through quantitative and qualitative questions also served as methodological triangulation. Data source triangulation was accomplished by interviewing participants and design team members and comparing their data. An audit trail of the themes, interviewees and survey responses is included in Appendix C. The audit trail was a representation of the qualitative data by methods and by data sources (methodological and data triangulation). Investigator triangulation was accomplished through using an expert methodologist to code the first interview and to review the themes. Also, a departmental faculty member reviewed the themes and quotes that supported the themes to validate my analysis. After themes were determined and the cases cross-analyzed, theory was applied.

Researcher Role/Personal Motivation

I have worked for the Cooperative Extension 4-H Youth Development program for 25 years. In 2007, a select group of staff from three (Iowa, Minnesota and Wisconsin) state 4-H

programs were charged with convening a tri-state meeting of 4-H staff to address strategies to increase youth participation in 4-H programs. I was a member of this select group who organized the tri-state meeting and identified partnership development, retention, and recruitment tactics as the primary strategies to increase youth participation in 4-H programs (Levings et al., 2007). One of the priority strategies was to create tools and training for the purpose of helping staff achieve success with partnership development. I later became a member of a five-person team who developed a needs assessment, and consequently a toolkit and online course designed to assist staff in developing partnerships to reach organizational growth goals. Program leaders of Iowa and Minnesota authorized time and resources for course development and professional development. The result was a 10 week online course that all 4-H state-paid staff members in both of the states were required to attend. Other state 4-H programs were later invited to participate and currently more than eight states have had one or more staff complete the course.

While developing the course, it became clear that members of our development team struggled with some of the learning concepts. Participants were also challenged by similar concepts. Questions that arose are the ones I identified and am seeking to understand in this research.

I began this research having multiple roles. I served as a researcher investigating two courses. I was a design team member of the Grow 4-H Partnership Course. I was also a supervisor of some of the staff who participated in the partnership course and the facilitation course during the time that I interviewed them. I interviewed two partnership course participants that I supervised at the time of the interview. I did not interview any facilitation course participants that I supervised.

According to several researchers (Breen, 2007; Bonner & Tolhurst, 2002; DeLyser, 2001; Hewitt-Taylor, 2002; Smyth & Holian, 2008), the insider-researcher role (being a complete member of the group you are studying) has advantages and disadvantages. It is critical that the researcher understand and mitigate any issues affecting research trustworthiness or validity. Because of my insider-researcher role, I had to: (a) be aware of the issues that could cloud my objectivity; and (b) put into place procedures to improve the validity of the research collection and analysis. These procedures included making sure that when I interviewed participants I revealed my role in the organization and that their confidences would be maintained and their candor would be strictly confidential and would not affect our working relationship now or in the future. I also used epoche as a method before the interviews and the data analysis so I could reduce existing past understandings of staff roles and responsibilities, as well as my understanding of the courses. Epoche is defined as a process “of setting aside your own prejudgments, bias and preconceived notions” (Moustakas, 1994, p. 85). This process included finding a quiet place to focus on the research participant, research topic, and field notes, reviewing my own thoughts regarding them, and setting aside any bias or preconceived ideas to see them anew. According to Moustakas (1994) this reflection and self-dialog can assist the researcher in becoming open enough to accept new truths as discovered by others’ dialog and artifacts.

CHAPTER 4. FINDINGS

Introduction

This mixed method multi-case study explored learning through analyzing two long-term professional development (PD) courses within the Cooperative Extension System (CES). Learning is explored through the lens of transformational learning (TL) theory. The research objectives were:

- Describe and compare perspective change in two professional development courses designed to make organizational change; and
- Describe and compare learning supports that foster perspective change in two professional development courses designed to make organizational change.

Summary of Methods/Analysis

This research was conducted using a four-phase process that included: (1) developing instruments and piloting those instruments; (2) disseminating a survey instrument; (3) conducting interviews; and (4) analyzing all data sources. The researcher analyzed quantitative survey questions, coded interviews and open-ended survey questions, and cross-compared findings to identify major themes. Quantitative survey questions included a set of questions designed to measure whether a perspective change had occurred, the level of change with facilitation and partnership development, as well as what supports contributed to the change. The nature of the two open-ended survey questions was to inquire about challenges with the course content and what contributed to any success respondents had with the course learning after the course was completed. The nature of the interview questions was to better understand what contributed to any new perspectives and thus transformation

by inquiring about assumptions and challenges concerning the course content and the learning supports provided by the organization before, during and after the course was finished.

Demographics

This section provides descriptive information about the study participants. The demographic information was used to choose interviewees. The information from the survey instrument was also helpful to understand the findings from research questions one and two. The sample population (n_s) for this study was comprised of the facilitation course (38) and partnership course participants (41) who completed the course surveys plus the course design team members (9) who were interviewed (Table 4.1). Demographic information collected from participants in both courses for this study included position title, the state where they were employed, and years of Extension service (Table 4.2). Demographic information was gleaned either from survey questions or secondary artifacts provided by design team members during interviews.

Table 4.1. Response rate

	Participants		Design Team Members	
	Facilitation	Partnership	Facilitation	Partnership
Population (N)	65	109	6	5
Survey Respondents (n_s)	38 (58.5%) ^a	41 (37.6%) ^a	NA	NA
Interviewees	10	6	5	4

^a Percent interviewed of survey participant survey respondents.

Table 4.2. Demographics for facilitation and partnership course respondents

	Facilitation course	Partnership course
Place of work F n=38, P n=38 ^a	100% (38) Iowa	50% (19) Iowa 34% (13) Minnesota 16% (6) other states (2 IL, 2 NE, 1 MI, 1 OH)
Position F n=34, P n=38		
County staff	32% (11)	50% (19)
Field specialists /	24% (8)	16% (6)
educators	32% (11)	16% (6)
Regional directors /	6% (2)	16% (6)
educators	6% (2)	3% (1)
State specialists /		
educators		
Other		
Years of service	12 Average	10.5 Average
F n=33, P n=38	7 Median	8 Median
	2 or 3 Mode	8 Mode

^a Number of survey respondents for each question. F = facilitation course, P = partnership course

This information identifies differences and similarities between the facilitation and partnership course participants. The facilitation course participants were entirely from Iowa, whereas the partnership course participants came primarily from two states, although other Midwestern states were represented. One-half of the partnership course participants were county coordinators/educators and the rest were equally divided among the following three positions: field youth educators, state youth program educators, or regional Extension educators. A noticeable difference between the courses was that there were fewer state specialists participants in the facilitation course than in the partnership course. There were negligible differences in years of experience between the facilitation and partnership course respondents, except that more facilitation course respondents were relatively new to

Extension. This information was beneficial in selecting interviewees, and in understanding the facilitation and partnership course differences based on the three data sources.

Case Descriptions

A description of each case (i.e., course) is included in this chapter. This description is based upon the interviews with the facilitation course and partnership course design team members and review of secondary artifacts (i.e., curriculum and reports).

Facilitation course

In 2011, the Iowa State University Extension and Outreach Professional Development Committee identified facilitation skills as a professional development need based on staff assessment, review of organization core competencies, and strategic direction documentation. A sub-group of the committee (all of them Extension employees) adopted, modified and offered the *Strengthening Your Facilitation Skills* course, developed by the University of Maine (Haskell, Cyr, & McPhail, 2007) to county-paid and state-paid Extension employees at four locations across the state.

The goals of the course were to assist staff to:

- develop skills in and practice in the art of facilitation/being facilitative;
- build confidence in facilitating groups; and
- improve group decision-making by reducing conflict.

It was expected that participants would challenge their thinking regarding the use of facilitation skills in their work, and gain practical tools for leading groups through the decision-making process. The skills could be used with client groups and within Extension. In addition the skills could translate to person-to-person relationship building. The course

content as described by a design team member summarizes the interviews and artifact information.

The course helped participants develop facilitation skills, so everything from setting up a room: room design, herringbone design, U-shaped, things like that, to using some of the tools for facilitation. But really what we placed the most focus on were the facilitator practices of diagnosis and intervention of negative group behaviors - so how to manage group member's participation, how to encourage positive interactions, and discourage negative interactions. We talked a little bit about mutual learning and unilateral control models. . . We talked about clarifying circles, where participants approach situations with a question and then other participants help them identify assumptions inherent in that question. So a lot of the work we do is around the facilitator skills of how to interact with other humans better....

Table 4.3 includes information about each of the course cohorts. As defined for this study, a cohort is a group of people who receive a full professional development experience using the course curriculum over a specified period of time. The information includes the approximate date the cohort experience occurred, the number of participants who attended as a cohort, and the type of Extension employee that made up each cohort.

Table 4.3. Facilitation cohorts by date offered, number of participants, and type of Extension employee participating

Cohort	<i>N</i>	Type of Extension employee participating
Cohort 1 Fall 2011	15	Mix of county and state-paid staff from all Extension program units ^a .
Cohort 2 Fall 2011	24	Regional Directors plus four campus staff.
Cohort 3 Spring 2012	10	Mix of county and state-paid staff from all Extension program units.
Cohort 4 Spring 2012	16	Mix of county and state-paid staff from one Extension program unit.

^a An Extension program unit is a sub-division that provides a specific expert based education, i.e., Agriculture, Communities, 4-H, Families, Business.

The four cohorts received face-to-face course instruction over a 20-plus hour time span. The timing of the delivery varied by cohort. Cohort 1 met one full day per week for five weeks. The course was modified after the first cohort to accommodate the needs of the participants by reducing the time commitment. After cohort 1, the other three cohorts were conducted on-demand by a sub-set of instructors. Cohort 2 met three full days consecutively. Cohort 3 and 4 met one full day a week for three weeks.

Partnership course

In 2007, the Iowa State University Extension 4-H program and the University of Minnesota Extension 4-H program identified partnership development as a strategy to grow and improve the 4-H program. The 4-H Directors and selected staff from both states identified and supported this strategy. Based on a needs assessment conducted in both states a small committee of professionals, identified by program administration, developed a toolkit (Bremseth, Grant, Levings, Hartung, Harris, & Cogshell, 2010) and a 10-week online training both called *Grow 4-H: Building Partnerships to Benefit Youth* (Levings, Bremseth, Grant, Hartung, & Harris, A2010).

The goals of the course were to assist 4-H professionals to:

- develop and practice skills in building sustainable partnerships;
- build confidence in establishing and maintaining partnerships; and
- increase opportunities for youth to be involved in long-term programs on a local level.

It was expected that participants would challenge their thinking regarding partnerships and club growth, as well as develop practical skills using the tools introduced to build and

maintain partnerships. The course content as described by one of the design teams members encapsulates the other interviews and artifact information.

The purpose of the course is to help provide a guide to (4-H) staff in a variety of roles . . . to become equipped to build partnerships and sustain partnerships in their communities in a way that will advance the 4-H youth development program. To advance the 4-H program by increasing the capacity of 4-H to work with a greater number of young people; particularly those who have been historically underserved, and to ensure that we have greater opportunity to increase the number of caring adults in a young person's life. Of course, some of the other benefits- like program costs and resources are shared [between partners] . . . so we become more efficient and effective in delivering our youth development program. The course includes both the toolkit and an online course.

The course was delivered to each cohort over a 10-week period using a combination of webinars and on-line instruction (Table 4.4). A real-time webinar was held during the second week of the cohort to review basic partnership information and to provide logistics for the students. A second real-time webinar was delivered approximately mid-term where content was taught and groups were engaged in a simulation. The rest of the training session was delivered online and students were expected to complete assignments in nine modules at a 70% completion rate. Modules included: understand the partnerships; know your organization; research potential partners; plan the first partnership meeting; assess the viability of the partnership; establish and manage the partnership; secure the resources; train and support partners; and evaluate the partnership.

By the time of data collection for this research, seven course sessions had been offered and 173 4-H professionals had completed the course from eight Midwestern states. This research examined the last three cohort events which occurred Spring 2011, Fall 2011, and Spring 2012, representing 109 participants. The courses were delivered to the four cohorts through two real-time webinars and nine asynchronous learning modules. The

course included 20-plus hours of instruction time. Table 4.4 presents information about each of the course cohorts. The information includes the approximate season the cohort experience occurred, the number of participants who attended, and the type of Extension employee participating.

Table 4.4. Partnership cohorts by date offered, number of participants, and type of Extension employee participating

Cohort	<i>N</i>	Type of Extension Employee participating
Cohort 1 Spring 2011	38	Mix of county- and state-paid 4-H employees. Mainly from Iowa and Minnesota with some participation from Michigan, Indiana, Nebraska, Missouri, Ohio, Kansas.
Cohort 2 Fall 2011	40	Mix of county- and state-paid employees. All from Iowa and Minnesota.
Cohort 3 Spring 2012	31	Mix of county- and state-paid employees. All from Iowa and Minnesota.

Course similarities and differences

Similarities in the courses included:

- Both occurred over a long period of time (16 hours or more of contact time either face to face or in the case of online with assignments, high use of discussion boards).
- Extension management in each state supported design team time to develop the course and teach the cohort events.
- The content of both courses was identified by management and employees as core to the organization's mission.
- Both courses taught content that had potential to change assumptions about employees work.
- Both courses were learner-centered and experiential. They incorporated group activities, simulations, case studies and learning discussions with peers.
- Both encouraged situated learning-working on a real partnership or practicing facilitation skills on the job.
- The people who designed and taught the course were Extension colleagues.

Differences in the courses included:

- The facilitation course was conducted entirely face-to-face versus the partnership course taught entirely online, using real-time webinars, but primarily asynchronous.
- Attendance was mandatory for many of the partnership employees, but for the facilitation course attendance was encouraged.
- The partnership course designers conducted a thorough needs assessment and evaluations with each of the cohorts that included focus groups and survey data.
- Teams were encouraged to form to complete assignments in the partnership course, although not all participants completed them with other colleagues, whereas facilitation course activities were all performed in groups.

Findings: Objective 1

The first objective of this study was to describe and compare perspective change in two professional development courses designed to make organizational change. For the purposes of this study perspective change was defined as “...changing a pre-existing assumption, belief, opinion or expectation through becoming aware of a different point of view and reflecting upon it” (Mezirow, 2000; pp. 7-8). This objective was explored using three data sources: survey questions, participant interviews, and design team member interviews.

In the first section, the results of the survey questions that establish whether individuals experienced a perspective change in both courses and the extent of that change are presented. In the second section called “themes”, seven themes are introduced that emerged from interviews and survey results of both courses. These themes describe how learning and perspective evolved in the courses.

Survey results

As a part of the survey instrument, respondents in the facilitation course ($n=38$) and partnership course ($n=41$) indicated whether or not they experienced a time during the course

in which their beliefs, values, opinions or expectations had changed. More than two-thirds of the facilitation respondents (70.3%, 26/37) and one-half of the partnership respondents (50%, 19/38) stated they had experienced such a change. Respondents were then asked to what extent the course content challenged their thinking. Nearly 90% of the facilitation course respondents and over two-thirds of the partnership course respondents reported that their thinking was challenged to some or a great extent (Table 4.5).

Table 4.5. Rates and percentages for course participants indicating to what extent the learning concepts or discussion from the facilitation course challenged their thinking

Extent concepts challenged thinking	Facilitation course <i>n</i>=35	Partnership course <i>n</i>=37
Not at all	0% (0)	8.1% (3)
Only a little	11.4% (4)	24.3% (9)
Some	65.7% (23)	62.2% (23)
A great deal	22.9% (8)	5.4% (2)

Respondents from both courses then were asked a follow-up open-ended question: “What course concepts challenged the way you see the world or your work?” Nineteen facilitation course participants responded, and the challenges they identified are included in Table 4.6.

Table 4.6. Facilitation course challenges

Facilitation course	Challenges
Course concepts	<ul style="list-style-type: none"> • Role change from being an expert to being impartial • Calling out disruptive behaviors • Assumption testing and interpretation • Managing group decision-making • The role of power

The assumptions that participants in the facilitation course were challenged by were primarily attributed to course concepts. The course concepts that caused the most struggle for facilitation participants were associated with changing from their role as an expert to a role that was impartial and bias free in helping groups make decisions.

Seventeen partnership course participants responded to the question about challenges they encountered as a result of the course (Table 4.7). These were grouped into the following categories: course concepts; conflicts with job; and the course format. A specific course tool called the “The benefits and non-negotiables of 4-H” was identified as the primary concept precipitating challenges for participants.

Table 4.7. Partnership course challenges

Partnership course	Challenges
Course concepts	<ul style="list-style-type: none"> ● The benefits and non-negotiables of 4-H ● Unclear expectations of partners (e.g. brand issues). ● Being conscious of both partners’ expectations. ● That others fully understand what 4-H is and what it can provide to youth (benefits). ● Work imbalance between partners. ● Mapping partnerships unit ● Memorandum of Understanding ● Sales Kit ● Defining 4-H clubs among colleagues
Conflict with other job responsibilities	<ul style="list-style-type: none"> ● Competing job assignments ● Understanding how course fits with current responsibilities
Course format	<ul style="list-style-type: none"> ● Online format troublesome ● Length of Course ● Time to do assignments

Themes

Seven themes help to describe how perspective change evolved in the courses. These themes are introduced with the name and definition of each theme in Table 4.8. The themes

Table 4.8. Themes identified in the facilitation and partnership courses that characterize learning leading to individual transformation or perspective change

Theme	Descriptions
Affirmation	Confirmation of course teachings with existing knowledge and/or previous experiences.
Common language	Expanding and/or becoming in sync with other staff on definitions and meanings of course concepts.
Skill building	The process of gaining awareness of, intentionality and/or competence in the use of tools, processes, methods, knowledge and content that can be readily used in personal or work lives.
Role perception	Perceiving work responsibilities differently or re-examining job identity.
Confidence	Gaining self-assurance or becoming more comfortable with the course concepts or their job role.
Transfer	Repeating a behavior – based on introduction of skills and perspective will be repeated in a new situation.
Self-awareness/identity	Introspection about one's own behavior, traits, thinking or feelings.

are each presented by introducing a definition of the theme, providing a summary description of the theme and findings, and presenting any survey data and interview data. A summary of similarities and differences between the two courses using all data sources are also presented, along with quotes from interviews that support each theme.

An alpha-numeric convention was used to identify the interview transcript or open-ended survey question response supportive of each theme:

- I or S for Interview or Survey (for open-ended survey responses)
- F or P for either Facilitation or Partnership Course
- d or p to designate a design team member or participant
- a unique number selected for each interview or survey response

For example, IFp16 would be interview facilitation course participant #16 and SPp14 is survey partnership participant #14. An audit trail of themes and responses for both interviewees and open-ended survey responses is included in Appendix C.

Affirmation

Affirmation for this study was defined as the confirmation of course teachings with existing knowledge and/or previous experiences. Most participants reported having previous experience with the topic prior to the course. The course confirmed their existing knowledge and/or experiences while allowing them to enhance skills, learn new skills and knowledge, and extend their perception of the topic. Participants from both courses used words or phrases to describe the course, such as “*expanded our knowledge base*,” “*it re-grounded me*,” “*my previous assumptions were affirmed*,” and “*I re-learned a lot of things*.”

As part of the survey instrument, respondents were asked to rank their involvement with facilitation or partnership development before taking the course. Approximately one half (47.2%, 17/36) of the facilitation course respondents rated their involvement as good to excellent before taking the course. In contrast, almost two-thirds of the partnership course respondents (63.2%, 24/38) rated their involvement in partnership development as good to excellent before the course started. Participant interviewees (IFp7, IFp10, IFp15, IPp5, IPp7, IPp9, IPp10) shared that the course teachings confirmed their existing knowledge and/or previous experiences they had with the course teaching. Participants who had been employed longer with Extension were more likely to state they had existing knowledge and experiences about the topics. Although these staff members had previous knowledge and experiences, most shared they learned new skills and knowledge and they were positive about the course. The interviews also revealed that facilitation course interviewees had a narrower view of the course content before the course started than partnership course interviewees. More of the partnership course interviewees shared that they understood what

was involved in partnership development before the course, using terms such as *re-grounding* based on previous professional development.

