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THE PRACTITIONER-DRIVEN SYSTEM

AN INTERACTIVE QUALITATIVE ANALYSIS OF THE E-LEARNING CREATION EXPERIENCE

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THE PRACTITIONER-DRIVEN SYSTEM

AN INTERACTIVE QUALITATIVE ANALYSIS OF THE E-LEARNING CREATION EXPERIENCE

by

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Dedication

Abigail Adams wrote that "learning is not attained by chance; it must be sought for with ardor and attended to with diligence." This study is dedicated to e-learning practitioners everywhere who diligently and quietly work behind the scenes to provide meaningful, engaging, and potentially life-changing online learning events to adults from all walks of life. They create experiences that help people to be competent, confident, effective, successful, and safe. Practitioners' names do not appear on e-learning title pages, nor do their signatures grace the bottom corner of a main menu. Still, they are authors and artists in every sense—synthesizing words, numbers, pixels, and code to craft moments of learning that spark again and again and often long after they have moved on to the next assignment. My experience with e-Learning practitioners inspired this study, and their voices have shaped it.

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Contemporary e-learning research often addresses a singular instructional topic, learning strategy, or authoring tool. Technological advancements and evolving delivery methods are changing the e-learning practitioner experience more rapidly than ever before, and the need for a holistic illustration of the modern-day practitioner experience has never been greater. This Interactive Qualitative Analysis (IQA) of the e-learning creation experience consists of Affinity Production Interviews, interviews, and an online survey of e-learning practitioners working with adult audiences. The result of the study is an e-learning creation experience system driven by participants' stories. The system is comprised of twelve affinities including leadership, policy, the instructional systems design process, the client relationship, emotions, and more. Exercising the system reveals conditions that influence the ultimate outcome of the system: e-learning success.

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CHAPTER 1: INTRODUCTION

A Project in Peril

Sam's hands were full as he approached his cubicle Monday morning. He placed the fresh coffee from the break-room on his desk and plugged in the headphones that never failed to drown out the occasionally loud conversations of his instructional design colleagues and cube mates. He glanced at a project schedule pinned to a nearby corkboard. The schedule was organized by the phases of a popular instructional design methodology commonly referred to as ADDIE. Sam delighted in crossing off the Design phase he completed last week. He knew that his work would eventually train thousands of individuals across the globe and he was excited to move on to the next phase. Moments after sinking into his chair, a shadow appeared over the desk. Sam looked up to see Donna, one of the firm's three e-learning project managers.

"Good morning, Sam. I have some bad news. The cooling system broke down over the weekend and our server overheated. We may have lost the work you completed on Friday, unless you saved it to your hard drive. Did you?" As Sam contemplated his project manager's question, a feeling of dread came over him. He always followed company policy, which required all instructional designers to work from the company's server and never save project files to local drives. Sam replied, "I did not. I thought we were replacing the cooling system?" Donna explained that the office building's historic status was both complicating and delaying installation of the new cooling system.

Since being assigned to the high visibility e-learning project two weeks ago, Sam has dealt with a weak hand-off from the sales division that excluded important client goals and requirements, conflicting input from Subject Matter Experts, and outdated graphic software that would not allow him to open and manipulate client-furnished image files. Sam invested many hours of his own time completing a training course about the client's Learning Management System because he wanted very badly to be the

instructional designer on this project. His regret grew stronger as he stared at a blank screen and struggled to recreate all that he accomplished on Friday. Even if successful, he will still be behind schedule and more leery than ever of obstacles he will likely encounter in the weeks to come.

The Problem and the Researcher's Position

Sam's story, while fictional, is an amalgamation of experiences I observed and encountered throughout my career as an e-learning instructional design practitioner. I entered the profession more than fifteen years ago after completing a graduate program in instructional technology. That program integrated multimedia authoring and development immersion with education about instructional systems design methodologies and learning theory. I developed a strong respect and appreciation for procedural systems such as the goal-directed Dick and Carey model and the Smith and Ragan model based on Robert Gagné's theory of learning. Like most e-learning practitioners, I was taught that following a well-defined model or methodology throughout the lifecycle of an e-learning project leads to project success, and that success is achieved predominately when learning transfer and retention occurs on a widespread scale among target audiences. Sam's story features a model known as ADDIE, to which Sam adhered. The story reflects the reality that adherence to a tried-and-tested model or systems approach does not always prevent obstacles or guarantee project success.