IFp10: *“I felt like I had a pretty good base, and during the course I had a blast. I learned a lot of things that kind of fit well with things that I had already learned. I kind of re-learned a lot of things that I should have remembered, that the course re-emphasized to me.”*

IFp15: *“I won’t say there was a ton of new information for me, just based on my longevity with Extension. As a group, I would say that it helped us focus and sharpen our skills in a lot of good ways.... We’ve expanded our knowledge base on how to work with facilitation techniques and to work with groups to use those kind of things, so I think it’s a situation that it’s been positive, not only for myself but also for the group. We may not use anything for several months and all of a sudden it’s like, bam, and we go into reaction mode. Sometimes it’s during a meeting, something crops up and I revert back to the training, thinking, okay, this is like that scenario we did in the Course, and here’s how I need to handle this.”*

IPp5: *“The course was re-grounding me back into what I had learned throughout my years within Extension. The assumption is that I am on the right track, it’s really looking at how can we harness ourselves in being real intentional, having a much clearer, crisper voice and approach in growing the 4-H program.”*

IPp9: *“Maybe my thoughts didn’t mirror the verbiage that the course used exactly, but I was on track with a lot of that because of the afterschool program partnerships that we’ve been working on for 5 years now. . . . the course reinforced a lot of my general thinking.”*

IPp10 *“I am not sure that my assumptions were any different than what I found in the course, I think that you identify your needs as an organization and you look at who in your community can meet those needs and then we make connections to community partners.”*

Common language

Common language was defined by participants as expanding and/or becoming in sync with other staff on definitions and meanings of course concepts. According to Warren, Roseberry, and Conant (1992) shared meaning implies constructing knowledge that is more than acquiring similar definitions; it is about developing ways of interacting and negotiating

differences in beliefs and interpretations. Participants reported that developing a common language and/or a shared meaning is important to understanding course concepts as well as making systemic changes within the organization. Facilitation course interviews reveal that the course assisted participants in developing a broader definition of facilitation and its processes. For partnership interviewees, the course assisted them in developing a shared meaning with other colleagues.

Two respondents who answered the open-ended questions commented on the need for a common understanding amongst staff. One shared that the partnership course provided a common understanding of partnerships within their county youth team, and another partnership course respondent in the following quote indicated her understanding of the importance of coming together on this definition:

SPp16: "I was somewhat surprised at the relatively narrow definition of 4-H clubs and what clubs could be according to some fellow participants in the class. If we have trouble getting Extension staff on board with expanded definitions, we have an uphill battle in getting the public and other stakeholders on board with where we want to take our programs."

The majority of interviews revealed participants and design team members from both courses had developed a common language that was useful to their learning and the organization (IFp10, IFp13, IFp16, IPp5, IPp10, IFC1, IFC3, IFC4, and IPC3). Common language for facilitation course interviewees appears to be centered on the definition and process of facilitation. Early in the course some participants had an inconsistent definition of facilitation and during the course this definition began to change. For partnership course participants several course tools were introduced that provided a new way to approach and communicate about what it means to partner with 4-H. These tools appeared not only to

have helped staff create shared meaning that connected staff, but also focused their work so that it better aligned with the organization's mission:

IFp16: *"I wasn't exactly sure about facilitation. I just thought it meant leading a meeting; so I assumed that I could still be an active member of the group as well as trying to lead the meeting. After taking the course, I realized you have to be outside of the group and not participate in it. I also thought that the facilitator was maybe just like the committee chair or something like that for the group, and that's not the case."*

IFp10: *"I guess going in I had a little bit narrower definition of facilitation as something that was a little more structured, and I think that true facilitation is kind of a structured experience. I guess after the course, and during the course as it went on, it was very interesting to me to hear how all the participants that were in the class with me were relating this to experiences they had in meetings, in group settings. Really the skill set translates across to any group setting, and in Extension we seem to do a lot of collaborative group work. So whether it's a true facilitation or just some of the concepts like how people relate to each other and how people act differently when they feel very strongly about something, a lot of that, even if it's not used in kind of the true facilitation manner I think translates to a lot of the collaborative group work that we do in Extension."*

IPp5: *"So what I'm telling staff here is to take all the static out, and we need to stay focused. I think the partnership course has provided some of that focus. It provided some of the clarity because I know when some conversations, our missions and visions, our values don't align – we should not partner."*

IPp10: *"There's the Benefits and Non-negotiables of 4-H tool that helped define for us, these are the benefits; because I would often think - is that okay? I know 4-H, I believe in 4-H. How do I articulate that to other people, that these are the benefits for you as a volunteer, or you as a parent getting your young person involved, or you as a company, or a corporate partner, so I think that was very good to have that listed there the way it is."*

IPC3: *"I would say, being . . . [the course] is required here in Minnesota, a couple things: we're all walking the same walk, talking the same talk, the dialogue is there, it's the same, the vocabulary that we're using is the same. It's really helped us, I think, connect across all 87 counties."*

Skill building

Skill building is the process of gaining awareness of and competence in the use of tools, processes, methods, knowledge and content that can be readily used in personal or work lives. Most participants in both courses reported developing and applying a number of specific skills, tools and processes that were introduced in the course. The process of skill building also included becoming intentional or mindful about how, where and when to use the skills through practice. Participants from both courses used words or phrases to describe their learning such as *“I have used the technique,” “I am more aware of asking questions,”* and *“I am becoming more aware and conscious of.”*

Two survey questions were asked that pertain to skill-building. The first question on both course surveys asked participants to indicate if they had participated in a specific behavior using a skill or process that was introduced in the course (Question 10 in the facilitation and Question 7 in the partnership survey). The most mentioned behaviors facilitation and partnership course respondents engaged in are included in Table 4.9.

The second question on both facilitation and partnership course surveys asked respondents if they had experienced any success with either facilitation or partnership development during or after the course. Answers to this question revealed skill-building activities occurred. Facilitation course respondents identified a tool, process, method or technique they used or new knowledge they gained as contributing to their success (20, $n=22$). The partnership course respondents identified new knowledge, use of processes, methods and becoming more conscious of the process as contributing to their success (10, $n=16$). A follow-up question inquiring about what contributed to no success revealed that for partnership respondents the reason was *“no time to engage with partners”* (6, $n=8$).

Table 4.9. Top four facilitation and partnership skills respondents were engaged in since participating in the course

Facilitation behaviors <i>n</i> =37	Facilitation course Yes response	Partnership behaviors <i>n</i> =38	Partnership course Yes response
<ul style="list-style-type: none"> • Asked clarifying questions • Applied a participatory process 	100% (36/36) 95% (35/37)	<ul style="list-style-type: none"> • Shared the benefits of partnering with 4-H • Became more clear about 4-H policies and non-negotiables with potential partners before entering into a partnership 	87% (33/38) 70% (26/37)
<ul style="list-style-type: none"> • Encouraged positive behaviors in a group setting • Arranged the physical space to support the meeting purpose 	94% (34/36) 92% (34/37)	<ul style="list-style-type: none"> • Advocated using the 4-H and Extension brand with a new program • Assessed how a potential partner aligned with 4-H goals and policies before entering into a partnership 	68% (26/38) 66% (25/38)

SFp20 listed a set of skills she had used during a facilitation event describing the kinds of knowledge and skills imparted during the instructional part of the course:

SFp20: *“Establishing ground rules together [a ‘working agreement’], humility and creating a safe environment for sharing, not judging, staying neutral. Listening and encouraging all to participants through questions. Linking ideas and praising, Paraphrasing, clarifying, and summarizing. Keeping on track/on time.”*

The facilitation interviewees and open-ended question survey respondents describe skill-building as becoming aware of new tools, using or practicing techniques, or becoming aware of and deliberate about the group process. The specific skills identified in the interviews included the technique of asking good questions, arranging the room, and using a participatory process. For the partnership course interviewees, skill-building was described as not only learning skills, but also making better decisions about how to use organizational resources. The specific skills included the use of a benefit and non-negotiable tool, and the partnership process step tool. All facilitation and partnership course interviewees

acknowledged they had built skills as a result of the course, except one partnership course interviewee:

IFp9: *“From the class I was made aware of the various tools available for facilitation. I too often use one approach to facilitation. From the class I was made aware of 4-5 different tools to use and how to use them in a combination.”*

IFp16: *“I have used the technique of acknowledging everybody and allowing them to pass and giving them ample time to think about what they would like to say. I have also used some of the techniques of brainstorming and asking questions to get full clarification from the group of exactly what they are saying and what they are thinking rather than writing down my interpretation of it. I make sure that they spell it out to me.”*

IFp10: *“Being aware and conscious of the group process enables me to occasionally take a step back and analyze how the group is functioning and whether intervention/assistance is needed.”*

IFp8: *“During the process of learning more about facilitation, I’ve found out about some tools that can be used, maybe a little bit more deliberate about your work through some scenarios with the group. I’ve developed that group to be more effective and the leaders within that group can be more effective ...”*

IFp11: *“I think about who is going to be around the table, how to set up the room, how is that going to be conducive to the conversation or the decision-making process, how can we again either develop an agenda or develop a method so that everybody’s voice is heard without going off on tangents. It really makes me think about the process from beginning to end.”*

IFp14: *“I am more aware of asking questions, and knowing that there is more to an issue. I mean I knew before, but . . . it’s –how can I get a little more information for this so I can give you the best answer. In working with groups it is really thinking about what their expectations are before I get there.”*

IFd3: *“The organization requires this as a core competency, the ability to structure conversations, to manage conversations, to manage change; and we felt that this was a good fit, starting with just building some of the facilitations skills because they are extraordinarily useful to everything that Extension does, no matter what capacity you’re serving in Extension - whether you’re in leadership, whether you’re in a county office, whether you’re a field specialist. These are all kinds of skills that come to play whenever you’re dealing with a multiplicity of individuals who all may be working with their*

own specific viewpoints and helping people to come to consensus and use tools that drive that kind of consensus-based decision making.”

SPp8: *“We used from the partnership training information, first meeting guide, non-negotiable tool, etc. to begin our conversations with a couple organizations.”*

SPp17: *“The steps involved (in partnership development) were pretty basic, but it was knowing how to act at each step that made this course beneficial. Logically most people realize what needs to be done to establish a partnership, but may not have the tools to do what needs to be done. The toolkit that we progressively made throughout the course will be beneficial to utilize in building future partnerships and advancing current partnerships.”*

SPp10: *“The list of non-negotiables makes 4-H a more forceful partner and can be challenging when we might be the one asking for the partnership.”*

Role perception

The definition of role perception is perceiving work responsibilities differently or re-examining your job identity. Participants found themselves rethinking their Extension job roles in an effort to gain more clarity. In their own minds, participants had to renegotiate their beliefs as they tried to reconcile what they did in their work compared to the organizations and community’s expectations.

There were no survey questions that addressed this theme, although interviewee data provided rich information about how the courses helped to change perspectives of course participants about their job roles. In some cases employees had to renegotiate their beliefs about their jobs. Interviewees from the facilitation course (IFp12, IFp15) and from the partnership course (IPp5) were still negotiating their beliefs about their job role, after a major reorganization that changed their jobs two years prior. In some cases participants were trying to understand how course content fit with their current job (IPp8), or they were redefining their job based on course content (IPd9). In the case of IFp16, she came to the course with a

problem of local non-profit groups expecting her to be actively involved in all aspects of their operations. She found that the course provided her with the tools to help change community partner expectations about what she does. The course reinforced her assumption about what her role is with Extension. These interviewees remarked that perceptions about their job roles had changed as a result of the course: IFp11, IFp12, IFp13, IFp16, IPp5, IPp6, IPp8, IPp9, IPp10:

IFp16: *"I have the assumption (now) that Extension employees really are intended to be facilitators."*

IFp12: *"I think one of the biggest changes is as we take a look at our change of roles. [In our past role] as county directors, we were thought of as problem solvers. I think that in our new regional director role we are asked to be problem finders, and look for opportunities to go ahead, and help staff, Extension councils, or even ourselves, and then go ahead and solve the problem."*

"When I came to Extension I thought I was going to be an educator... and in '09 we were dismissed. That restructure had an impact on us. The course provided us another avenue to be in front of a group and to be a teacher and educator for a different client.... I long to find more opportunities to use some of those skills."

IFp8: *"I guess (now) I have an innate problem with the expert model. I think . . . too often . . . experts, in whatever the discipline is, like to come out and spew out what they have to say and then go back into their world and go on with what they were doing. So I think this Course has helped me to step back a little bit and try not to be an expert all the time, but rather a resource. So I ideally want to be able to have the information at hand, have the group working toward something, provide them pertinent information depending on the topic, and help them to develop that knowledge based on their local information and a resource that I can supply to help move the group forward."*

IPd5: *"Part of my struggle as a regional specialist is that it is really going to be hard to identify with a community. When I was in a county position many years ago, I knew the communities extremely well and the (role) of that power base of movers and shakers and partnering. So going through the Course, I shifted my thought, that I may not be doing a lot of partnering. That it may actually be more . . . the staff that I am supporting in that I am needing to*

coach them and remind them what we learned in the partnership training together.”

IPp8: “I don’t know if I’ll really use (the sales kit) too much; but it made me think as I worked with staff of what do they need to have. So I had a few examples of my own even though I don’t deal with partners directly at this time in my work I do. It is helping the others and making sure that I think that they have the proper things in it.

IPp9: “ I have found that a lot of other youth-serving agencies have a vague notion on how to go about it (partnership development), but they don’t have the tools or the knowledge to be as concise and straight forward about setting and establishing partnerships. So the course has allowed me some resources to bring to the table to share with other community groups. It’s been good, which reinforces my skill, so that’s all been a result of the taking the course.”

Confidence

The definition of this theme is gaining self-assurance or becoming more comfortable with the course concepts or their role. Participants were able to realize their growth in confidence as a result of the course. This confidence was in the areas of skill performance and the processes associated with the course topic (i.e., facilitation and partnership development).

As a part of the survey instrument, respondents in both courses were asked to rate their confidence in facilitation or developing new partnerships before the course and at the time the survey instrument was disseminated. Before the course, 43.2% (16/37) of facilitation course respondents and 59.4% (22/37) of partnership course respondents rated their confidence as very good to excellent. By the time of data collection over 90% of facilitation (94.4%, 34/36) and partnership course (91.4%, 32/35) respondents rated their confidence as good to excellent.

Interviewees (IFp7, IFp8, IFp9, IFp10, IFp12, IFp16, and IPp8) indicated that they developed confidence or were more comfortable with performing the skills and processes of

facilitation or partnership. It should be noted that only one partnership course interviewee specifically shared they had improved confidence.

SFp15: *“The confidence I had made the difference (to success after the course was over). I was able to overcome some initial reluctance to participate from the group, by NOT letting them off the hook. We worked through the situation.”*

SFp18: *“I prepared before the meeting looking through the materials from the training... and feeling comfortable with the situation before going into the meeting.”*

IFp7: *“It just is a confidence builder, knowing that there’s others that want to learn the same thing. I think it’s a pat on the back of saying, ‘I am doing some good work in this area,’ and it is a matter of sharing your story with others. It was a setting where we introduced ourselves and throughout those five weeks, we were presenting ourselves to other fellow workers.”*

IFp8: *“I guess it’s made me a little bit more comfortable working with groups, recognizing some of the different types of personalities that can come . . . or that you may need to work with as your group builds and becomes effective. It’s helped me to also identify some leaders, both vocal and silent ones, that a facilitator can lean on to help them (the leaders) along the way. I guess it’s made me more willing, or provided more confidence for me to go out and work with new groups, or provide workshop opportunities that I mentioned. That I can maybe have a strategy before going in and be more prepared and more effective in the time that we have.”*

IFp9: *“We’re critical of ourselves, but I really felt facilitation (before the course) was not a strength of mine. I think by taking the class it gave me confidence that I didn’t have before. This is really crazy. I’m left-handed, I do not like to write on flip charts - and I taught school for six years. My penmanship on blackboards and on flip charts is not the best, and so I shy away from facilitation. So from that class, we’ve done some things electronically - put it up on the board, use an LCD projector, use a mini projector, use an iPad. That has helped me a lot, and that came out of that class.”*

IFp9: *“I feel the training has made me feel more comfortable when working with groups outside of Extension concerning some difficult community issues.”*

IFp16: *“Because of my age and the age of the people that I work with, I’m a considerable amount of years younger than these people. I think they respect me more because I am more prepared and I know what I’m talking about*

rather than kind of stumbling through meetings and not being prepared. It has definitely helped me to feel more comfortable teaching and (with) different aspects of my job, which is from the skills that I learned during the training.”

IPp8: “I think my confidence has increased, because I was a bit apprehensive that people even wanted to partner with us. The fact is that we have great programs for kids, which teach kids skills. At the Partnership Course we learned what we can view as a strength in each other, whether it’s financial or just the fact that another agency has kids, but we can also talk about what’s negotiable and what is not and how we can help each other. I am not scared to go in and start talking to somebody that we could possibly partner with.”

Transfer/Action

The definition used for transfer is “learning that involves the application, generalizability and maintenance of new knowledge and skills” (Holton, Bates, & Ruona, 2000). Participants reported using skills and knowledge in settings and in ways similar to how they were presented in the course. Participants from both courses were able to generalize or transfer new knowledge and skills to new situations.

A design team member shared her thoughts whether participants are conscious about where the knowledge and skills they gained in the course originated. A survey question asked if respondents had experienced any success with either facilitation or partnership development during or after the course. Success would indicate the extent of transfer occurring. Almost 90% of the facilitation respondents (89.2%, $n=33$), and more than 70% of the partnership respondents stated they had (71.1%, $n=27$) experienced success. A second question asked of both the facilitation and partnership course participants: “If you experienced success with facilitation or developing a partnership after taking the course, please share what made it successful.” Twenty (91%, 20/22) facilitation survey respondents

and 10 (62.5%, 10/16) partnership survey respondents answering this question revealed that they were actively using the knowledge and skills they had gained from the course.

Survey responses indicated that participants were actively using the new knowledge and skills in the ways they were presented and practiced in the course demonstrating the application type of transfer. There was no information from the survey responses that indicated participants generalized the knowledge and skills learned to new situations after the course ended.

SPp18: “I prepared before the meeting looking through the materials from the training . . . I set up the meeting and had an ice-breaker ready to begin with, . . . and then moved into the ground rules and what the leader of the organization and I had decided my role would be for the meeting. I used large paper to write down answers to questions I was asking, and made sure to clarify before I wrote the answers down. Then we reviewed the answers before moving on. The meeting didn’t end up completely successful as we didn’t completely reach our goal as time constraints stopped us. . . but I feel we made real progress . .

SFp7: “I had the opportunity to use some questioning techniques that allowed the group to reach a consensus.”

SFp16: “Three organizations/agencies worked together to start a new program with a great turnout. Agencies took turns leading portions of the program and youth learned about a variety of topics through hands-on activities.”

Interviews held with the facilitation and partnership participants and design team members revealed new knowledge and skills were applied in the ways they were presented (IFp7, IFp10, IFp11, IFp12, IFp13, IFp16, IPp10, IPp8, IPp6, IFd2, IFd4, IPd4). These passages speak to application of knowledge and skills.

IFp16: “I’ve actually used that technique of acknowledging everybody and allowing them to pass, but acknowledging who everybody is and giving them ample time to think about what they would like to say. I’ve also used some of the techniques of brainstorming and asking questions to get full clarification from the group of exactly what they are saying and what they are thinking rather than writing down my interpretation of it. I make sure that they spell it

out to me, what they would like to have happened or their thoughts or ideas when brainstorming and what not.”

SPp12 *“I was really challenged with a current partnership that involved a grant. The leadership from the partnership had changed after the grant was received and there were some unclear expectations and lack of investment by the new leadership. The Course assisted in moving the relationship back so that we could better understand each other and I could clearly communicate the non-negotiables.*

IPp10: *“...when I was taking this course, at the same time I was working on a grant, and started to make connections with the master gardener folks on campus. So I used that process that we were starting to go through as what I was supposed to be doing in this course, reaching out, developing new partnerships”*

Facilitation and partnership participants IFp8, IFp11, IFp12, and IPp10 were able to give examples in their interviews of generalizing and transferring what they learned in the course to new situations:

IFp11: *“I think that has impacted my teaching skills and that I listen a lot more. I don’t lecture as much, I ask a lot more questions, try to again have the participants give more input than I did when I initially started doing it. ” (She had content and process reflection)*

IFp12: *“That facilitative approach has helped us work with staff in some of our offices... I’ve learned that facilitative approach, that questioning goes ahead and keeps things much more open and allows people to feel like you’re not accusing them of something - you’re trying to find out for your own information or your ability to help coach them along the way, and it really does appear to be much more, less threatening.”*

IPp10: *“I was thinking about the county youth coordinators mainly, but also thinking about the regional specialists, how are they working with the county staff to help them recruit volunteers?” (After the course was over, she wrote a National volunteer recruitment grant and the Partnership curriculum was one of the pieces that she wrote into it to help with corporate partnerships and volunteer recruitment and help the staff make those connections).*

Facilitation course respondents used words such as: *“being aware and conscious,” “being able to recognize,”* etc. A partnership design team interviewee talked about

witnessing the knowledge and skills after the course had ended, but was not certain that participants were conscious about where they learned these skills.

IPd4: *“I do know there are (staff) doing things that two years ago they were not doing. I wonder if one of those reasons is because they’ve taken the partnership course, that maybe they don’t think about it on the conscious level, but subconsciously they now feel like, I could go and work with them, and we could see about doing this, or I could bring them as a partner because they have this. So sometimes it’s hard to get at whether or not that was a direct reason for them to pursuing [a partnership] , but it certainly may have been part of that; and I hope to see more of that even among our staff out there in the field.”*

IFd4: *“I could really see them embodying the values and the practices of facilitation even in their getting prepped for another meeting. It wasn’t even a meeting that they were leading, it was something that they were doing the preplanning for..., so that was really cool to see.”*

Self-awareness

The definition of this theme is introspection about one’s own behavior, traits, thinking or feelings. Many participants reported that during the course they became aware of something about their personally or a habit they were unaware of prior to the course. Words or phrases reported in the interviews that were associated with this theme include: *“I came to realize,” “I was having to wrap my head around this,” “I was becoming more mindful,” “I struggled,”* and *“I came to recognize.”*

The data for this theme are primarily based on the interviews. As one of the interviewees shared, *“I feel that having my eyes opened to this reality makes me more understanding and a better facilitator.”* These types of transcript passages indicated the extent of personal reflection participants experienced during the course. Participants of both courses (IFp10, IFp11, IFC4, IFp16, IFp14, IFp8, IPp7, IPp9) indicated that they were ‘becoming’ or were more self-aware as a result of the course. Self-awareness was identified

in more facilitation interviews than partnership course interviewees. Facilitation course participants questioned the validity of prior assumptions and took action to change previous behaviors and/ or became more self-aware:

IFp16: *“In [the facilitation course] I learned that sometimes the people who are sitting quietly are thinking things through. It may take them longer to come up with something to say, but chances are what they will say, when given the chance – as talkers like myself tend not to give the quiet people many chances to speak if someone doesn’t step in - has more value than what has popped into my head in just a few seconds after we are asked to think on a topic in the group silence time. Thinking about this, I realized that those people exist in groups that I work with personally, and in a meeting I came to recognize them and give them the opportunity to speak up without forcing them to do so. I feel that having my eyes opened to this reality made me more understanding and better able to be a facilitator.”*

IFp10: *“I tend to be more mindful of the group that I’m working with (now), just because I’m kind of aware of group process and engaging people, so I try and be more deliberate with how I’m doing that...You can still be an active facilitator even if you’re not talking, and that was something that I kind of had to wrap my head around. I don’t have to be in charge of the group process at all times, that I have to be aware of the group process and be ready to take control back if the group isn’t being productive.”*

IFp11: *“The instructor kept saying we [facilitators] are Switzerland, and that the facilitator needs to be neutral and to try to draw out from people their ideas and ask them questions and try not to give your personal opinion. I think that was probably one of my ah-ha moments. That was going to be really hard for me, because I’m really opinionated; and it’s hard not to bring out your personal perspective when you’re with a group that you’ve worked with over the years. But it’s trying to be that facilitator and trying to be that neutral person and letting them be the owners of whatever topic you’re working with.”*

IFd4: *“So, in relation to the Facilitation curriculum specifically, it takes a while for anybody, be it a person on the teaching team or a participant in the audience, to get the facilitative participative democratic mindset and really embody it. The way that a lot of facilitation materials are written by facilitation professionals sound really touchy-feely, really soft, indirect, slow moving. I don’t know, there’s a lot of different descriptors that could be used, but it’s a specific style of making sure that you understand what the group needs and empowering them to get it. So, I struggled, I’m speaking from a personal perspective and also from what I observed during the course, . . . getting yourself into that facilitative mindset took a few tries. I mean, I think*

that's something that anybody is going to struggle with, when you're facilitating and learning a strategy and diagnosing all at the same time - that sort of multiple levels of cognition, that middle level learning that's happening. It's complicated. So I'm not saying this is something that I can be sure that the students were struggling with, but it is something that I as an educator of this content struggled with, just making sure the ideas were getting across well."

IFp14: *"I am more aware of asking questions, and knowing that there is more to an issue. I mean I knew before, but . . . it's how can I get a little more information for this so I can give you the best answer. In working with groups it is really thinking about what their expectations are before I get there."*

IPp6: *"I think (the course) gave me a perspective to be more open and to really look at the big picture, so I think it has impacted my entire work. Even just looking at volunteers, I can be more open and be like, maybe this is a good fit for them, and get that going, so I think overall it has been good."*

Learning and perspective change

All but one participant self-reported they acquired, elaborated upon and revised current knowledge as a result of completing one of the courses. Participants engaged in acquiring instrumental knowledge, communicative knowledge, and some engaged in learning for emancipatory/transformational knowledge (Mezirow, 1991). The survey results revealed that 50% or more of the participants in both courses self-reported a perspective change. Yet, based on review of the interviews, only 5 of 16 participant interviewees changed their perspectives (Appendix C). Perspective change was determined by reviewing the transcripts for evidence of a premise reflection. According to Mezirow (1991, p. 108), premise reflection involves becoming aware of why we perceive, think, feel or act as we do. In this study, perspective change appeared to be associated with self-awareness. Participants were reflecting about the reasons they act the way they do.

Process of becoming transformed

In some cases self-awareness involved participant's questioning a personality trait of their own or others. The participant had to work through why the trait was not helpful or could hinder them in performing the skill. In many cases participants were in the act of becoming transformed through struggling with a concept and often justifying their perspective and testing it in light of their colleagues ideas and perspectives. The process of becoming is identified in the theme passages as "*the process of becoming.*" The following passage is an example of a participant engaging in conflict with her own ideas about the list of non-negotiables and how dialog opened discussion and other ideas about the challenge. This act of becoming is a process wherein a participant was between rejecting the new concept or notion about one's trait and transforming one's perspective. In this course she did not transform, but is still in process of becoming:

IPp9: *"The list of non-negotiables - the way it came across in the learning is like I'm going to be an 80% partner here, and we're doing it my way or I'm taking my toys and going home... I think some people taking the course at the same time that I did had never really thought about looking at, oh, gee, I do need this, I do need that. So actually putting it on paper in a list was a good thing and eye opener, shall we say; but amongst my counterparts in my 4-H region, when we met and we just happened to be talking about this, I know within my group, we discussed like - whoa, we got to be careful about how we ask for this. It depends on who's initiating "the ask" of the partnership. So I guess it was a consensus on, yeah, we have to be heads up about how we ask for all these needs to be met. I tend to be, if it's in my head, it's out my mouth; so I would just say my thoughts to the group that way, where I guess not everyone is so vocal and maybe had to think it over and would naturally be a softer sell."*

Findings: Objective 2

The second objective of this study was to describe and compare learning supports that foster perspective change in two professional development courses. For the purposes of this

study, learning supports were defined as materials, processes and people that are available to learners before, during and after the professional development experience to maximize outcomes for the individual and the organization. This objective was explored using three data sources: survey questions, participant interviews, and design team member interviews.

Survey responses

A series of five questions was asked to identify staff who experienced a change in values, beliefs, opinions or expectations, and specific support (people, course assignment, or other) that helped influence the change. The first and primary question asked survey respondents to answer whether or not they experienced a time during the course in which their values, beliefs, opinions or expectations had changed. More than two-thirds (70.3%; 26/37) of the facilitation course respondents and one-half (50%; 19/38) of the partnership course respondents stated they had experienced a change.

The second question asked if a person influenced the change. More than one-half of the facilitation course participants (55.6%, 20/36) answered that it was a person who influenced the change and only 5.4 % (2/37) of the partnership course participants answered that a person influenced the change. A follow-up question asked respondents to choose from a list of types of people assistance or supports they attributed to the change. The results are presented in Figure 4-1. One-half or more of the facilitation respondents attributed instructor support, their own motivation or an instructor challenge as influencing the change. In contrast, only two partnership course participants said the change was attributed to people, with only one specific response (colleague support).

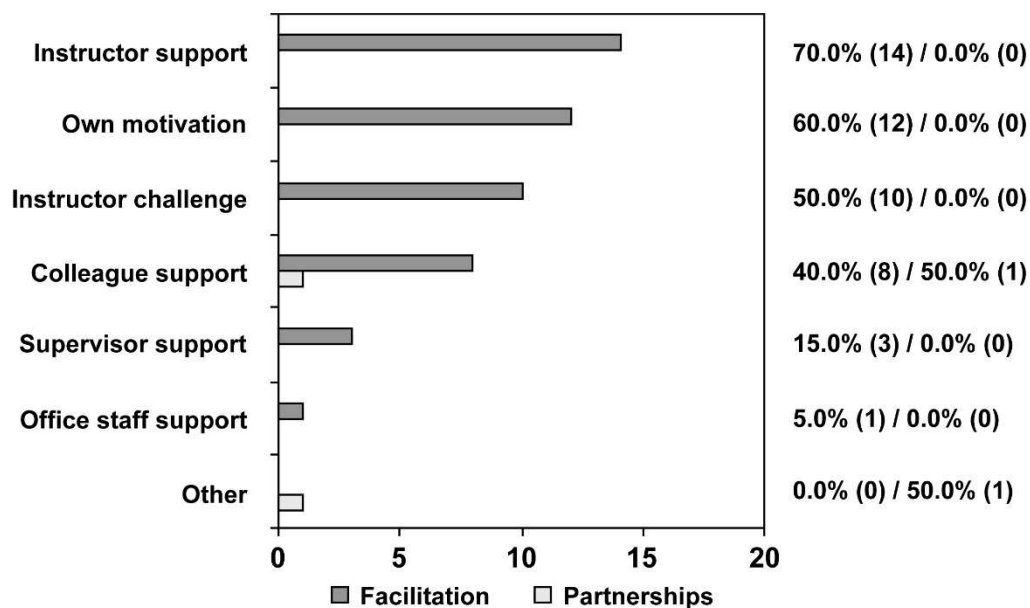


Figure 4.1. Supports attributed to a person influencing a change in belief, value, opinion or expectation as a result of participation in the facilitation or partnership course

The third question asked if a course assignment influenced the change. More than 40% of the facilitation respondents (15/35) and almost 80% (29/37) of the partnership respondents stated change stemmed from a course assignment. A follow-up question asked respondents to identify the course assignments they attributed to any change in belief, value, opinion or expectation they had as a result of the course (Figure 4.2). The primary course assignment support for both courses was personal reflection, followed by course assignments/activities. The third most important course assignment support for the facilitation course was verbally discussing concerns and, for the partnership course, it was course projects.

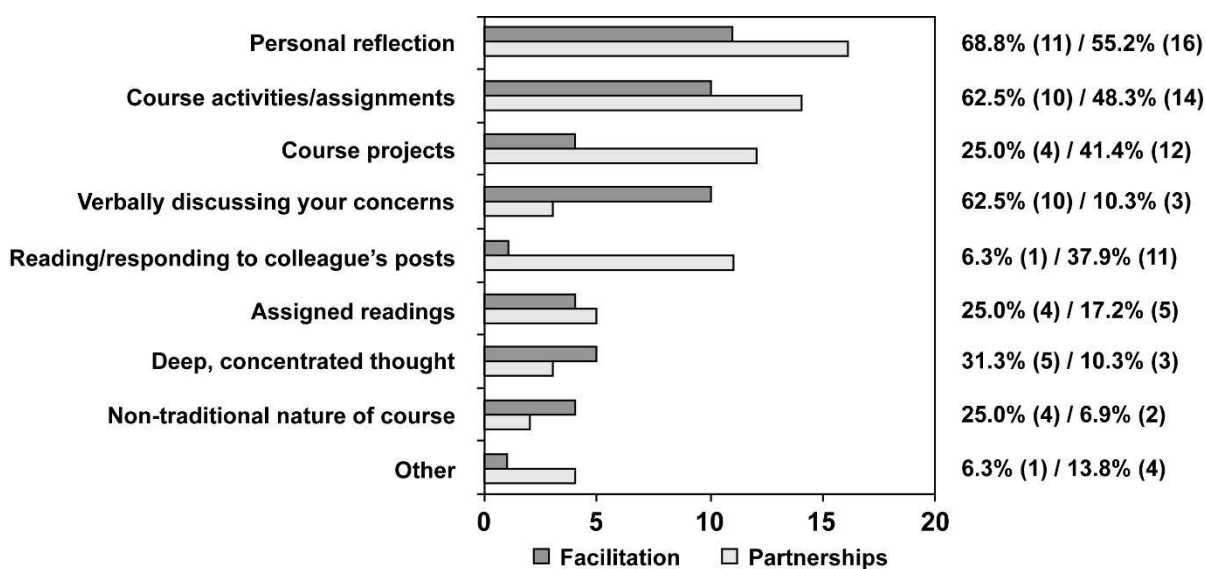


Figure 4.2. Supports attributed to a course assignment influencing a change in belief, value, opinion or expectation as a result of participation in the facilitation or partnership course

The fourth question asked if something else influenced change. One quarter of the facilitation respondents (25%, 9/36) and almost that many (22.2%, 8/36) of the partnership respondents indicated something else influenced change. A follow-up open-ended question asked, “What was it?” Most of the facilitation respondents and all of the partnership respondents’ answers were consistent with the findings in question two and three, that people or a course assignment influenced their change in beliefs. Two different answers identified by the facilitation respondents were the *“opportunity for practice,”* and *“your own attitude or perception that something needed to change.”*

The fifth question was asked to help verify questions two and three and to provide detail. The question specifically asked, “Which of the following assisted you in learning and/or applying the course content (learning is defined as change in knowledge, attitudes and

behavior).” Respondents could check all that applied. Table 4.10 displays the learning supports identified by facilitation and partnership respondents.

Both “*self-motivation*” and “*the belief that the content is part of their jobs*” were identified as the top two supports provided in both courses by the facilitation and partnership respondents. Training, instructor support and peer encouragement were three additional supports mentioned by facilitation respondents. Partnership respondents also singled out “*belief that the activity increases youth opportunities*,” and “*belief in organizational goals*,” as strong supports. Fewer partnership respondents identified people

Table 4.10. Learning supports identified by facilitation and partnership course participants, arranged by total combined responses and ranked for each course

Learning Support	Facilitation course (n=34)	Rank	Partnership course (n=38)	Rank
Self-Motivation	82.4% (28)	1	47.4% (18)	2
Belief the activity is part of the job	82.4% (28)	2	44.7% (17)	3
Training	82.4% (28)	3	39.5% (15)	4
Peer encouragement	55.8% (20)	5	36.8% (14)	5
Belief in organization goals	44.1% (15)	6	44.7% (17)	3
Colleagues taking Course together	32.4% (14)	8	39.5% (15)	4
Instructor encouragement	58.8% (20)	4	13.2% (5)	9
Time to engage in new skills	44.1% (15)	6	15.8% (6)	8
Skill in relationship building	44.1% (15)	6	15.8% (6)	8
Pressure	17.6% (6)	9	32.4% (13)	6
Supervisor Encouragement	35.3% (12)	7	10.5% (4)	10
Role Models	32.4% (11)	8	13.2% (5)	9
Office staff encouragement	11.8% (8)	10	10.5% (4)	10
Other			2.6% (1)	11
Belief activity increases youth opportunities	Did not ask		52.6% (20)	1
Belief in Partner’s goal	Did not ask		18.4% (7)	7

NOTE: Respondents could select as many supports as applied.

supports (other than themselves) - office staff, supervisors, and instructors- than did Facilitation respondents.

Interview findings

To further explore the learning supports objective, 10 facilitation and 6 partnership course participants were asked a specific question about the assistance they received through course challenges or changes in assumptions. In addition, 5 facilitation and 4 partnership course design team members were asked about the supports course participants received from their supervisors and from design team members before, during, and after the course. Each interviewee transcript was reviewed in its entirety for learning support data as well.

Three categories of supports emerged: (1) people, (2) curriculum materials, and (3) instructional methods. People support denotes that a person provided some type of emotional, psychological or educational assistance to course participants. Curriculum materials denote tangible materials such as syllabi, readings or activities that assisted with the development of curriculum. Instructional methods are those activities the instructor provided to participants to assist with their learning.

Categories and methods of supports were identified and organized into supports provided during a specific time period: (1) before, (2) during, and (3) after the professional development experience. “Before” refers to a time period before the course started or the formal period of instruction begins. “During” refers to the time period when the course was in session or the formal period of instruction. “After” refers to the time period after the course or formal period of instruction, in this case 3 to 6 months after the course ended and the survey was administered.

This section is divided into two main sub-sections based on who was interviewed (participants and design team members) and further divided based on when the learning supports were provided (before, during and after the experience). Each sub-section is introduced by presenting the findings and interview quotes. Additional information includes differences and similarities between facilitation and partnership course interviews and quotes that support the finding. The findings from participant interviews are presented first.

Participant interviews

The learning supports provided to course participants identified by interviewees are divided into categories and included in Table 4.11.

Table 4.11. Supports identified by course participants provided before, during, and after the courses

Supports before	Supports during	Supports after
People: <ul style="list-style-type: none"> • Supervisor/colleague encouragement (F&P) • Own motivation or beliefs (F) • Curriculum materials: <ul style="list-style-type: none"> • Readings before the course. (F) • Design team making class specific for the group taking it (F) 	People: <ul style="list-style-type: none"> • Peer support (F&P) • Own motivation (F&P) • Instructor support (F&P) • Supervisor encouragement (F& P) • Instructional Methods: <ul style="list-style-type: none"> • (Learner-centered approaches) • Time for discussion/reflection (F) • Activities out of comfort zone (F) • Role plays (F) • Practice time (F) 	None

KEY: F= Facilitation course; P=Partnership course.