Sam's story is a snapshot of the e-learning creation experience. Sam, as a practitioner, experienced problems that threatened his project's progress, completion, and ultimate success. The sources of and solutions to Sam's problems, however, are as widespread as his target audience. The ADDIE model is but one of numerous elements Sam encountered. Other elements include colleagues, leadership, Subject Matter Experts, the office building, corporate policy, communication, software, on-the-job training, and

more. Sam's story is incomplete, though not because we do not know the outcome of his e-learning project. Sam's story is incomplete because we lack a comprehensive list of the components Sam encountered during the e-learning creation experience and how, if at all, those components influenced one another. In other words, the system of e-learning creation is murky. I do not believe that incidences of e-learning success (as evidenced through learning transfer and retention) can be substantially increased without first clarifying the e-learning creation experience system as it is today. Doing so involves defining system components and their relationships to one another. I am personally and professionally familiar with this need for clarification and, through this study, seek to passionately and aggressively address it.

Design Considerations

I had considered examining this need for clarification by introducing and then testing hypotheses about what I believed to be a critical e-learning creation system component, such as a prevalent instructional design methodology or model. Doing so, however, would require making assumptions about identify of components comprising the e-learning creation experience system, and those assumptions may or may not be accurate. Also, focusing on only one component increases the risk of excluding possible influencing relationships with other, unidentified components. As a practitioner and a researcher, I seek to address the need in a manner that acknowledges its complexity, clarifies its underpinnings, and amplifies the myriad voices of non-fictional instructional design practitioners for whom the e-learning creation experience has proven either a tremendous joy, a profound failure, or somewhere in the middle. Moreover, I strive to reveal one or more hypotheses that encourage further study. A methodology with roots in grounded theory (specifically Interactive Qualitative Analysis, or IQA) aligns best with the problem of a murky, incomplete e-learning creation experience system and my desire to clarify it. Practitioners currently working as instructional designers, developers, or

project managers supporting e-learning projects are the ideal study participants.

Norvell Northcutt and Danny McCoy developed IQA as a systems approach to qualitative research. While IQA consists of some quantitative elements (such as estimation of timbre of a system's various components) it is, at its core, powered by words. The words collected and categorized during this study reflect the lived experiences, thoughts, feelings, and memories captured during Affinity Production Interviews, in-depth individual interviews, and an online survey completed by study participants who have supported one or more e-learning projects.

Research Questions

Instructional design practitioners who support e-learning projects work in environments that are formal and informal, address a vast array of instructional topics, employ an ever-growing list of learning strategies, utilize dozens of design and authoring software applications, and empower target learning audiences from every imaginable walk of life. Instructional design practitioners may design storyboards, produce scripts, generate instructional images, program, manage the efforts of others, implement and evaluate e-learning efforts, or any number of combinations of these tasks. Their experiences, although unique and personal, share components that are common to most instructional design practitioners who contribute to e-learning projects. These components, (referred to as affinities throughout the remainder of this document), and the ways in which they influence one another, combine to form a system representing the e-learning creation experience.

My two research questions, then, attempt to identify affinities and determine how, if at all, they influence one another. The research questions are as follows:

- 1. What affinities do instructional design practitioners attribute to the e-learning creation experience?
- 2. How, if at all, do those affinities influence one another?

Study Limitations

The importance of high levels of participation is a characteristic shared by qualitative and quantitative studies alike. In most cases, the larger that the total number of participants is, the richer and more representative of the population the findings are. Instructional design practitioners are growing in number each year, although they are also incredibly busy, often balancing professional obligations and family responsibilities. Encouraging study participation was a significant challenge, and conducting my study in a timely manner required limiting the number of participants completing the Affinity Production Interviews, in-depth interviews and online survey to acceptable rather than considerable values.