Summary of course supports

Supports before the courses

Most interviewees from both courses did not recall a support provided to them before the course started. If a support was identified before the course they identified people or a curriculum development support. The people support they identified was either their supervisor or another colleague provided encouragement to attend. The curriculum development support identified was either a pre-course reading or modification of the course for their cohort's specific needs by the design team. One facilitation course participant identified that it was her own belief that facilitation skills was part of her job that motivated her to take the course (own motivation). This facilitation course interviewee identified the lack of supervisor support:

IFp10: *“Honestly, as far as my supervisors – I am not even sure that they really grasped what the topic was. I think they were generally aware that it was some sort of continuing education and they had given me kind of free reign to do that as I saw fit. So as far as the facilitation role in general, I don’t know that they were specifically supportive or unsupportive. My co-workers were aware and started to ask me more about group process.”*

Supports during the courses

During the course the two support categories that emerged were people and instructional methods. The support category of curriculum was not mentioned. The themes that surfaced under the people category were peer/colleague support, own motivation, instructor support and supervisor encouragement.

Peer support emerged as the most dominant theme under the people support category with both facilitation course and partnership course interviewees. Peer support was defined

as colleagues listening to/discussing their points of view and practicing together in an atmosphere of trust. For facilitation course interviewees (IFp7, IFp8, IFp10, IFp11, IFp12, IFp17), listening to/discussing implied a sense of trust amongst each other summarized in IFp11's response below. Practicing together was identified by facilitation course participants as peer support (IFp7, IFp10, IFp12). Partnership course participants (IPp5, IPp6, IPp8, IPp9, IPp10) also shared that belonging to teams of colleagues taking the course together was helpful in listening to/discussing points of view and in sharing in the work load of the course. These participants were engaged in completing the assignments together and discussing points of clarification or struggles they had with the course content:

IFp11: *"As a group (the course participants) kind of jelled and if we had questions we all felt comfortable in asking people. We did a lot of processing during the course, and so we all got a pretty good feel for each other and what we are going to be doing in the future whether it be committees, families, changes in generations, estate planning. . . ."*

IFp12: *"We practice(d) some of the things that we were asked to do, whether it was how to divide up groups, whether it was what format the facilitation should look like, and that ability to do some of that in a safe haven of your peers."*

IPp9: *"...the counterparts in my region met and we just happened to start talking about one of the course concepts and tools, I know our group we discussed like –whoa, we have got to be careful about how we ask partners for this. So I guess it was a consensus that we have to be careful about how we share this tool with our partners."*

Our group- *"We were pretty much a learning community, we were going through the course together, sharing our homework- sometimes we divided it out amongst each other, providing feedback to each other, trying to come up with specific partners."*

IPp10: *"We partnered up during that course, so we would talk about how to work together and then how to make this work with partnerships that we were developing and that we were already in the process of developing. It was handy because I don't believe that I made any connections with any other staff that were taking the Course at the same time except through the discussion board."*

Instructor support, own motivation and supervisor encouragement were minor support methods identified under the category of “people support.” In this subset, instructor support was a stronger support as it was mentioned by more interviewees. Note it was only recognized by facilitation course interviewees (IFp7, IFp8, IFp15). Instructor support was identified by having trust in the actions of the instructors, appreciating the time the instructor-colleagues provided for the organization, and viewing the instructors as role models.

Under the instructional methods category, the term learner-centered activities summarize the findings. Learner-centered activities identified were time for discussion and reflection, activities that push staff out of their comfort zone, role plays and having practice time. Facilitation interviewees (IFp7, IFp10, IFp11, IFp12, IFp17) specifically identified this type of support. No specific instructional method was identified as support by the Partnership participant interviewees when asked specifically what supports helped during the period of time when the course was in session.

Supports after the courses

No support was identified by course participant interviewees as assisting learning after the course. The lack of follow-up support was mentioned by interviewees. Some interviewees elaborated and shared that they had hoped for refresher courses or more courses to get new colleagues up-to-speed.

Design team members interviews

To explore this learning support objective, 5 facilitation and 4 partnership design team members were asked about the supports course participants received from design team

members and others before, during and after the course. Themes that emerged are included in Table 4.12.

Supports before the courses

Coaching was identified by the partnership course designers as a support they provided. Coaching served to help participants through technology issues with the online environment requested by many of the course participants.

The support other people provided to course participants identified by design team members included supervisor support and coaching. Members of both course design teams shared that supervisors support included immediate supervisors and/or upper Extension administration. This support included activities such as publicizing the course (sending

Table 4.12. Learning supports identified by design team members as being provided to course participants before, during and after the course

Supports Before	Supports During	Supports After
People <ul style="list-style-type: none"> • Coaching (P) • Supervisor Support (F&P) <ul style="list-style-type: none"> • Curriculum Development (F&P) • Needs assessment (F&P) • Design pilot (F&P) • Course preparation (F&P) • Design modifications (F&P) • Offering pre-work (F&P) 	People <ul style="list-style-type: none"> • Instructor support Instructional Methods (F & P) <ul style="list-style-type: none"> • (Learner-centered approaches) • Time for discussion/reflection • (F&P) • Hands-on, small group work (F&P) • Activities to increase peer interaction (F&P) • Practice time (F) • Listening (F&P) • Diagnosing behaviors and struggles (F&P) • Creating a safe environment (F&P) 	People <ul style="list-style-type: none"> • Coaching (F & P) • Focus groups (P)

KEY: F= Facilitation course; P=Partnership course.

emails to all staff and verbally encouraging some staff to participate) and allowing internal Extension colleagues (design team staff members) time and resources to engage in developing and teaching the course. It also included allowing participant's time to attend and secure the funds for their travel.

Members of both course design teams identified curriculum development as a learning support before the courses began. Curriculum development for the facilitation course was referred to as selecting the most appropriate curriculum, modifying the curriculum based on their experiences and the setting of each cohort, and designing course pilots using learner-centered approaches. The course modifications included changing the span of time (e.g., one day per week for 5 weeks or 3 consecutive days), changing some of the course activities, emphasizing some concepts over others, and changing the design (e.g., incorporating real life strategic planning with one of the classes while teaching the facilitation skills).

Curriculum development for the partnership course was referred to as conducting a needs assessment, developing a toolkit/curriculum and a 10-week online course, planning for evaluation, and modifying the course for each new cohort. The design team developed a questionnaire before course development to assess the need for the course, to identify the current state of partnership development, and reveal topics staff believed would help them become successful. Course modifications included adding an additional real-time webinar mid-course to facilitate camaraderie amongst staff, adding a respite week to the course syllabus to allow participants to catch-up, and instituting teams to go through the course together. Partnership design course members also identified promoting the course to their

colleagues before the course started, and coaching some participants on how to use the technology in an online environment:

IFC1: “The support that we provided before was, first of all, to design the pilot around the curriculum; so it was identify the curriculum and figure out what we were going to offer. We publicized that throughout the system and got agreement from the leadership team that they would allow staff time to participate in the workshop and even encourage them to participate. During the workshop we actually paid for the meals and the room and the materials. So there was no cost, other than transportation costs, to get to the meeting.”

Supports during the courses

The “people support” design team members directly provided to participants was difficult to separate from the instructional methods support category. All of the strategies shared under learner-centered approaches are based on specific instructor behaviors. For instance, listening is not only an instructional method, but it is also a psychological support for participants.

Design team members identified learner-centered approaches as the major support they provided to course participants during the course. These learner-centered approaches are described by the design team as: hands-on, small group work; activities to increase peer interaction; listening; diagnosing behaviors and struggles; and creating a safe environment. Facilitation course design members shared an additional approach: providing time to practice skills to reduce intimidation; and they elaborated on the time they allowed for self-reflection and for peer-to-peer interactions. These learner-centered approaches in the partnership course were characterized a bit differently based on the online learning environment. These approaches included: monitoring and interacting with participants on the discussion boards; providing time for peers to respond to each other’s posts before interjecting; encouraging

students to interact; redirecting on-line conversations; providing technical assistance; answering emails; and coaching and listening to student needs.

Supports after courses

Ongoing coaching was cited as the support most of the design team members provided to participants after the course was over. This support was initiated by course participants and took the form of participants contacting instructors to help them through planning a facilitation session, working through a dilemma with a partner, or helping them to better understand how to approach an upcoming facilitation session or a new partner.

Partnership course design team members shared that they had followed up with course participants through focus groups and the evaluation:

IFC4: "Two students have contacted me to look at their plan and see if it makes sense and if that was going to work for them. I had another one that called me that said that she had one [a facilitation session] that she had done and that it had not gone the way that she wanted it to. She felt like she was too close to the problem and had asked me to come in and fill in for the second one that she had to do."

Summary

Objective 2 was to describe and compare learning supports that foster perspective change in two professional development courses. This objective was explored using three data sources: survey questions; participant interviews; and design team member interviews. Data from this question refined an earlier learning supports definition to include people, instructional methods and curriculum development processes available to learners before, during and after the professional development experience in order to maximize outcomes for the individual and the organization.

In summary, the findings identified similarities and differences in the supports received by the participants of the facilitation course and partnership course who shared they had experienced a change in belief, opinion, value or expectation as a result of the course. Differences included that people support more likely contributed to these changes in the facilitation course participants and this support came primarily from their instructors and their own motivation. In contrast, course activity supports were twice as likely as people supports to contribute to learning change within partnership course participants. Information from the interviews indicated the bulk of the support for learning change occurred during the formal period of the course. Even though the design team provided supports before the formal instructional period, generally participants did not acknowledge it. The importance of personal reflection was also a finding from this study, with participants of both courses acknowledging its significance as a course activity support in the surveys. In contrast participants did not identify personal reflection as a key support in the interviews.

CHAPTER 5. IMPLICATIONS AND RECOMMENDATIONS

Summary

This study examined perspective change in two professional development experiences within the Cooperative Extension System (CES) designed to make organizational change. Two research objectives were developed. The first objective was to describe and compare perspective change in two professional development courses and the second objective was to describe and compare supports that foster perspective change in two professional development courses.

These objectives were addressed by conducting surveys, reviewing secondary artifacts, interviewing design team members, and interviewing select participants from two professional development courses: the facilitation course and partnership course. Data sources were used to create a description of the two courses and to explore perspective change, and to identify activities that supported participants with their perspective changes.

In this chapter, key findings from Chapter 4 are summarized and interpreted for use within the broader professional development profession and the CES. A discussion of a framework/model for professional development informed by the study findings is included. Implications for theory, research and practice for professional development and organizational change are also provided. The key findings for this study were:

1. Perspective change was achieved for some course participants.
2. Self- motivation is a critical learning support for participants.
3. Five of the seven themes, representing important learning processes are consistent with the individual transformational learning phases identified by Mezirow (1991).

4. A theme called “the act of becoming” was identified and has implications for future professional development design.
5. Peer support and instructor support were critical to the learning process and perspective change process.
6. Learning was insufficiently supported before and after the PD experience.

Discussion and Implications

The six key findings are discussed and implications are provided for each:

1. Differences in determining a perspective change

This research study revealed that more than one-half of the participants in both courses self-reported a changed assumption or belief, value, opinion, or expectation as a result of completing the course. This finding is consistent with other studies (Brock, 2010; King, 1997, 2009). Nevertheless, interviews with the participants revealed that only 5 out of 16 participant interviewees had a perspective change.

A number of factors could be responsible for the difference. Differences could be attributed to the methods used to determine perspective change, course design, and/or issues with the course duration. In this study, interviews were analyzed for perspective change by using a method that identifies critical reflection (Kember, 2010). Not all studies use the same methods to determine a perspective change and the lack of consistency could indicate differences. A more consistent way to determine if a perspective change has occurred is needed.

The course designers did not intentionally design the courses to foster perspective change and/or the courses may not have been of sufficient duration for perspective change to

occur. This study revealed that several participants were in the process of making a perspective change, but the process was not completed. This phenomenon, called the “act of becoming,” is described in the 4th key finding. Perspective transformations resulting from professional development may need to occur over a semester or more (King, 2009). In addition, 20 or more hours are needed for teachers to make changes about their teaching perspectives (Desmoine, 2009). A meta-analysis of existing studies could be conducted to determine if time is a factor in fostering perspective change in professional development experiences.

2. Learning supports: Motivation

Self-motivation was identified as a major learning support by participants. In this study, motivation applies to prior beliefs about the value of the course to the organization and to one’s self. Unmotivated participants may not allow themselves to acquire, elaborate on, revise or transform their learning. Having the attitude to embark on change, perceiving there is support for the change, and self-efficacy with regard to the change are significant to making organizational change (Desplaces, 2005).

The role of motivating experienced staff to take part in PD could be a factor in fostering perspective change. Experienced staff served as role models and as coaches/mentors, supporting less experienced staff. Experienced staff contributed viewpoints that assisted participants with changing theirs, as shared by several participants. Encouraging experienced staff to participate and helping them feel more comfortable with their role as a peer mentor may be nurtured by affirming their past knowledge.

3. Seven processes of learning were present in the professional development experience

Individual perspective change was associated with 5 of the 7 themes or learning processes found in this study. The 5 themes are also similar to 5 of the 10 processes, or phases, that individuals experience to change perspectives Mezirow (1978, 1994) revealed in his research. The five themes in this study are listed with Mezirow's phases in parentheses: (1) creating self-awareness (undergoing self-examination); (2) clarifying roles and responsibilities (exploring options for new roles); (3) building skills (acquiring knowledge and skills) (4) transferring learning (practicing new role); and (5) building confidence (building confidence in new roles).

Two processes were found in this study that do not correspond to the Mezirow's transformational learning phases. These are affirming prior learning and common language/shared meaning. Both of these processes have implications for making perspective changes that could lead to organizational change. Each of these are discussed as follows.

Affirming past knowledge and skills, defined as confirmation of the course teaching with existing knowledge and/or previous experience, has implications for professional development. Affirming past knowledge and skills was a source of comfort to participants. This comfort was expressed by the phrases: "*I am on the right track,*" and "*my past understandings were reconfirmed.*" A large portion of participants who experienced affirmation were experienced staff (those with 10 years or more of CES service). No direct pattern was found between perspective change and affirmation. However, these participants were highly valued by less experienced staff in providing peer support- sharing their knowledge, skills and expertise with others in the course. Although these participants may

not appear to be changing their own perspectives they appear to be instrumental in helping others change theirs. I contend that this may be a specific phase or support needed when fostering transformational learning in professional activities.

Common language is defined as expanding/and or becoming in sync with other staff on definitions and meanings of course concepts. A finding in this study was that common language is a highly communicative process that occurred through acquiring similar definitions and developing a shared meaning. As explained by Clark and Brennan (1991) and Warren, Roseberry, and Conant (1992) shared meaning implies constructing mutual knowledge, beliefs and assumptions between individuals. This construction is more than developing similar definitions; it includes challenging and negotiating conflicts in beliefs to come together in reaching common goals.

The process of developing a common language/shared meaning has important implications in creating individual and organizational perspective change. Developing a common language/shared meaning as described in this study is much like developing a critical community of conversation (Doll, 1993; Nelson & Harper, 2006) and a learning team (Senge, 1990). A “critical community of conversation” is a conversation between participants that exposes assumptions and where participants offer other individuals different perspectives upon exposed assumptions (Nelson & Harper, 2006). This is a necessary prerequisite to changing perspectives (Mezirow, 1991). Team learning is defined as “the process of aligning and developing the capacity of a team to create the result its members truly desire” (Senge, 1990, p. 236). When groups of employees align or start to function as a whole they begin to act as a team. Senge (1990) stated that team learning is poorly understood. He continued that, until the phenomena are described better and methods

identified for building teams, the occurrence will be happenstance or it will not be distinguishable from “groupthink.” Team learning starts with the process of dialog and discussion and continues with practice (Senge, 1990). These interrelated concepts—common language, shared meaning, critical community of conversation and team learning have implications for transformational learning in professional development theory and practice.

4. “*The act of becoming*”

A finding emerged from re-examining interview quotes represented for each theme. Several quotes did not provide sufficient evidence for critical reflection. Critical reflection was used as primary evidence for a perspective change. Many of these individual quotes suggested that some participants who may not have fully experienced a perspective change after the course were still questioning assumptions and beliefs 3 to 12 months after the course concluded. Review of interview transcripts identified a phenomenon that I called “the act of becoming.”

In many cases participants were struggling with a course concept, and often justified their perspective and tested it in light of their colleague’s ideas and perspectives. This “act of becoming” is consistent with the term “liminality” identified by Nelson and Harper (2006), taken from Turner (1985), to describe a period of ambiguity for learners. In both courses some participants were caught between rejecting the introduced concepts or notions about themselves and transforming their perspective.

“It is engagement in the liminal state that creates the conditions and potential for deep understanding and enables transformative learning to occur” (Nelson & Harper, 2006, p. 13). The conditions were catalyzed by a challenge (e.g., a new idea, etc.) that made the participant feel challenged, unclear, confused, or frustrated— a description of the liminal state. This

challenge or content dilemma can be equated to a critical event or a disorienting dilemma that Mezirow (1991) and Cranton (2006) stated is a trigger for critical reflection to occur.

An important factor in progressing participants through the liminal state according to (Nelson & Harper (2006) is time. Time is needed to dialog with others so that ideas can move beyond the understanding of one person to become a “critical community of conversation” (Nelson & Harper, 2006). A critical community of conversation is a conversation between participants that exposes assumptions and where participants offers different perspectives upon exposed assumptions. These conversations are dependent on the time needed to discuss, argue, posit and to reformulate and act upon ideas and discuss again in a safe environment where participants feel comfortable with exposing their viewpoints. The extended time may be needed during the PD experience to enable a critical community of conversation to occur and also after the PD experience to continue the conversation and learning.

5. Peer support and instructor support were important to the learning process and perspective change process

During the courses peer support was important for participants undergoing a perspective change. Peer support was defined as colleagues listening to/discussing their points of view and practicing together in an atmosphere of trust. Peers “taking the course together” was critical for participants in the online course. Peers were completing assignments together and discussing and clarifying points or struggles with the course content.

Peer support in this study is similar to peer learning partnerships identified by Eisen (2001) in her case study on the Teachers Partners Program. Peer learning partnerships are

“voluntary, reciprocal helping relationships between people of comparable status, who share a common or closely related learning development objective ... that leverages each participants existing storehouse of expertise” (p. 32). All participants in Eisen’s (2001) study identified peer relationships as the key factor for learning and change and this is supported by other research (Carson & Fisher, 2006; Garet et al., 2001; King, 2002b). A study conducted by King (2002b) on online professional development confirmed the importance of peer support in decreasing dependency on the instructor and improving ongoing collaboration between participants. Intentionally teaming up participants to engage in the PD together also is consistent with the teacher education component of collective participation as defined by (Garet et al., 2001).

The primary support for the face-to-face course was “instructor support” and was defined in this study as having trust in the actions of the instructors and viewing the instructors as role models. In this study, the instructors were peers and some were managers/supervisors. Instructor support was reported as a more important variable within the face-to-face course than the online one. This is consistent with King (2002b), when peer-to-peer interactions increase there is less dependency on instructors. On the other hand, in face-to-face PD, it is difficult not to be front and center as questions and dialog is often directed to the instructor.

6. Learning was insufficiently supported before and after the PD experience

A finding in this study was that few learning supports were identified by participants to have occurred before and after the instructional phase of the course. The nature of the support before the courses began included curriculum design, coaching, and encouragement to attend. Curriculum development activities (e.g., conducting a needs assessment, choosing

or developing learner-centered materials and activities, etc.) were conducted based on current research. Managers provided communication and encouragement to employees throughout the state's system to attend. Nevertheless, a few county participants indicated that their supervisors were ambivalent about the course. This may suggest there is an issue with coherence as defined by Garet et al. (2001). Coherence includes how well the professional development experience is aligned with strategic goals and policies of the organization, and how well the need and impact of the professional development is communicated throughout the system. Coherence within a system like CES may be problematic, as the state partner may not be communicating effectively with the local partner about the need and impact of the professional development experiences they offer.

Learners need support after they have experienced a perspective transformation, as their new perspective can lead to disruptions at work, as others in the workplace may not hold similar viewpoints (Cranton, 2006; Mezirow, 1991). Peers and/or managers/supervisors can provide coaching, mentoring, and listening to support learners in their efforts to act in accordance with their new perspective. Review of the transformational literature revealed a lack of empirical studies on the identification and effect of supports to learners after participation in experiences where learners are engaged in transforming their perspectives. Until more transformational learning research on the supports for learners after a transformative learning experience is conducted, insight from the human resource development and "transfer of learning" fields (Broad & Newstrom, 1991) will need to inform the field.

Overarching Considerations

The professional development experiences studied were not intentionally developed using research-based transformational learning components and supports. However, the design and instruction did include many learner-centered methods informed by research in other fields. Unintentionally, some content became the trigger for critical reflection for many of the participants. Design and instruction did facilitate peer interaction through creating teams of participants working on assignments together and in practicing processes and methods they learned as a group. This peer interaction or support along with instructor support assisted participants in creating a “critical community of conversation” as described by Nelson and Harper (2006) where conversation between participants exposed assumptions and where participants offered different perspectives upon exposed assumptions. A critical community of conversation may have been instrumental in helping common language or shared meaning to have evolved.

An original conceptual framework provided a theoretical and a practical lens to look at this study (Figure 1.1). The conceptual framework in the original research design has been modified based on the findings and further literature review. A new conceptual framework modified from the original is provided (Figure 5.1), informed by Broad and Newstrom (1992); Mezirow (1991); Cranton (2006); and Garet, et al. (2001).

The major difference between the two frameworks stems from the “learning for transfer” research by Broad and Newstrom (1992). These researchers identified each of the “players” (managers, individuals, designers) involved in each phase of PD (before, during and after) the PD experience. They also identified specific actions of each of the players.

Perspective Change in Professional Development

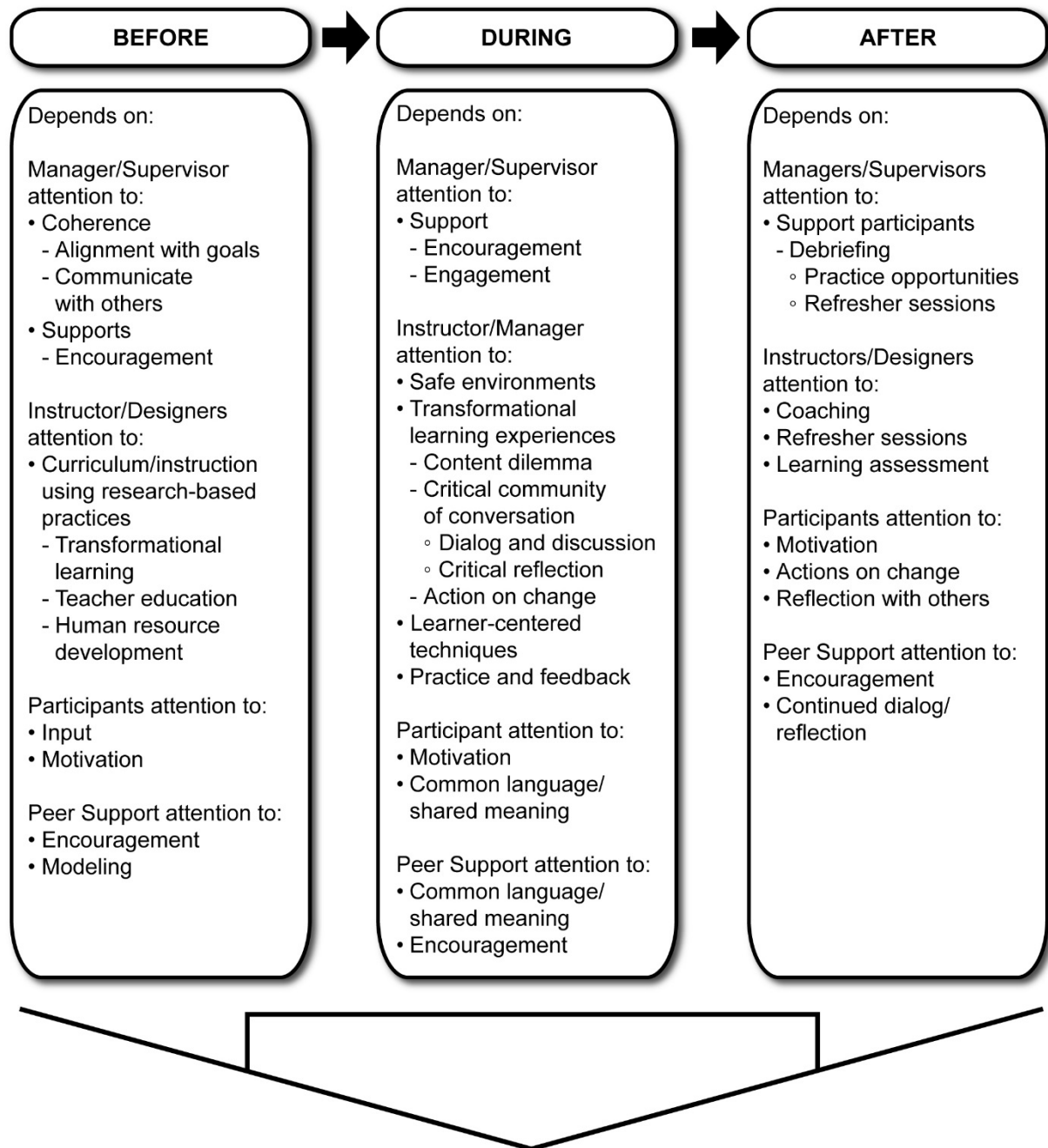


Figure 5.1. Framework for professional development for perspective change

The second major difference is that peer support and participant motivation are included in the before, during and after activities. Both peer support and participant motivation were identified as key findings and were discussed in the preceding section. The third major difference is that components and supports directly from the transformational learning field were included, as well as from teacher education and human resource development. Many of these concepts were discussed previously.

In the “before phase”, the primary role of managers and supervisors is to ensure coherence. Coherence is foundational to making organizational transformation. Coherence is defined as connecting the PD experience to a wider-set of opportunities, aligning the content with the strategic goals of the organization, and encouraging communication among all levels of the organization about the value and need to support employees in their perspective change (Garet et al., 2001).

Coherence is important to perspective change in that it helps to identify what perspectives may be need to be changed. For instance, if a strategic plan calls for employees to help community stakeholders make local decisions, then employees may need to change a viewpoint they have about their role in the community. Employees may hold a viewpoint that they are experts when the organization wants them to broaden this viewpoint.

A diagram that helps to explain the components that foster transformational change in professional development for organizations is included in Figure 5.2. It is informed by research from: Mezirow (1991), Cranton (2006), and Garet et al. (2001).

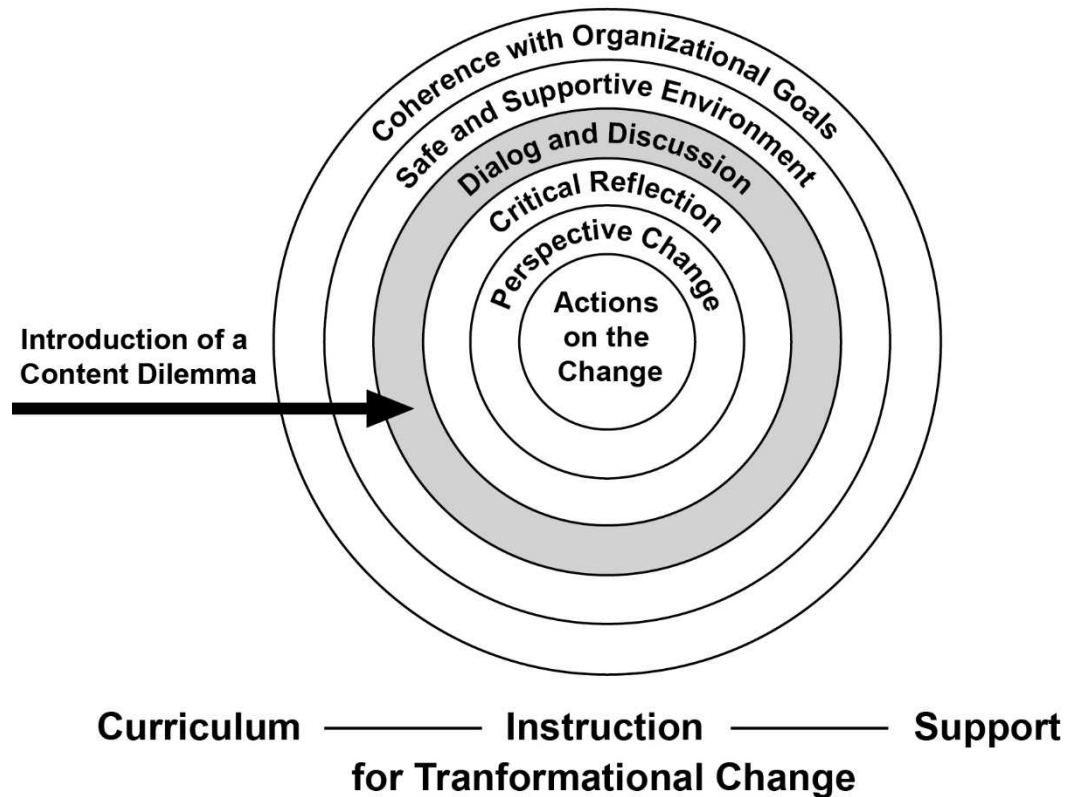


Figure 5.2. Transformational learning components for perspective change in professional development

Provided that coherence is present, the process of choosing curriculum and designing instruction can begin. Being intentional and sensitive to providing a safe and supportive environment for learning underlies the success of the PD experience. In this study a trusting environment was essential to those who underwent a perspective change and to those who were in the “act of becoming.” Without learners feeling safe and supported in their learning they could not engage in the dialog and discussion that was necessary to critically reflect upon the introduced content dilemma. Providing opportunities and techniques for creating dialog and discussion where participants can engage test and question their own assumptions and those of others is critical as well. These activities enable the individual and organization

to engage widely in critical reflection. Critical reflection is a necessary activity to revise and transform perspectives. Planning in the “before phase” for supporting learners who have experienced a perspective change in the “after phase” can improve transfer or action on learning (Cranton, 2006).

Limitations

This study was conducted with two important limitations that should be noted when interpreting the findings. The first limitation is that grounded theory methods were initially applied to the research design. As I progressed with the study, it became clear a better fit was a case study methodology. Grounded theory methodologies are appropriate for research whose purpose is to establish new theory and case studies are more appropriate for research wherein the purpose is to describe or explore a phenomenon with a specific case or multiple cases (Creswell, 2007). A particular grounded theory method I initially employed was conducting a thorough literature review after data analysis. This method, I believe, hindered the validity and reliability of the survey instrument. The reason grounded theorists refrain from conducting a thorough literature review is to “avoid seeing the world through the lens of extant ideas” (Charmaz, 2006, p. 6). Whereas this approach helped me avoid pre-conceived ideas throughout data analysis, it may have adversely affected the survey design.

The original purpose of the survey and the actual use of the survey were different. The original intent for the survey was to identify interviewees and the secondary purpose was to evaluate the courses to reciprocate design team members for their interview time. The intention was not to use the evaluative questions in this study, but after analysis several questions proved useful to corroborate themes emerging from the interviews. If survey

questions were better designed, and these questions had been analyzed before the interviews the survey and the study would have been strengthened.

Another limitation is the issue of generalizability in qualitative studies. According to Onwuegbuzie and Leech (2010), there are two types of generalizations used in qualitative research. These are analytic generalizations and case-to-case transfer generalizations. Analytic generalizations are “applied to a wider theory on the basis of how selected cases “fit” with general constructs (Curtis, Gesler, Smith, & Washburn, 2000, p. 1002). Case-to-case transfer involves making generalizations from one case to another similar case (Firestone, 1993). In the case of this research, general claims or findings and discussion were supported by other research from several fields—teacher education, human resource development, and transformational learning. Most of the findings in this study were confirmed by both courses, although not all professional development can be generalized even within CES. For instance, both courses had design team members that conceptually understood and practiced constructivist (learner-centered) methods during the instruction. These methods were consistent with many research-based practices, and the designers had strong backing from management to conduct the courses. These and other variables may or may not be present in all CES professional development.

Future Research

This study was designed to add to the transformational learning in professional development body of literature, through better understanding how professional development fostered perspective change. This research focused on the setting of CES, although many findings are pertinent to professional development in other social sector settings. For instance

organizations that provide PD for their staff would benefit from understanding the importance of including a plan for providing emotional and follow-up learning support to foster perspective change after PD is completed.

Several gaps in the transformational learning literature were identified in this study. The first gap is that little is known about the “action phase” of transformational learning. Mezirow (1991) defined the action phase, but no peer-review articles providing detailed information about the phase were found in the literature review. Research that can provide more insight into how to identify and support “action on change” could be helpful to professional development practitioners.

The second gap is the lack of a practical and efficient way to measure change in individual perspective. Currently, the primary way a perspective change is determined through analyzing transcripts for premise reflection. Research identifying perspective change indicator words or phrases from written documents and dialogue could fill this gap. This calls for a meta-analysis of past research of transcripts on perspective change. Key findings identified in the study also suggest further study.

- Explore transformational learning in professional development for organizational change using both individuals and groups as the unit of analysis. This will provide further understanding how employee teams can make organizational change.
- Explore the transformational learning phase of “action on change” or “transfer of learning” (e.g., participants who in a study have undergone a perspective change with those who have not).

- Explore the “process of becoming” (e.g., with participants identified in a study to see if after a professional development experience they have moved beyond the liminal state to a changed perspective or not and if so what contributed to any change).
- Examine how organizational coherency affects the presence of perspective change in professional development. (e.g., compare one program where managers and supervisors are on board with and understand their role in providing learning supports with a control program).
- Examine a course designed for perspective change using the framework provided in Figure 5.1 (i.e., would a larger percentage of participants change perspectives and what would be the change in action or transfer of learning to the workplace?)
- Examine the learning supports before and after a learning experience that can assist learners with making a perspective change.
- Explore the learning supports that contribute to participants moving through the ‘act of becoming’ or liminal zone of transformation.

Implications and Recommendations for Practice

Organizational change is best achieved using a combination of learning, performance and change solution interventions (Gilley, Dean, & Bierma, 2001). However, learning solution interventions such as professional development tend to be preferred for educationally-based organizations (Collins, 2005). As the current study revealed, designing professional development to make organizational change involves creating opportunities and supports for perspective change to evolve in an atmosphere of coherency. This calls for organizational change agents (administrators, managers and others charged with

organizational change) and professional development practitioners to change their own perspectives on how both organizational change is made and how professional development should be delivered. Delivery should be based on transformational learning best practices instead of relying on practices that may only change knowledge and skills.

The elements found in this study that enhance conditions for a perspective change are consistent with and augment the action imperatives identified by Marsick and Watkins (1999) and the elements of a learning organization identified by Senge (1991). These include: creating continuous learning opportunities, promoting inquiry and dialogue, encouraging collaboration and team learning, establishing systems to share and capture learning, empowering employees to a collective vision, connecting the organization to the environment and providing strategic leadership for learning. Understanding how to incorporate these elements requires a more thorough comprehension of both individual and group transformation. This can only be achieved if those responsible have transformed their paradigms about the goals of professional development and how organizational change is made.

The design of professional development experiences for perspective change can be improved. A detailed framework for “learning for perspective change in professional development” utilizing Broad and Newstrom’s “framework for learning transfer” was presented in this chapter (Figure 5. 1). This framework can serve professional development practitioners in all fields. A simpler version of Figure 5.1 is provided in Figure 5.3.

The table provided in Appendix D addresses “learning for perspective change in professional development.” It provides details for practitioners to consider when designing professional development. This table is targeted to four specific audiences: participants,

Primary Functions of Learning for Perspective Change in Professional Development

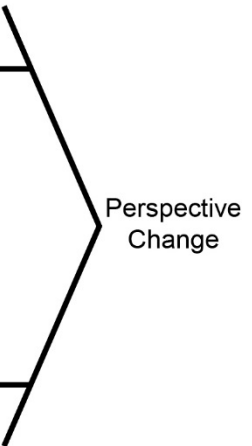
Roles	BEFORE	DURING	AFTER	
Participant	Motivation	Engagement	Support	 Perspective Change
Instructor/ designer	Curriculum for TL	Instruction learner-centered	Support	
Manager/ supervisor	Coherence	Support	Support	
Peers	Support	Support	Support	

Figure 5.3. Primary functions for learning for perspective change in professional development by time and players

instructors/designers, managers/supervisors, and peers. It includes information identified from this study as well as research from other fields. The following provides highlights from the table regarding professional development practices that can be applied to foster perspective change:

- Involve managers/ supervisors and instructors/designers to motivate new and experienced staff by encouraging attendance, helping them understand their role in attending, and how attending will impact the organization (coherence).
- Encourage instructors/designers to intentionally construct the course for perspective change when it is appropriate to do so using current research.
- Involve managers/ supervisors and instructors/designers in debriefing with participants to assess if perspectives have changed, if they are in the “act of becoming,” or if they have resisted change. Assist them by providing coaching/mentoring and course refreshers.

- Communicate plans and purposes to all managers/ supervisors and stakeholders in the “before phase.”
- Design for and foster the creation of and support of a “critical community of conversation” and to assist in developing a common language and shared meaning amongst participants.
- Work with managers/supervisors to selectively choose employees to participate whose job roles “fit” with the content. Confusion about what managers/supervisors want employees to transfer may ensue, if employees in attendance are not expected to use the content, skills, knowledge or new perspective in their jobs.

The following recommendations shared can be presented directly to instructors/designers. These recommendations can broadly be applied within any organization:

- Design professional development for the appropriate type of learning (i.e. instrumental, communicative or emancipatory/transformational).
- Support participants in their learning before, during and after the professional development experience. Learning supports for each phase (before, during and after) should be planned from the beginning and include all stakeholders in the design (Participants, Instructors/Designers, Managers/Supervisors and Peers).

Recommendations for Cooperative Extension Service

This study explored perspective change or transformation within professional development using CES as the setting. The purpose was to provide insight into how organization-wide change through PD can best be administered. The findings and the recommendations already shared in this chapter have specific implications to CES. The recommendations shared in this section are based not only upon the findings and the literature, but my own 25 year experience as an Extension employee. These recommendations include challenging ourselves, attending to organizational coherence or alignment and intentionally designing PD for perspective change.

The first recommendation for CES is consistent with the recommendation provided by Keith Smith, Director of Ohio State University (as cited in Seevers & Graham, 2012). As Smith stated: "...extension leadership and personnel must learn to embrace working outside of their comfort zone....we must challenge ourselves to do many things that Extension has not traditionally done so we can survive well into the future" (p. xiv). The importance of challenging ourselves, implies doing the uncomfortable work of exposing firmly held assumptions, beliefs and values about our organization and how its employees do the work of the organization. This uncomfortable work includes learning how to engage in robust dialog and discussions in safe trusting environments, where critical communities of conversation help us challenge the status quo.