Additionally, I made efforts to select participants who have supported, to some degree, instructional design projects involving the creation of asynchronous e-learning solutions. The degrees to which participants have done so, however, vary. Some may have worked exclusively with e-learning while others may have only supported a small number of e-learning projects. This variance is a limitation because the answers provided by novice participants may be based on one or two e-learning projects as opposed to being based on cumulative reflections about many e-learning creation experiences.

Finally, time proved to be a limitation. Individual interviews, in most cases, exceeded two hours in duration due to the need to cover a dozen affinities as well as their respective sub-affinities. In some instances, I sensed that participants may have wanted to share more details and information than their availability would allow.

Keywords

The past two decades have culminated in a sea of synonymous and oft-confused terms related to instructional design, e-learning and workplace training in general. These terms emerge from professional organizations, researchers, and industry-related literature. It is necessary to identify and define keywords used throughout this document.

- ◆ The term *e-learning* is used to describe instructional solutions that involve, to some degree, delivery of content through a desktop computer, laptop, or tablet device and either through the Internet or through a fixed repository such as a secure Learning Management System (LMS). The origins of this now ubiquitous term are unclear, though most believe it to have originated sometime in the 1980s about the same time as the term *online learning* (Moore, Dickson-Deane, and Galyen, 2011).
- ◆ The term *learner* is used to describe an adult participating in one or more e-learning programs within a workplace setting.
- ♦ The term *instructional design* is used to describe the profession dedicated to the creation and implementation of learning materials for various academic and workplace audiences.
- ◆ The term *practitioner* is used to refer to an individual who supports instructional design initiatives through project management, design, development, programming/coordination, evaluation or some combination of these tasks. The participants of my study are comprised entirely of practitioners who support elearning initiatives.
- ◆ The terms *methodology* and *model* are used interchangeably, in the context of instructional design, throughout this study. These terms refer to steps or phases created/assembled to support the lifecycle of an instructional design initiative.

Methodologies and models referenced are deemed applicable to but not necessarily exclusive to e-learning.

Conclusion and Dissertation Organization

E-learning popularity has been increasing for years, and as a result, the body of research about e-learning has also increased. The vast majority of this research falls into one of three main categories: learners' attitudes (about one or more e-learning solutions), effectiveness of methodologies and models, or specific design/development strategies (Iskander, 2012). While these efforts help inform and contribute to communities of practice, e-learning initiatives continue to fall short of achieving their instructional goals and objectives. I believe that improving e-learning success begins not with inventing a better methodology or releasing a more robust authoring tool, but with improving our understanding of the modern-day e-learning creation experience—a subject conspicuously absent from the three main categories listed above.

As Marshall (2002) noted, "Most academics are familiar with the ad-hoc approach to e-learning where development of resources and support of students have more to do with individual heroics than good institutional planning" (p. 3). This study focuses on the heroes, (instructional design practitioners), and their experiences when supporting e-learning projects. Through analysis of practitioner voices, the study seeks to identify affinities comprising the e-learning creation experience system and the ways in which those affinities influence one another.

The remainder of this document examines relevant literature, defines the IQA Methodology, presents study findings, and shares interpretations. Specific chapter descriptions are as follows:

Chapter Two offers a review of relevant research. It references literature about the instructional design field and its history, well-known and widely accepted instructional design methodologies and models, and explains the impact that the emergence of elearning has had on both. It also examines research on the professional challenges and demands facing practitioners.

Chapter Three describes the methodology, Interactive Qualitative Analysis, (IQA).

Chapter Four presents study findings—weaving the threads of affinities uncovered during focus group experiences with influencing relationships derived from interviews to reveal the tapestry of an e-learning creation experience system.

Chapter Five interprets the findings and offers advice for practitioners, suggestions for instructional design administrators/supervisors, and prioritizes topics for additional research and exploration supporting the interdisciplinary effort to improve and enhance e-learning effectiveness.