The second recommendation is CES administrators and managers have an important responsibility to attend to coherence or alignment. Communication to align the actions of decision-makers (e.g., upper administration, program units, and local county extension councils) is necessary to make important organizational change. If PD is used as a change

strategy, and more often than not it is, then many of the components identified in this research and the literature to make individual transformation and group transformation can assist with making change in CES. The first step is to foster coherence is to improve communication within all levels of CES and with stakeholders about the strategic direction and how PD offered to employees assists with the strategic direction. It is not just sharing or telling the direction, but stimulating a critical community of conversation about long-held assumptions about the role of CES. These activities take time, and need to be facilitated in a safe and supportive atmosphere. Until a direction is determined, the assumptions holding the organization back are identified, and a critical community of conversation creates new individual and organizational perspectives, the future of CES will be at a standstill.

The third recommendation is to intentionally design PD for its purpose. The habit within CES, and many other organizations, is to fit all types of learning around a pre-determined design. For instance, all PD in a program unit may be placed in two two-day in-service trainings held yearly. The design might be already determined a keynote and 90 minutes sessions with a closing at the end. Sessions include a mix of learning, i.e., skill-building, new knowledge, information, and perspective change. Many times little regard is paid to the time and methods needed for the type of learning, especially when it comes to changing perspectives. Often administrators/managers push out a new strategic direction, without understanding what assumptions need to be changed and the time and methods needed to make the change. In this study special PD experiences were offered outside of the traditional way CES often designs PD and this ingenuity should be encouraged. Given this, not all PD should be developed for perspective change. Specific skills, knowledge and

information needed to improve employee performance doesn't always require a new, more open perspective.

CES has unique issues that impact how professional development is conducted. Many staff are isolated geographically from other employees whose work most resembles theirs. Because of this it is important to plan opportunities for these employees to gather, both face-to-face and online, to engage in learning for perspective change. Staff need to develop and find time for relationships and for opportunities to develop shared meaning through a critical community of conversation. Managers and supervisors need to support these gatherings by providing encouragement and resources for perspective change to occur. Finally, managers, supervisors, instructors/designers of PD should pay more attention to supporting employees after the PD experience. Plan for continued learning after the initial experience should be developed and supported. This would include release time for instructors to enact the plan in concert with participant supervisors.

Closing Remarks

This study revealed perspective change in two PD experiences that were not explicitly designed for transformational learning. It was not totally unexpected that transformational learning could be fostered because the instructors/designers employed good curriculum development methods before instruction and during instruction they used learner-centered methods. Nevertheless, this is not effective and efficient as PD is expensive and time consuming. The literature suggested a greater number of participants may have had a perspective change if PD were designed deliberately for perspective change. The argument made here is that, if PD is consciously and intelligently designed for transformational

learning aligned with organizational change goals, then PD will become a more effective organizational change tool.

APPENDIX A. SURVEY QUESTIONNAIRES



A-1. PARTNERSHIP COURSE QUESTIONNAIRE

Before You Begin

We are asking for your consent to participate in a study about how Iowa State University Extension & Outreach supports its employees through professional development. You are invited to participate in this study because you have completed the Building Partnerships to Benefit Youth last year.

If you agree to participate in this study, you will complete an online questionnaire about your experiences in the course. **Based on your responses you may be asked to participate in one or more interviews and share relevant documents.**

The questionnaire will ask what you learned in the course, how you were supported while taking the course, and what challenges you had with the course. The questionnaire will take 20-30 minutes to complete. At the end of the survey you will be asked to provide your name. This is optional, but if you provide your name you may be contacted to participate in a one hour interview about the course.

If you are chosen for an interview you will be asked about assumptions you had about the course and how the organization assisted you in learning. You may be asked to share documents (emails, agendas, etc.) that helped your learning in the course or that shows organizational assistance provided. After the interview the researcher may contact you concerning follow-up questions via email or phone. During the interview you will be reminded not to provide information or opinions that will compromise your position and/or identify.

If you decide to participate in the study, the information gathered will be used to improve future ISU Extension and Outreach professional development for staff. Your participation in this questionnaire and any subsequent interview is completely voluntary and you can choose to skip any question that you do not wish to answer or makes you feel uncomfortable.

There are some potential risks of participating in the interview portion of this study, such as discomfort in having the interview audio taped, answering questions about course challenges, and sharing this information with someone you not know well or have opinions about. Your name, people, and places you mention in the interview or in any open-ended question on the questionnaire will be changed to reduce the chances that your responses are linked back to

you or other colleagues. Although there are several measures in place to avoid individuals being readily identifiable, total confidentiality cannot be guaranteed.

All records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: any identifiers will be kept with the data and remain confidential through use of password protected files; limited access to data by the investigators; and hard copies will be stripped of personal identification and secured in a locked file. It is anticipated that all records will be destroyed 2 years after publication. Your identity will remain confidential to the extent it can be in any published results.

If you have any questions about the survey content, contact Dr. Mike Retallick at 515-294-4810; mail to: msr@iastate.edu or Keli Tallman at 515-294-1017 ktallman@iastate.edu

If you have any questions about the rights of research subjects please contact the IRB Administrator, (515) 294-4566; mail to: IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames Iowa 50011.

The link to the questionnaire is: _____

By filling out the questionnaire you are giving permission to participate in the questionnaire portion of the research. Within the questionnaire you will be asked if you are willing to voluntarily agree to participate in the interview portion of the research.

Sincerely,

Dr. Mike Retallick
Assistant Professor
Agriculture Education & Studies

Ms. Keli Tallman
ISU Extension & Outreach 4-H
Evaluation Specialist

1. Do you agree with the above statements?

- ☐ I have read the information above and I consent to take part in the questionnaire.
- ☐ I do not wish to participate in the following questionnaire or any interview.

Changes in Partnership Development

2. Please rate your involvement with community partners in developing youth programs.

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

3. Please rate your confidence in developing new community partnerships.

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

4. Please rate the effectiveness of your partnership relationship building skills.

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

5. Please rate the quality of your youth programs built with partners.

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

6. Please rate your attitude about engaging with community partners

	Poor	Fair	Good	Very Good	Excellent
Before taking the course					
While taking the course					
Now					

7. Since participating in the Partnership Course, have you...

	Yes	No
Moved a current partnership to a higher stage?		
Advocated using the 4-H and Extension brand with a new program?		
Broadened your definition of a 4-H club?		
Shared the benefits of partnering with 4-H?		
Made 4-H goals and policies (non-negotiables) clear with potential partners before entering into a partnership?		
Used the community mapping tools?		
Developed an agenda for a partnership meeting?		
Conducted a cold call?		
Assessed how a potential partner is aligned with 4-H goals and policies before entering into the partnership?		
Assessed the merit of starting a partnership?		
Facilitated a conversation about each partner's role and responsibility?		
Analyzed the need for a memorandum of Understanding (MOU)?		
Assessed partner training needs?		
Anticipated resource (i.e. staff, materials, funding) needs with partners?		
Used the evaluation tools to improve a partnership relationship?		
Used a tool to improve a partnership program?		

8. Did you experience success with partnership development during or after the course?

Yes	No	
		(If you answer Yes, complete question 14)
		(If you answer No, complete question 15)

9. If you experienced success with developing a partnership after taking the course, please share what made it successful in the box below. (If you did not experience success, go to question 15.)

--

10. If you did not experience success with developing a partnership after taking the course, please share why not in the box below.

--

11. Was the course required?

- ☐ Yes
☐ No

12. Please rate your interest in taking the course when you signed up for the course.

- ☐ Not at all
☐ Only a little
☐ Some
☐ A great deal
☐

13. Do you believe you experienced a time during this course when you realized that your values, beliefs, opinions, or expectations had changed?

- ☐ Yes
☐ No

14. To what extent did any of the learning concepts or discussions from the Partnership Course challenge your thinking or assumptions? (pick one)

	A great deal
	Some
	Only a little
	Not at all

15. What concepts or discussion challenged the way you see the world or your work? (I was really challenged with the assumption that...

Or write a brief story about concepts that challenged you in this course. I could be positive or negative. Be as descriptive as possible. Include things like who was involved, what was happening, and any feeling you may have had. Tell the story chronologically- what happened before, during and after the course).

Which of the following helped to influence any changes in assumptions you had about the course concepts?

16. Was it a person who influenced the change?

- ☐ Yes
☐ No

17. If “yes”, was it..... (check all that apply)

- ☐ Support from office staff
☐ Support from colleagues/peers
☐ Support from supervisors (s)
☐ Your own motivation
☐ A challenge from one of the instructors
☐ Support from instructor (s)
☐ Other (please specify)

18. Was it part of a course assignment that influenced the change?

- ☐ Yes
☐ No

19. If yes, what was it? (check all that apply).

- ☐ Course projects
☐ Reading and responding to colleagues posts

- ☐ Nontraditional structure of the course
- ☐ Deep, concentrated thought
- ☐ Verbally discussing your concerns
- ☐ Course activities/assignments
- ☐ Personal reflection
- ☐ Assigned readings
- ☐ Other (please specify)

20. Was it something else that influenced the change?

- ☐ Yes
- ☐ No

21. If Yes, what was it?

22. Please identify the following factors you believe best improve an individual's likelihood of building and maintaining successful partnerships. **Choose three.**

	Training in partnership development
	Encouragement from the office staff
	Supervisor's encouragement
	Instructors encouragement or support
	Peer encouragement or support
	Skill in relationship building
	Own motivation
	Pressure (if it was required or expected for you to engage in the course skills)
	Skill in relationship building
	Belief in your own organization's goals
	Belief that developing partnerships is your job
	Belief in the goals of your partner's organization
	Belief that partnerships will increase youth opportunities
	Having role models who are good at partnership development
	Time to engage in new skills learned
	None of the above
	Other (please specify)

23. Which position title best describes what you do? (X only one)

	County Youth Program Coordinator or Educator
	Field Youth Program Specialist or Educator
	State Youth Program Specialist or Educator
	Regional Extension Specialist or Educator
	Other (please specify)

24. In which state did you work when you took the course?

	Iowa
	Minnesota
	Other (please specify)

25. How many years have you worked for 4-H Extension?

26. In order to conduct follow up research we would like to have your contact information. By giving your name and email you are agreeing to be interviewed.

Name:

Email:

Thank you so much for participating in this survey.

IOWA STATE UNIVERSITY
Extension and Outreach

Iowa State University Extension programs are available to all without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

A-2. FACILITATION COURSE QUESTIONNAIRE

Before You Begin

We are asking for your consent to participate in a study about how Iowa State University Extension & Outreach supports its employees through professional development. You are invited to participate in this study because you have completed the Facilitation Course last year.

If you agree to participate in this study, you will complete an online questionnaire about your experiences in the course. **Based on your responses you may be asked to participate in one or more interviews and share relevant documents.**

The questionnaire will ask what you learned in the course, how you were supported while taking the course, and what challenges you had with the course. The questionnaire will take 20-30 minutes to complete. At the end of the survey you will be asked to provide your name. This is optional, but if you provide your name you may be contacted to participate in a one hour interview about the course.

If you are chosen for an interview you will be asked about assumptions you had about the course and how the organization assisted you in learning. You may be asked to share documents (emails, agendas, etc.) that helped your learning in the course or that shows organizational assistance provided. After the interview the researcher may contact you concerning follow-up questions via email or phone. During the interview you will be reminded not to provide information or opinions that will compromise your position and/or identify.

If you decide to participate in the study, the information gathered will be used to improve future ISU Extension and Outreach professional development for staff. Your participation in this questionnaire and any subsequent interview is completely voluntary and you can choose to skip any question that you do not wish to answer or makes you feel uncomfortable.

There are some potential risks of participating in the interview portion of this study, such as discomfort in having the interview audio taped, answering questions about course challenges, and sharing this information with someone you not know well or have opinions about. Your name, people, and places you mention in the interview or in any open-ended question on the questionnaire will be changed to reduce the chances that your responses are linked back to you or other colleagues. Although there are several measures in place to avoid individuals being readily identifiable, total confidentiality cannot be guaranteed.

All records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, the

Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: any identifiers will be kept with the data and remain confidential through use of password protected files; limited access to data by the investigators; and hard copies will be stripped of personal identification and secured in a locked file. It is anticipated that all records will be destroyed 2 years after publication. Your identity will remain confidential to the extent it can be in any published results.

If you have any questions about the survey content, contact Dr. Mike Retallick at 515-294-4810; mail to: msr@iastate.edu or Keli Tallman at 515-294-1017 ktallman@iastate.edu

If you have any questions about the rights of research subjects please contact the IRB Administrator, (515) 294-4566; mail to: IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames Iowa 50011.

The link to the questionnaire is: _____

By filling out the questionnaire you are giving permission to participate in the questionnaire portion of the research. Within the questionnaire you will be asked if you are willing to voluntarily agree to participate in the interview portion of the research.

Sincerely,

Sincerely,

Dr. Mike Retallick
Assistant Professor
Agriculture Education & Studies

Ms. Keli Tallman
ISU Extension & Outreach 4-H
Evaluation Specialist

3. Do you agree with the above statements?

- ☐ I have read the information above and I consent to take part in the questionnaire.
- ☐ I do not wish to participate in the following questionnaire or any interview.

Changes in Partnership Development

4. Please rate your involvement with facilitation (helping groups reach consensus).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

3. Please rate your confidence as a facilitator (helping groups reach consensus).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

4. Please rate the effectiveness of your facilitation skills (helping groups reach consensus).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

5. Please rate your attitude about facilitation (helping groups to reach consensus).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

6. Please rate your involvement with being facilitative (using good interpersonal skills and tools to seek solutions with others in various settings).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

7. Please rate your confidence in being facilitative (using good interpersonal skills to seek solutions with others in various settings).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

8. Please rate the effectiveness of your facilitative skills ((using good interpersonal skills to seek solutions with others in various settings).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

9. Please rate your attitude about being facilitative ((using good interpersonal skills to seek solutions with others in various settings).

	Poor	Fair	Good	Very Good	Excellent
Before taking this course					
Immediately after you took the course					
Now					

10. Since participating in the Facilitation Course, have you.....

	Yes	No
Arranged the physical space to support the meeting purpose?		
Set ground rules?		
Applied a least one of the participatory processes?		
Recognized conflict and its role within group learning and maturity?		
Provided a safe comfortable environment for conflict to surface?		
Managed disruptive group behavior?		
Created opportunities for participants to benefit from the diversity of the group?		
Questioned and summarized to elicit a sense of the group's collective perceptions or conclusions?		
Helped a group make decisions?		

Managed group process?		
Assisted the group in reflection of the experience?		
Used various approaches to achieve group consensus?		
Diagnosed a person's behavior in a group		
Encouraged positive behaviors in a group setting?		
Asked clarifying questions?		
Changed your view of being a leader?		
Recognized stages of group behavior in a group (Norming, Storming, etc.)?		

11. Did you experience success with partnership development during or after the course?

Yes	No	
		(If you answer Yes, complete question (12))
		(If you answer No, complete question (13))

12. If you experienced success facilitating (helping a group reach consensus) or being facilitative (using good interpersonal skills to seek solutions with others in various settings) after taking the course, please share what made it successful in the box below. (If you did not experience success, go to question 13)

--

13. If you did not experience success with developing a partnership after taking the course, please share why not in the box below.

--

14. Was the course required?

- ☐ Yes
☐ No

15. Please rate your interest in taking the course when you signed up for the course.

- ☐ Not at all
☐ Only a little
☐ Some
☐ A great deal

16. Do you believe you experienced a time during this course when you realized that your values, beliefs, opinions, or expectations had changed?

- ☐ Yes
☐ No

17. To what extent did any of the learning concepts or discussions from the Partnership Course challenge your thinking or assumptions? (pick one)

	A great deal
	Some
	Only a little
	Not at all

18. What concepts or discussion challenged the way you see the world or your work? (I was really challenged with the assumption that...

Or write a brief story about concepts that challenged you in this course. I could be positive or negative. Be as descriptive as possible. Include things like who was involved, what was happening, and any feeling you may have had. Tell the story chronologically- what happened before, during and after the course).

--

Which of the following helped to influence any changes in assumptions you had about the course concepts?

19. Since participating in the Facilitation Course, which of the following tools have you used?
(Select all of those you have used)

Working Agreement	Yes	No
Contracting		
Icebreakers		
Brain mapping		
One-at-a-time brainstorming		
Sticky note Brainstorming		
Multi-voting		
Loop and Group		
Nominal Group Technique		
Action Planning		

20. Which is your favorite from the list above?

21. Was it a person who influenced the change?

- ☐ Yes
☐ No

22. If “yes”, was it..... (check all that apply)

- ☐ Support from office staff
☐ Support from colleagues/peers
☐ Support from supervisors (s)
☐ Your own motivation
☐ A challenge from one of the instructors
☐ Support from instructor (s)
☐ Other (please specify)

23. Was it part of a course assignment that influenced the change?

- ☐ Yes
☐ No

24. If yes, what was it? (check all that apply).

- ☐ Course projects
☐ Reading and responding to colleagues posts
☐ Nontraditional structure of the course
☐ Deep, concentrated thought
☐ Verbally discussing your concerns
☐ Course activities/assignments
☐ Personal reflection

- ☐ Assigned readings
- ☐ Other (please specify)

25. Was it something else that influenced the change?

- ☐ Yes
- ☐ No

26. If Yes, what was it?

27. Please identify the following factors you believe best improve an individual's likelihood of building and maintaining successful partnerships. **Check all that apply**

<input type="checkbox"/>	Training in partnership development
<input type="checkbox"/>	Encouragement from the office staff
<input type="checkbox"/>	Supervisor's encouragement
<input type="checkbox"/>	Instructors encouragement or support
<input type="checkbox"/>	Peer encouragement or support
<input type="checkbox"/>	Skill in relationship building
<input type="checkbox"/>	Own motivation
<input type="checkbox"/>	Pressure (if it was required or expected for you to engage in the course skills)
<input type="checkbox"/>	Skill in relationship building
<input type="checkbox"/>	Belief in your own organization's goals
<input type="checkbox"/>	Belief that developing partnerships is your job
<input type="checkbox"/>	Belief that possessing strong facilitation skills is a part of the job
<input type="checkbox"/>	Belief that facilitation skills will increase opportunities for Extension
<input type="checkbox"/>	Having local colleagues go through the course together
<input type="checkbox"/>	Having role models who are good at partnership development
<input type="checkbox"/>	Time to engage in new skills learned
<input type="checkbox"/>	None of the above
<input type="checkbox"/>	Other (please specify)

28. Which position title best describes what you do? (X only one)

<input type="checkbox"/>	County Paid Staff
<input type="checkbox"/>	Field Specialist
<input type="checkbox"/>	Campus or State Specialist
<input type="checkbox"/>	Regional Extension Director
<input type="checkbox"/>	Other (please specify)

29. In which state did you work when you took the course?

	Southwest Iowa Workshop (Carroll)
	REEDs and invited staff focus (Des Moines)
	Northeast Iowa Workshop (Fayette County)
	Southeast Iowa Workshop (Ottumwa)
	Other (please specify)

30. How many years have you worked for Extension?

26. In order to conduct follow up research we would like to have your contact information. By giving your name and email you are agreeing to be interviewed.

Name:

Email:

Thank you so much for participating in this survey.

IOWA STATE UNIVERSITY
Extension and Outreach

Iowa State University Extension programs are available to all without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

APPENDIX B. PROTOCOLS AND SECONDARY ARTIFACTS

B-1. Course Participant Interview Protocol

Course Participant Interview Protocol

Job title/years of service of interviewee:

Interviewee: _____

What to Bring:

Date: _____

- Tape Recorder/tape- test out before.
- Pull out the Questionnaire and review answers to questions for this Participant to use a prompt as needed. (Particularly the Challenge Question and Organizational Support Question).