CHAPTER 2: THEORETICAL BACKGROUND

Instructional Design Defined

Instructional Systems Design (ISD) or simply instructional design is not an easy term to define. Is it a theory or an actual discipline? Is it an art or a science? Is it a framework or an industry? Is it anchored by classrooms or rooted in existing (and emerging) technologies? Whatever combination of answers you believe is correct, the likelihood is strong that a body of literature exists to support it. This IQA study focuses on instructional designers and their experiences while at work supporting e-learning projects. For this reason, I've opted to present three popular definitions originating from different periods spanning three decades although all continue to be considered as relevant. The definitions I've chosen are action-oriented and free of specifications involving delivery methods, subject matter, learning strategies, industries, (public, private, non-profit), and other distinctions beyond my study's purpose and focus.

An early proponent of the movement to link theory and practice provides the first instructional design definition. Glaser (1976) stated:

In an effort to explore the possibilities for design theory in psychology and education, a lead can be taken from certain intellectually rigorous practices that have been developed in other fields. The essence of design is to devise courses of action aimed at changing existing situations into preferred ones... (p. 6).

As a researcher and a practitioner, this simple and powerful definition applies to every instructional design effort to which I have ever contributed. The fictional story of Sam from Chapter One of this document illustrates the experiences of one individual, a practitioner, in the midst of "courses of action" aimed at training a global workforce. The obstacles Sam encountered (and the countless real-life situations that mirror these obstacles) are significant drivers of my research.

The second definition originates from the 1980s and introduces a framework for an emerging profession. Reigeluth (1983) defines instructional design as:

...a discipline that is concerned with understanding and improving one aspect of education: the process of instruction. The purpose of any design activity is to devise optimal means to achieve desired ends. Therefore, the discipline of instructional design is concerned primarily with prescribing optimal methods of instruction to bring about desired changes in student knowledge and skills. (p. 4).

This definition positions instructional design as, first and foremost, a discipline involving maximizing instruction through the prescription of solutions. It is a definition as suitable to the high-tech digitally dominated learning environments of the twenty-first century as to the chalkboards, conference tables and overhead projectors of corporate training rooms common three decades ago. As desired knowledge and skills change over time and as methods of instruction evolve, the inherent link between the two established by Reigeluth's definition remains constant.

The third definition takes us to the new millennium and is simultaneously more casual and more complex than the two preceding definitions. Piskurich (2006) defines instructional design as:

...a set of rules—or procedures, you could say—for creating training that does what it is supposed to do. Some of those procedures have to do with finding out what the training is supposed to do (you might call it determining the goals of the training); other procedures deal with letting the participant know what those goals are. Still other procedures ensure that everything in the training focuses on those goals, and one more set monitors how we know that the goals have been achieved.

(p. 3).

Piskurich's definition is necessary here because it introduces the concept of a formal process or set of procedures. Procedures are intended to standardize and streamline efforts—goals that skyrocket in priority when training takes center stage and attracts widespread, national attention. Instructional design, in fact, has origins in just such a situation.

Born of Necessity

The catalyst for many advancements/movements (in any field) is often an urgent threat or need. Most researchers trace the roots of instructional design (as we know it today) to the United States' preparations for World War II, when "...training devices were used widely in the armed forces. And this interest and demand have led to the establishment of a number of agencies and programs in which the psychologist participates in the design, development, and evaluation of training devices" (Gagne, 1954, p. 95). Many thousands of newly drafted and enlisted military personnel needed to learn multiple complex tasks within a very short period of time prior to deployment. A systematic approach to instructional design paved the way for expedited and repeatable training initiatives.

Decades later, Reiser (2001) elaborates, noting that "Immediately after World War II, many of the psychologists responsible for the success of the military training programs continued to work on solving instructional problems" (p. 58). The success of instructional design practices during the war was strong enough (and memorable enough) to influence adult training endeavors after the war had ended.

Since the mid-twentieth century, instructional design has emerged as—among other

things—a profession. Similar to all professions, a steady stream of educated, capable and competent individuals are required to advance instructional design tenets and engender widespread respect (and accountability) for the work. But as time progresses and learning environments, learner expectations and available technologies change, the challenges facing future and practicing instructional designers grow more complex. Perhaps Liu's (2004) orchestra conductor metaphor best captures this phenomenon: "...an instructional designer must somehow go beyond engagement, and combine the elements of audience, objective, ability to compromise, imagination, new technological possibilities, and talent constraints into a single symphony of an engaging and educative experience" (p. 197). The need for organizations to recruit and hire people able to flawlessly and efficiently "conduct" the symphony is a growing priority—explained in more detail below.