Time: _____

Place: _____

Interviewer: _____

1. Set the Stage:

- Introduce Self.
- *Review why I am interviewing them.*
 - *Want to know more about what you have to say about this Professional Development opportunity.*

2. Share Study Focus:

- The study focuses on what challenges you may have experienced with the course content and what you did or what the organization did to assist you with these challenges.

3. Share Ground Rules:

- Answers to the questions will be recorded and transcribed, but names will remain confidential.
- The transcriptionist will change your name, names of other people, and place names you share with me. Except to me your name is not connected to the data directly. If the research analysis uncovers more questions to ask you, your interview will have a number and I will know how to contact you based on that number.
- Anything you share with me in the interview will not be used in any way to harm or embarrass you.
- You can choose to skip any question I ask.

Questions:	Interviewer Notes :
1. Share with me a little bit about you and your work.	
2. Share some reasons that you took the course.	
3. What assumptions about (<u>facilitation</u> or <u>partnership development</u>) as a part of your job, did you have <ul style="list-style-type: none"> ▪ before the course started? ▪ during the course? ▪ after the course? 	
4. How did these assumptions affect your attitudes about the course? About <u>Facilitation</u> or <u>Partnership Development</u> as a strategy to reach organizational goals?	
5. Describe any challenge you had with the course content. (Refer back to the survey question dealing with this for prompts). <ul style="list-style-type: none"> ▪ Before ▪ During ▪ After the course 	
6. What “help” or support did you receive from your organization to help you through these challenges?	
7. Who provided the “help”?	
8. Describe the impact <u>facilitation</u> or <u>partnership development</u> has on your work?	

B-2. Course Creator Protocol

Course Participant Interview Protocol

Interviewee: _____

Date: _____

Time: _____

Place: _____

Interviewer: _____

Job title/years of service of interviewee:

What to Bring:

- Tape Recorder/tape- test out before.
- Pull out the Questionnaire and review answers to questions for this Participant to use a prompt as needed. (Particularly the Challenge Question and Organizational Support Question).

4. Set the Stage:

- Introduce Self.
- Review why I am interviewing them.
 - Want to know more about what you have to say about this Professional Development opportunity.

5. Share Study Focus:

- The study focuses on what challenges you may have experienced with the course content and what you did or what the organization did to assist you with these challenges.

6. Share Ground Rules:

- Answers to the questions will be recorded and transcribed, but names will remain confidential,.
- The transcriptionist will change your name, names of other people, and place names you share with me. Except to me your name is not connected to the data directly. If the research analysis uncovers more questions to ask you, your interview will have a number and I will know how to contact you based on that number.
- Anything you share with me in the interview will not be used in any way to harm or embarrass you.
- You can choose to skip any question I ask.

Questions:	Key Notes
1. Describe the course.	
2. What were the reasons the course was developed?	
3. What support did you receive from your supervisors or peers or organization to encourage staff to participate?	
4. What assumptions about (<u>facilitation</u> or <u>partnerships development</u>) did you believe staff had <ul style="list-style-type: none"> ▪ before the course started? ▪ during the course ? ▪ and after the course? 	
5. What supports or help did you provide to staff taking the course? <ul style="list-style-type: none"> ▪ Before the course started. ▪ During ▪ After the course If you have documentation would you be willing to share.	
6. What parts of the content presented challenges for the students?	
7. How did you support students learning during the course? Share what you might have said or did to help your staff to change their assumptions.	
8. Describe the course have an impact on the organization?	

B-3. Secondary Artifacts

Facilitation Course

Broshar, D. (2012). Facilitation Course Follow-up Evaluation. [e-mail] .

Haskell, J., Cyr, L. & McPhail, G. (2007). *Strengthening Your Facilitation Skills Level 1*. The University of Maine Cooperative Extension.

Partnership Course

Bremseth, T., Grant, S., Levings, J., Hartung, M., Harris, A., Cogshell, N. (2009). Grow 4-H: Building Partnerships to Benefit Youth [Toolkit]. In the Grow 4-H: Building Partnerships to Benefit Youth Online Course [Online course]. (Available from Iowa State University and University of Minnesota. Retrieved from <http://www.extension.iastate.edu/4h/partnershiptraining>

Pleskac, S., Deidrick, J., Bremseth, T., Ehlers, C., & Grover, V. (2007). *Tri-State 4-H Club Growth and Expansion Report*. (Unpublished report). *Iowa State University Extension, University of Minnesota Extension, and University of Wisconsin Extension*.

Levings, J., Bremseth, T., Grant, S., Hartung, M. & Harris, A. (2010). Grow 4-H: Building Partnerships to Benefit Youth [Online course]. *Iowa State University and University of Minnesota*. Retrieved from <http://www.extension.iastate.edu/4h/partnershiptraining>

Course Syllabi

Grow 4-H Building Partnerships to Benefit Youth Evaluation. Prepared by Sam Grant.

Grow 4-H Building Partnerships to Benefit Youth Evaluation. Prepared by Sam Grant.

Marketing email.

APPENDIX C. AUDIT TRAIL OF THEMES

Themes	Affirmation	Common Language	Skill Building	Role Perception	Confidence	Transfer/ Action	Self-Awareness	Mind-set Change (Act of Becoming)	Evidence of Perspective Change (Transformation)
Facilitation Participants									
IFp7	X		X, S12		X	X, S12	X		
IFp8			X		X	X, S12	X	X	
IFp9			X, S12,18		X	S12,18		X	
IFp10	X	X	X, S12,18		X S12	X, S12	X		X
IFp11			X	X		X	X		X
IFp12			X, S12	X	X, S12	X, S12		S18	
IFp13		X	X	X		X			
IFp14			X				X	X, S18	
IFp15	X		X	X		X			
IFp16		X	X	X	X	X	X		X
Partnership Participants									
IPp5	X	X	, S12,	X		S12		X	
IPp6			X	X		X	X		X
IPp7	X						X	X	
IPp8			X, S18	X	X	X		X, S18	
IPp9	X		X	X			X		X
IPp10	X	X	X	X		X, S			
Facilitation Design Team Members									
IFd1		c	c	c					
IFd2			c	c		c			
IFd3		c	c					c	
IFd4		c		X		X	X	X	X
IFd5 (6)						c			
Partnership Design Team Members									
IPd1			X			c		X	
IPd2									
IPd3		C	X			X		X	
IPd4			c		c	c		c	
Partnership Survey Questions		SPp16 C	10/16 respondents			10/16 SPp18 SPp12			
Facilitation Survey Questions			20/22 respondents		SFp15 SFp18	20/22 Success			

X indicates transcript evidence; c indicates corroborating evidence from the design team member; S # indicates evidence of the theme was found in an open-ended survey question

APPENDIX D. PERSPECTIVE CHANGE PRACTITIONER CHART

Player	Before	During	After
Participant	<ul style="list-style-type: none"> ● Provide input into PD planning ● Participate in assignments ● Pay attention to attitude ● Experienced staff understand role as a mentor 	<ul style="list-style-type: none"> ● Link with a friend or other participants to continue course discussions ● Actively participate ● Plan for how to apply course content ● Create common language & shared meaning 	<ul style="list-style-type: none"> ● Set goals, practice skills ● Collect data on successes ● Review PD content periodically ● Maintain contact with other participants ● Continue to discuss and create shared meaning
Instructor/ Designer	<ul style="list-style-type: none"> ● Align PD with strategic plans of ● Involve managers and participants in needs assessments ● Attend to good curriculum design and instruction. ● Design experiences using a content dilemma, dialog & discussion, critical reflection, action on learning. ● Design peer coaching and learning opportunities ● Develop participant readiness 	<ul style="list-style-type: none"> ● Create a safe supportive environment for robust discussion ● Use of learner-centered methods ● Provide time for discussion ● Encourage reflection ● Use of open-ended questions, wait-time, etc. ● Use of reflective blogs, journaling, role-plays, simulations, cultural immersion, use of films, arts, case studies, action research projects ● Give individualized feedback 	<ul style="list-style-type: none"> ● Contact participants to offer support & encouragement ● Provide refresher/problem-solving sessions ● Set up a recognition system ● Conduct evaluations ● Report out impacts
Manager/ Supervisor	<ul style="list-style-type: none"> ● Collect baseline performance data ● Conduct or support needs analysis ● Provide orientation for supervisors (highlight concepts, how to reinforce content & employee behavioral change) ● Brief staff on importance of PD ● Provide coaching ● Provide time for staff to participate ● Offer incentives ● Select participants carefully- does it match their job role ● Send co-workers to attend together (reinforces learning). 	<ul style="list-style-type: none"> ● Reduce staff interruptions while taking PD ● Communicate importance ● Monitor attendance ● Recognize participation ● Participate ● Plan assessment of transferring new skills and perspective after PD instruction 	<ul style="list-style-type: none"> ● Debrief the PD with reports ● Provide psychological support for new perspectives ● Provide decision-making opportunities ● Set mutual expectations ● Arrange for refresher sessions ● Provide new job aids ● Publicize successes ● Engage in evaluations
Peers	<ul style="list-style-type: none"> ● Encourage others to attend ● Participate in needs assessments 	<ul style="list-style-type: none"> ● Encourage and positive support ● Provide time for dialog ● Be open to share positive viewpoints 	<ul style="list-style-type: none"> ● Encourage and positive support ● Provide time for dialog ● Be open to share positive viewpoints

REFERENCES

- Angelique, H.L. (2001). Linking the Academy to the Community through Internships: A Model of Service Learning, Student empowerment and Transformative Education. *Sociological Practice: A Journal of Clinical and Applied Sociology*, 3(1), 37-55.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel psychology*, 41(1), 63-105.
- Benge, M., Harder, A., & Carter, C. (2011). Necessary pre-entry competencies as perceived by Florida extension agents. *Journal of Extension*, 49(5). Retrieved from <http://www.joe.org/joe/2011october/a2.php>
- Bennetts, C. (2003). The impact of transformational learning on individuals, families and communities. *International Journal of Lifelong Education*, 22(5), 457-480.
- Berger, J. G. (2004). Dancing on the threshold of meaning: Recognizing and understanding the growing edge. *Journal of Transformative Learning*, 2, 336-351.
- Bierma, L. (2001). Practice of organizational learning. In J. W. Gilley, P. Dean & L. Bierma (Eds.), *Philosophy and practice of organizational learning, performance and change* (pp. 41-66). Cambridge, MA: Perseus.
- Birdi K.S. (2005). No idea? Evaluating the effectiveness of creativity training. *Journal of European Industrial Training*, 29(2), 102-111.
- Blewett, T. J., Keim, A., Leser, J., & Jones, L. (2008). Defining a transformational education model for the engaged university [Commentary]. *Journal of Extension*, 46(3). Retrieved from <http://www.joe.org/joe/2008june/>
- Boleman, J. T., James, D. L., & Couch, M. E. (2002). 4-H BEST: A new professional development program for 4-H county extension agents. *Journal of Extension*, 40(3). Retrieved from <http://www.joe.org/joe/2002june/iw5.php>
- Bonner, A., & Tolhurst, G. (2002). Insider-outsider perspectives of participant observation. *Nurse researcher*, 9(4), 7-19.
- Borko, H., Jacobs, J., & Koellner, K. (2010). Contemporary approaches to teacher professional development. *International Encyclopedia of Education*, 7, 548-556.
- Bowe, C. W., Lahey, L., Armstrong, E., & Kegan, R. (2003). Questioning the “big assumptions.” Part I: Addressing personal contradiction that impede professional development. *Medical Education*, 37, 715-722.

- Bowie, L., & Bronte-Tinkew, J. (2006). The importance of professional development for youth workers. Research-to-results practitioner insights. Washington, DC: Child Trends, Inc. Retrieved from <http://ufl.summon.serialssolutions.com.lp.hscl.ufl.edu/search?s.dym=false&s.q=CorporateAuthor%3A%22Child+Trends%2C+Inc.%2C+Washington%2C+DC%22>
- Breen, L. J. (2007). The researcher “in the middle”: Negotiating the insider/outsider dichotomy. *Special Edition Papers*, 19(1).
- Bremseth, T., Grant, S., Levings, J., Hartung, M., Harris, A., & Cogshell, N. (2009). Grow 4-H: Building partnerships to benefit youth [Toolkit]. In the Grow 4-H: Building Partnerships to Benefit Youth Online Course [Online course]. Available from Iowa State University and University of Minnesota. Retrieved from <http://www.extension.iastate.edu/4h/partnershiptraining>
- Broad, M. & Newstrom. (1992). *Transfer of training*. Reading, MA: Addison-Wesley.
- Brock, S. E. (2010). Measuring the importance of precursor steps to transformative learning. *Adult Education Quarterly*, 60(2), 122-142.
- Brodeur, C. W., Higgins C, Galindo-Gonzalez, S., Craig, D. D., & Haile, T. (2011). Designing a competency-based new county extension personnel training program: A novel approach. *Journal of Extension*, 49(3). Retrieved from <http://www.joe.org/joe/2011june/a2.php>
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.
- Bryan, W. A., & Schwartz, R. A. (1998). Strategies for staff development: Personal and professional education in the 21st century. *New Directions for Student Services*, 84. San Francisco, CA: Jossey-Bass.
- Burke, W. W. (1992). *Organization development: A process of learning and changing* (2nd ed.). Reading, MA: Addison-Wesley.
- Burns, H. (2011). Teaching for Transformation: (Re) Designing sustainability courses based on ecological principles. *Journal of Sustainability Education*, 2. Retrieved from http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1025&context=elp_fac
- Burnes, B. (2004). *Managing change: A strategic approach to organisational dynamics* (4th ed.). Harlow, U.K.: Prentice Hall.
- Cannon, M. (2010). *Going beyond compliance: Examining of sustainability education planning practices in US MBA business school programs*. Doctoral dissertation. Athens: University of Georgia.

- Carrington, C., & Selva, G. (2010). Critical social theory and transformational learning: Evidence in pre-service teachers' service-learning reflection logs. *Higher Education Research & Development*, 29(1), 45-57.
- Carson, L., & Fisher, K. (2006). Raising the bar on criticality: Students' critical reflection in an internship program. *Journal of Management Education*, 30(5), 700-723.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.
- Cheng, E., & Ho, D. (2001). A review of transfer of training studies in the past decade. *Personnel Review*, 30(1), 102-114.
- Choy, S. (2009). Transformational learning in the workplace. *Journal of Transformative Education*, 7(1), 65-84.
- Ciporen, R. (2008). *The role of personally transformative learning in leadership development: A case study examining the transfer of learning from an executive education program*. Doctoral dissertation. Retrieved from ProQuest Digital Dissertations (ATT 3327049)
- Clark, H. H., & Brennan, S.E. (1991). Grounding in Communication. In L.B. Resnick, J.M. Levine, & S.D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 127-149). Washington, D.C.: American Psychological Association.
- Clark, M.C., & Wilson, A. (1991). Context and rationality in Mezirow's theory of transformational learning. *Adult Education Quarterly*, 41(2), 75-91.
- Clark, R. W. (1987). Human resource development: Key to extension's survival. *Journal of Extension*. Retrieved from <http://www.joe.org/joe/1987spring/fl.php>
- Colaizzi, P.F. (1973). *Reflection and Research in Psychology: A phenomenological study of learning*. New York, NY: Hunt Publications.
- Collins, J. C., & Collins, J. C. (2005). *Good to great and the social sectors: Why business thinking is not the answer: a monograph to accompany Good to great: why some companies make the leap—and others don't*. Boulder, CO: Harper.
- Conklin, N. L., Hook, L. L., Kelbaugh, J. B., & Nieto, R.D. (2002). Examining a professional development system: A comprehensive needs assessment approach. *Journal of Extension*, 40(5). Retrieved from <http://www.joe.org/joe/2002october/a1.shtml>
- Conner, D. R. (1992). *Managing at the speed of change: How resilient managers succeed and prosper where others fail*. New York, NY: Villard.

- Cooper, A. W., & Graham, D. L. (2001). Competencies needed to be successful county agents and county supervisors. *Journal of Extension*, 39(1). Retrieved from <http://www.joe.org/joe/2001february/rb3.php>
- Cooperrider, D. L., Peter, Jr, F. S., Whitney, D., & Yaeger, T. F. (2000). Appreciative inquiry: Rethinking human organization toward a positive theory of change. *Team Performance Management*, 6, 7-8.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research*. Los Angeles, CA: Sage.
- Cranton, P. (1996). *Professional development as transformational learning*. San Francisco, CA: Jossey-Bass.
- Cranton, P. (2006). *Understanding and promoting transformative learning: A guide for educators of adults* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Cranton, P., & King, K. (2003). Transformational learning as a professional development goal. *New Directions for Adult and Continuing Education*, 98, 31-38.
- Cranton, P., & Wright, B. (2008). The transformative educator as learning companion. *Journal of Transformative Learning*, 6(1), 33-47.
- Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Cummings, T. G., & Worley, C. G. (2009). *Organization development and change*. Independence KY: Cengage Learning.
- Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social Science Medicine*, 50, 1,001-1,014.
- Daloz, L. (2000). Transformative learning for the common good. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- Deloitte. (2009). *Measuring the forces of long-term change: The 2009 Shift Index*. Retrieved from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_tmt_ce_ShiftIndex_072109ecm.pdf
- DeLyser, D. (2001). "Do you really live here?" Thoughts on insider research. *Geographical Review*, 91(1), 441-453.
- Denzin, N. (1984). *The research act*. Englewood Cliffs, NJ: Prentice Hall.
- Desplaces, D. (2005). A multilevel approach to individual readiness to change. *Journal of Behavioral & Applied Management*, 7(1), 25-39.

- Desmoine, L. (2009). Improving impact studies of teachers' professional development: toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181-199.
- Devereux, J. P. (2012). *Transformative experiences of long-term recovering alcoholics: A cooperative inquiry*. Retrieved from ProQuest Digital Dissertations. (ATT 3508068)
- Diem, K. (2009). Preparing youth development professionals to be successful: How do the needs of Extension/4-H compare to those of other organizations? *Journal of Extension*, 47(1). Retrieved from http://www.joe.org/joe/2009february/pdf/JOE_v47_1rb1.pdf
- Dillman, D. A., Smyth, J. D., Christian, L. M., & Dillman, D. A. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, N.J: Wiley.
- Dirkx, J. M. (2000). Images, transformative learning and the work of the soul. *Adult Learning*, 12(3), 15-16.
- Dirkx, J. M. (2003). Leaning in and leaning back at the same time: Toward a spirituality of work-related learning. *Advances in Developing Human Resources*, 15(4), 356-369.
- Doll, W. (1993). *A postmodern perspective on curriculum*. New York, NY: Teachers College Press.
- Donahue, T. (2009). *The making of global citizens through education abroad programs: Aligning missions and visions with education abroad programs*. Retrieved from ProQuest Digital Dissertations. (ATT 304998401)
- Donovant, B. W. (2009). The new, modern practice of adult education: Online instruction in a continuing professional development setting. *Adult Education Quarterly*, 59(3), 227-245.
- Eisen, M. J. (2001). Peer-based professional development viewed through the lens of transformative learning. *Holistic Nursing Practice*, 16, 30-42.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Feagin, J. Orum, A., & Sjoberg, G. (Eds). (1991). *A case for the case study*. Chapel Hill: University of North Carolina Press.
- Feller, A. E. (2009). Imaginal dialogue in the undergraduate classroom. *Proceedings of the 8th International Transformative Learning Conference*, Bermuda, 107-113.
- Field, J. (1997). Passive or proactive? *Adults Learning*, 8(6), 160-161.