A Growing Priority

In January 2009, a popular job search Website contained almost 1,350 jobs related to instructional design in the United States (Van Rooij, 2010). More than four years later, an instructional design job search on this same Website revealed more than 8,000 full-time positions and more than 3,000 part-time positions in the United States—all related to instructional design (SimplyHired, 2013). Care must be taken to avoid the assumption that such a dramatic increase in instructional design job postings is due entirely to growth of the training and development industry. The increased popularity and utilization of online job search and recruiting tools such as SimplyHired may very well be a factor contributing to increased postings. However, the amount of money companies and organizations spend on training (per learner) is also increasing. A popular annual report indicated that in 2012, average employer investment per learner rose to \$1,059 from the \$749 per learner reported the previous year (2012 Training Industry Report, 2012). In the twenty-first century, organizational behaviors appear to be paying close attention to the long held theoretical argument that money spent on employee training and development

is a sound investment (Doyle, 1994).

Additionally, The United States Department of Labor Bureau of Labor Statistics reports "Employment of training and development managers is expected to grow 15 percent from 2010 to 2020... Job opportunities should be best for those with a master's degree, certification, or related work experience" (Bureau of Labor and Statistics, 2012). A diverse array of brick-and-mortar, online and blended educational programs have emerged to meet the increased demand for the training and preparation often necessary to qualify and compete for instructional design employment or freelance/contract opportunities at all levels. A recent online posting of instructional design programs in the United States, (derived from a survey distributed to a professional organization), included the names and links to 38 graduate degree programs, 30 online graduate degree programs, four undergraduate degree programs and 25 certificate programs (Malamed, 2013). A more exhaustive search that did not involve a survey yielded nearly 500 instructional design degree and certificate programs in the United States (Van Rooij, 2010). In contrast, when I completed my Master's degree in Instructional Technology in 1997, (in the Unites States), only a handful of degree programs were in operation and the majority of programs were small graduate-level programs nested within larger departments such as math or science.

Enter the Consituency

Organizations are spending more money annually on training and development of their precious human capital. Open instructional design related positions are on the rise (and are expected to continue rising). Formal/informal degree and certification programs are emerging to meet the needs of those hoping to join the growing instructional design workforce. Whether they participate in a training program or prepare for performing instructional design tasks on their own, some of these individuals eventually find their

way to a career in instructional design. Still others, dubbed by Hepfer (1998) as "accidental trainers," find themselves thrust into the role of instructional designer with little to no guidance or support, often involuntarily reassigned from the role of Subject Matter Expert (or SME). SMEs are individuals who provide subject matter and content-related guidance to instructional designers. Regardless of how they entered the profession, individuals who support creation of e-learning projects comprise the constituency (or group of participants) of this Interactive Qualitative Analysis, or IQA, study. I refer to them throughout this study as practitioners, and like Sam from the Chapter One story, they routinely face difficult, unexpected challenges for which formal training may not have prepared them. The evidence presented below expounds upon this and establishes practitioners as a fascinating, multi-faceted, and unpredictable population.

A Rude Awakening

In the early 1990s, with e-learning in its infancy, Rowland (1993) first suggested that critical differences existed between widely accepted views of instructional design and what instructional design practitioners actually do on-the-job. His study suggests that instructional designers "...took a skeptical posture toward given information, seemed to believe that conditions and outcomes do not entirely determine methods, and continued to question the adequacy of solutions even after development" (p. 89). The findings suggest that factors other than a certain methodology or specific subject matter impact practitioners' actions and attitudes.

That same year, Wedman and Tessmer (1993) conducted a study of 73 course developers and found rampant irregularity among their patterns of interaction with instructional design tasks and among their tendencies to complete those tasks. They append to this finding the suggestion that the instructional design and development theory "...will benefit from research which contributes to an understanding of situated ID

practice" (p. 54). To clarify, Suchman (1987) defines situated practice as any action performed in response to a situation that a person encounters. In other words, more study is needed about how instructional designers respond to unpredictable circumstances in the workplace.