- Firestone, W. A. (1993). Alternative arguments for generalizing from data: as applied to qualitative research. *Educational Research*, 22(4), 16-23.
- Fox, W. E., & Carpenter, B. (2004). Total resource management: A successful professional development program. *Journal of Extension*, 42(6). Retrieved from <http://www.joe.org/joe/2004december/tt3.php>
- Franz, N. (2007). Adult education theories: Informing Cooperative Extension's transformation. *Journal of Extension*, 45(1). Retrieved from <http://www.joe.org/joe/2007february/a1.php>
- Franz, N. (2003). Transformative learning in Extension staff partnerships: Facilitating personal, joint, and organizational change. *Journal of Extension*, 41(2). Retrieved from <http://www.joe.org/joe/2003april/a1.php>
- Franz, N, Garst, B. A., Baughman, S., Smith, C., & Peters, B. (2009). Catalyzing transformation: Conditions in extension educational environments that promote change. *Journal of Extension*, 47(4). Retrieved from <http://www.joe.org/joe/2009august/rb1.php>
- Friere, P. (1974). *Education for critical consciousness*. New York, NY: Continuum.
- Garst, B., Baughman, S., & Franz, N. (in press). Benchmarking professional development practices across youth-serving organizations: Implications for Extension. *Journal of Extension*.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Gay, L. R., & Airasian, P. W. (2000). *Educational research: Competencies for analysis and application*. Columbus, OH: Merrill.
- Gesme, D., Towle, E., & Wiseman, M. (2010). Essentials of staff development and why you should care. *Journal of Oncology Practice*, 6(2), 104-106.
- Ghimire, N. (2010). A professional competency development model: Implications for extension educators. *Journal of International Agriculture and Extension Education*, 18(2), 5-13.
- Giley, J. W., Dean, P., & Bierema, L. (2001). *Philosophy and practice of organizational learning, performance and change*. Cambridge, MA: Perseus Printing.
- Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

- Glisczinski, D. (2007). Transformative higher education: A meaningful degree of understanding. *Journal of Transformative Education*, 5(4), 317-328.
- Gonzalez, I. M. (1982). *The professional competencies needed by Extension agents in the Pennsylvania Cooperative Extension Service*. Doctoral dissertation. University Park: The Pennsylvania State University.
- Gravett, S. (2004). Action research and transformative learning in teaching development. *Educational Action Research*, 12 (2), 259-272.
- Grudens-Schuck, N., Cramer, J., Exner, D., & Shour, M. (2003). The new adult education: Bringing peer educators up to speed. *Journal of Extension*, 41(4). Retrieved from <http://www.joe.org/joe/2003august/a2.shtml>
- Habermas, J. (1971). *Knowledge and human interests*. Boston, MA: Beacon Press.
- Haslinda, A., & Mahyuddin, M. Y. (2009). The effectiveness of training in the public service. *American Journal of Scientific Research*, 6, 39-51.
- Haskell, J., Cyr, L., & McPhail, G. (2007). *Strengthening your facilitation skills: Level 1*. Orono, ME: University of Maine Cooperative Extension.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany, NY: SUNY Press.
- Hewitt-Taylor, J. (2002). Insider knowledge: Issues in insider research. *Nursing Standard*, 16(46), 33-35.
- Heron, J. (1992). *Feeling and personhood: Psychology in another key*. Newbury Park, CA: Sage.
- Hodkinson, P., & Hodkinson, H. (2001). The strengths and limitations of case study research. *Paper presented to the Learning and Skills Development Agency Conference* (PDF). Retrieved from http://scholar.google.com.proxy.lib.iastate.edu/scholar?q=Hodkinson%2C+P.+%26+Hodkinson%2C+H.+%282001%29.+The+Strengths+and+Limitations+of+Case+Study+Research.+&btnG=&hl=en&as_sdt=0%2C16
- Henderson, G. M. (2002). Transformative learning as a condition for transformational change in organizations. *Human Resource Development Review*. Retrieved from <http://hrd.sagepub.com/content/1/2/186>
- Hiemstra, R. & Brockett, R. (1994). Resistance to self-direction in learning can be overcome. In R. Hiemstra & R. G. Brockett, *Overcoming resistance to self-direction in adult learning* (pp. 89-92). San Francisco, CA: Jossey-Bass.

- Hill, H. C., Beisiegel, M., & Jacob, R. (2013). Professional development research: Consensus, crossroads, and challenges. *Educational Researcher*, 7, 1-12.
- Holton, E. (2005). Holton's evaluation model: New evidence and construct elaboration. *Advances in Development Human Resources*, 7(1), 37-54.
- Holton, E., & Baldwin, T. (2003). Making transfer happen: An action perspective on learning transfer systems. In E. Holton & T. Baldwin (Eds.), *Improving learning transfer in organizations* (pp. 3-15). San Francisco, CA: Jossey-Bass.
- Holton, E., Bates, R., & Ruona, W. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), 333-360.
- Jarvis, C. (2012). Fiction and film and transformative learning. In E. W. Taylor & P. Cranton (Eds.), *Handbook of transformative learning: Theory, research, and practice* (pp. 486-499). San Francisco, CA: Jossey-Bass.
- Jokikokko, K. (2009). The role of significant others in the intercultural learning of teachers. *Journal of Research in International Education*, 8(2), 142-163.
- Kasl, E., & Elias, D. (2000). Creating new habits of mind in small groups. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 229-252). San Francisco, CA: Jossey-Bass.
- Kasworm & Bowles (2012). Fostering transformative learning in higher education settings. In E. W. Taylor & P. Cranton (Eds.), *Handbook of transformative learning: Theory, research, and practice* (pp. 388-407). San Francisco, CA: Jossey-Bass.
- Kember, D. (2010). Determining the level of reflective thinking from student's written journals using a coding scheme based on the work of Mezirow. *International Journal of Lifelong Education*, 18(1), 18-30.
- Kennedy, M. M. (1998). *Form and substance in in-service teacher education* (Research Monograph No. 13). Arlington, VA: National Science Foundation.
- Kiely, R. (2005). A transformative learning model for service-learning: A longitudinal case study. *Michigan Journal of Community Service Learning*, 12(1), 5-22. Retrieved from <http://hdl.handle.net/2027/spo.3239521.0012.101>
- Killeavy, M., & Moloney, A. (2010). Reflection in a social space: Can blogging support reflective practice for beginning teachers? *Teaching and Teacher Education*, 26(4), 1,070-1,076.
- King, K. P. (1997). Examining learning activities and transformational learning. *International Journal of University Adult Education*, 36(3), 23-37.

- King, K. P. (2002a). Identifying success in online teacher education and professional development. *The Internet and Higher Education*, 5(3), 231-246.
- King, K. P. (2002b). Educational technology professional development as transformative learning opportunities. *Computers & Education*, 39(3), 283-297.
- King, K.P. (2004). Both sides now: Examining transformative learning and professional development for educators. *Innovative Higher Education*, 29(2), 155-174.
- King, K. P. (2005). *Bringing transformation to life*. Malabar, FL: Krieger Publishing.
- King, K. P. (Ed.). (2009a). *Handbook of the evolving research of transformative learning based on the Learning Activities Survey*. Charlotte, NC: IAP.
- King, K. P. (2009b). The adult ESL experience: Facilitating perspective transformation in the classroom. In K.P. King (Ed.). *Evolving research of transformative learning based in the LAS* (pp. 63-83). Charlotte, NC: IAP.
- King, P. M., & Kitchener, K. S. (2004). Judgment model: Twenty years of research on epistemic cognition. Personal epistemology: The psychology of beliefs about knowledge and knowing. In B. K. Hofer & P. R. Pintrich (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing* (pp. 31-74). New York, NY: Routledge.
- Kirwin, C., & Birchall, D. (2006). Transfer of learning from management development programmes: testing the Holton model. *International Journal of Training and Development*, 10(4), 252-268.
- Kitchenham, A. (2008). The evolution of John Mezirow's transformative learning theory. *Journal of Transformative Education*, 6(2), 104-123.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Kozlowski, S., Gully, S., Brown, K.G., Salas, E., Smith, E., & Nason, E. R. (2001). Effects of training goals and goal orientation traits on multidimensional training outcomes and performance adaptability. *Organizational Behavior and Human Decision Processes*, 85(1), 1-31.
- Kreber, C. (2004). An analysis of two models of reflection and their implications for educational development. *International Journal for Academic Development*, (1), 29-49.
- Kreider, H., & Bouffard, S. (2005). A conversation with Thomas R. Guskey. *The Education Exchange*, 11(4), 12-14.
- Kumagai, A. K. (2008). A conceptual framework for the use of illness narratives in medical education. *Academic Medicine*, 83(7), 653-658.

- Kutilek, L. M., & Earnest, G. W. (2001). Supporting professional growth through mentoring and coaching. *Journal of Extension*, 39(4). Retrieved from <http://www.joe.org/joe/2001august/rb1.php>
- Lakai, D., Jayaratne, K. S. U., Moore, G., & Kistler, M. Barriers and effective educational strategies to develop extension agents' professional competencies. *Journal of Extension*, 50(4). Retrieved from <http://www.joe.org/joe/2012august/rb1.php>
- Lange, E. (2004). Transformative and restorative learning: A vital dialectic for sustainable societies. *Adult Education Quarterly*, 54(2), 121-139.
- Lee, M. Y., & Greene, G. J. (2004). A teaching framework for transformative multicultural social work education. *Journal of Ethnic and Cultural Diversity in Social Work*, 12(3), 1-28.
- Lehman, W. E. K., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, 22, 197-209.
- Learning. (n.d.). In Oxford Dictionary online. (2012). Retrieved from http://www.oxforddictionaries.com/us/definition/american_english/learning
- Levings, J., Bremseth, T., Grant, S., Hartung, M., & Harris, A. (2010). Grow 4-H: Building partnerships to benefit youth [Online course]. Iowa State University and University of Minnesota. Retrieved from <http://www.extension.iastate.edu/4h/partnershiptraining>
- Levings, J., Pleskac, S., Deidrick, J., Bremseth, T., Ehlers, C., & Grover, V. (2007). *Tri-state 4-H club growth and expansion report* (Unpublished). Iowa State University Extension, University of Minnesota Extension, and University of Wisconsin Extension.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Liimatainen, L., Poskiparta, M., Karhila, P., & Sjogren, A. (2001). The development of reflective learning in the context of health counselling and health promotion during nurse education. *Issues and Innovations in Nursing Education*, 34(5), 648-658.
- Loucks-Horsley, S., Hewson, P. W., Lover, N., & Stiles, K.E. (1998). *Designing professional development for teachers of mathematics and science*. Thousand Oaks, CA: Corwin Press.
- Marquardt, M. J. (1996). *Building the Learning Organization*. New York, NY: McGraw.
- Marsick, V. J. (1988). Learning in the workplace: The case for reflectivity and critical reflectivity. *Adult Education Quarterly*, 38(4), 187-198.
- Merkle, H. B., & Artman, R. B. (1983). Staff development: A systematic process for student affairs leaders. *NASPA Journal*, 21(1), 55-63.

- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B., & Kim, S. (2012). Studying transformative learning: What methodology? In E. W. Taylor & P. Cranton (Eds.), *Handbook of transformative learning: Theory, research, and practice* (56-72). San Francisco, CA: Jossey Bass.
- Merriam, S. (1995). What can I tell from an N of 1? Issues of validity and reliability in qualitative research. *PAACE Journal of Lifelong Learning*, 4, 51-60. Retrieved from <https://www.iup.edu/assets/0/347/349/4951/4977/10245/BA91CF95-79A7-4972-8C89-73AD68675BD3.pdf>
- Metz, Burkhauser, M., & Bowie, L. (2009). Training out-of-school-time staff. Bethesda, MD: Child Trends.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (1994). Understanding transformation theory. *Adult Education Quarterly*, 44(4), 222-232
- Mezirow, J. (1997). Transformative theory out of context. *Adult Education Quarterly*, 48(1), 60-62.
- Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, 48(3), 185-198.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In Jack Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3-34). San Francisco, CA: Jossey-Bass.
- Miles, M., & Huberman, M. (1984). *Qualitative data analysis: A source book for new methods*. Beverly Hills, CA: Sage.
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded source book* (2nd ed). Thousand Oaks, CA: Sage.
- Mincemoyer, C., & Kelsey, T. (1999). Assessing in-service education: Identifying barriers to success. *Journal of Extension*, 37(2). Retrieved from <http://www.joe.org/joe/1999april/a3.html>
- Molenda, M., & Pershing, J. (2004). The strategic impact model: An integrative approach to performance improvement (PI) and instructional systems design. *Tech Trends*, 48(2), 26-32.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

- Nelson, C., & Harper, V. (2006). A pedagogy of difficulty: Preparing teachers to understand and integrate complexity in teaching and learning. *Teacher Education Quarterly*, 33(2), 7-21.
- Newstrom, J. W. (1985). Leveraging management development through the management of transfer. *Journal of Management Development*, 5(5), 33-45.
- NIFA. (2014). *About us*. Retrieved from <http://www.csrees.usda.gov/qlinks/extension.html>
- Onwuegbuzie, A., & Leech, N. (2010). Generalization practices in qualitative research: A mixed methods case study. Qual. Quant. *International Journal Methodology*, 44, 881-892. doi: 10.1007/s11135-009-9241-z
- Pasquariello, G. (2009). *The way in and the way on: A qualitative study of the catalysts and outcomes of transformative learning*. Doctoral dissertation. Retrieved from ProQuest Digital Dissertations. (AAT 3376158)
- Penland, P. (1979). Self-initiated learning. *Adult Education Quarterly*, 29(3), 170-179.
- Piaget, J. (1977). *The essential Piaget*. New York, NY: Basic Books, Inc.
- Powell, J. H. (1989). The reflective practitioner in nursing. *Journal of Advanced Nursing*, 14, 824-832.
- QSR International. (2013). NVivo 10 [Software]. Retrieved from <http://www.qsrinternational.com/>
- Radhakrishna, R. B. (2001). Professional development needs of state extension specialists. *Journal of Extension*, 39(5). Retrieved from <http://www.joe.org/joe/2001october/rb4.php>
- Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.). New York, NY: MacMillan.
- Rockwell, S. K., Jha, L., & Krumbach, E. (2003). Success outcome markers in extension (SOME): Evaluating the effects of transformational learning programs. *Journal of Extension*, 41(5). Retrieved from <http://www.joe.org/joe/2003october/a4.php>
- Saks, A., & Haccoun, R. (2007). *Managing performance through training and development*. Toronto, CAN: Nelson & Thompson Ltd.
- Sandlin, J. A., & Bey, G. J. (2006). Trowels, trenches and transformation: A case study of archaeologists learning a more critical practice of archaeology. *Journal of Social Archaeology*, 6(2), 255-276.
- Senge, P. (1990). *The fifth discipline: The art & practice of the learning organization*. New York, NY: Doubleday.

- Seevers, B., & Graham, D. (2012). Education through cooperative extension. (3rd ed.). Fayetteville: University of Arkansas.
- Senyurekli, A. R., Dworkin, J., & Dickinson, J. (2006). On-line professional development for extension educators. *Journal of extension*, 44(3), 3RIB1.
- Smith, K. (2007). Forward. In B. Seevers & D. Graham (Eds.), *Education through Cooperative Extension* (3rd ed.). Fayetteville: University of Arkansas.
- Smith, R. O. (2012). Fostering transformative learning online. In E.W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 408-422). San Francisco, CA: Jossey-Bass.
- Smyth, A., & Holian, R. (2008). Credibility issues in research from within organisations. P. Sikes & A. Potts (Eds.), *Researching education from the inside: Investigations from within* (pp. 33-48). New York, NY: Taylor and Francis.
- Sokol, A. V. (1998). *Mezirow's transformative learning theory applied to formal adult education: A case study*. Doctoral dissertation. Washington, DC: George Washington University.
- Soules, M. (2000). *Hybrid online courses and strategies for collaboration*. Nanaimo, BC, CAN: Malaspina University. Retrieved from <http://marshallsoules.ca/hybrid2.htm>
- Stake, R. (2006). *Multiple case study analysis*. New York, NY: The Guilford Press.
- Stein, M. K., Smith, M. S., & Silver, A. (1999). The development of professional developers: Learning to assist teachers in new settings in new ways. *Harvard Educational Review*, 69(3), 237-269.
- Stevens, K., Gerber, D., & Hendra, R. (2010). Transformational learning through prior learning assessment. *Adult Education Quarterly*, 60(4), 377-404.
- Stone, B. B., & Bieber, S. (1997). Competencies: A new language for our work. *Journal of Extension* [On-line], 35(1). Retrieved from <http://www.joe.org/joe/1997february/comm1.php>
- Stone, B., & Coppernoll, S. (2004). You, extension and success: A competency-based professional development system. *Journal of Extension*, 42(2). Retrieved from <http://www.joe.org/joe/2004april/iw1.php>
- Taylor, E. W. (1997). Building upon the theoretical debate: A critical review of transformative learning. *Adult Education Quarterly*, 48(1), 34-60.
- Taylor, E.W. (2000). Fostering transformative learning in the adult education classroom. *Canadian Journal of the Study of Adult Education*, 14, 1-28.

- Taylor, E. W. (2003). Looking back five years: A critical review of transformative learning theory. In *Proceedings of the 5th International Transformative Learning Conference* (pp. 412-418). New York, NY: Columbia University.
- Taylor, E. W. (2007). An update of transformative learning theory: a critical review of the empirical research (1999-2005). *International Journal of Lifelong Education*, 26(2), 173-191.
- Taylor, E. W., & Snyder, M. J. (2012). A critical review of research on transformative learning theory, 2006-2010. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 37-55). San Francisco, CA: Jossey-Bass.
- Tisdell, E. (2008). Critical media literacy and transformative learning: Drawing on pop culture and entertainment media in teaching for diversity in adult higher education. *Journal of Transformative Education*, 6, 48-67.
- Thering, S. (2007). A practical theory-based approach to action-research in survivor communities. *Journal of Extension*, 45(2). Retrieved from <http://www.joe.org/joe/2007april/a3.php>
- Thomas, G. (2011) *How to do your case study: A guide for students and researchers*. Thousand Oaks, CA: Sage.
- Trochim (1989). Outcome pattern matching and program theory. *Evaluation and Program Planning*, 12, 355-366.
- Tsai, W. C., & Tai, W. T. (2003). Perceived importance as a mediator of the relationship between training assignment and training motivation, *Personnel Review*, 32(2), 151-163.
- Turner, V. (1985). *On the edge of the bush: Anthropology as experience*. Tucson: University of Arizona Press.
- van Woerkom, M. (2004). The concept of critical reflection and its implications for human resource development. *Advances in Developing Human Resources*, 6(2), 178-192.
- Warren, B., Roseberry, A.S., & Conant, F. (1994). Discourse and social practice: Learning science in language minority classrooms. In Spener, D. (Ed.), *Adult biliteracy in the United States* (pp. 191-210). McHenry, IL: Center for Applied Linguistics and Delta Systems Co.
- Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. San Francisco, CA: Jossey-Bass.
- Walton, J. (1999). *Strategic human resource development*. Edinburgh Gate, U.K.: Pearson Education.

- Walton, J. (2010). Examining a transformative approach to communication education: A teacher research study. *College Student Journal*, 44(1), 157-177.
- Weimer, M. (2012). Learning-centered teaching and transformative learning. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 439-454). San Francisco, CA: Jossey-Bass.
- Woodard, D. B., & Komives, S. R. (1990). Ensuring staff competence. In M. J. Barr & M. L. Upcraft (Eds.), *New futures for student affairs* (pp. 217-238). San Francisco, CA: Jossey-Bass.
- Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Yin, R. (2014). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
- Yorks, L., & Kasl, E. (2006). I know more than I can say: A taxonomy for using expressive ways of knowing to foster transformative learning. *Journal of Transformative Learning*, 4(1), 43-64.