More than a decade later, Visscher-Voerman and Gustafson (2004) highlight the scarcity of empirical information about what practitioners do on-the-job, stating "...the reasons that designers conduct or do not conduct specific activities remain largely unexamined" (p. 69). Their study of 24 senior-level instructional design practitioners revealed heterogeneous behaviors on-the-job. Individual designers, while sharing some similarities, behaved in unique ways. The researchers pose the possibility that being able to act as a "chameleon" is now in fact a critical skill for instructional design practitioners (p. 87). One possible explanation for the growing gap between instructional design research and practice is presented by Driscoll and Dick (1999): "Of the doctorates in IT [Instructional Technology], only a portion are researchers in academia; the remainder have gone into business, industry and government settings where research is rarely conducted" (p. 14). Driscoll and Dick are suggesting that the individuals most capable of planning and completing studies about instructional design experiences work in settings where such research is difficult to plan and complete.

Within the last year, Fortney and Yamagata-Lynch (2013) noted "...experienced instructional designers know that instructional design in practice differs dramatically from the tidy procedural discipline that they learned in their academic coursework" (p. 103). The explanation for this, touched upon in Chapter One of this study, is a simple one. Schwier, Campbell and Kenny (2004) remarked that "much of the extensive work describing theoretical models of instructional design (ID) has not been drawn from the practice of the instructional designer and consequently, instructional design theory is not grounded in practice" (p. 1). Roytek's (2010) work amplifies this notion and introduces

e-learning; she surmises "much of what is found in the literature related to [e-learning instructional design] is conceptual and not grounded in the study of instructional designer practice" (p. 171). Before deeply exploring the increasingly difficult transition from instructional design student/apprentice to instructional design practitioner, however, it is necessary to define more clearly what a successful transition, (and instructional design success in general), looks like.

Success Through a Kaleidoscope

Different stakeholders define instructional design success in different ways. Learners, organizational leaders, employers and other key stakeholders may have different definitions of success. Instructional design success, in this respect, is like looking through the lens of a kaleidoscope. The tube that holds the broken pieces of glass together, however, is always achievement of the instructional goal or goals necessary to close performance gaps. Instructional design efforts are driven by performance gaps. Merrill (2007) asserts, "strategy-by-instructional-goal interactions take precedence of strategy-by-learning-style interactions, regardless of the instructional style or philosophy of the instructional situation" (p. 105). Simply stated, it is all about the instructional goal and helping targeted learning audiences achieve that goal. If learners achieve instructional objectives and ultimately achieve an instructional goal, and if the goal was properly defined, then some degree of success has occurred.

Klimczak and Wedman (1997) posed the following two-part question: "What are the factors that contribute to ID project success? Since multiple stakeholders (e.g., trainers, learners, sponsors, designers) are often involved in an ID project, does the importance attached to these factors vary depending on stakeholder perspective" (p. 5)? Study outcomes suggest seven distinct factors, and weaknesses among existing evaluation models—including the most popular and most widely accepted model

described below. Success is defined and measured differently by different stakeholders. For example, a project manager may interpret success as a project completed on-time and within the allocated budget whereas an instructional designer may interpret success as achievement of instructional objectives as evidenced through learner performance on assessment instruments.

Kirkpatrick (1994) suggested that the success of a training initiative could be evaluated at four levels. The first level is based on reactions to the training experience shared by targeted learning audiences. This is often in the form of an end-of-course survey. The second level involves learning criteria. Assessment instruments, examinations or observations at the second level measure the degree to which a participant has mastered one or more of the program's instructional/performance objectives. The third level deals directly with behaviors. Here, test scores are less critical than consistently applied positive behaviors (as taught throughout the program) on-the-job. The fourth and highest level of evaluation is about organizational impact and results. Successful outcomes with measurement at the first two levels do not necessarily indicate success will be achieved at the third and fourth levels. For example, Sam's story in Chapter One detailed difficulties with conflicting SME materials. If not adequately reconciled, those conflicts may result in inaccurate or incomplete instructional experiences that, even if assessment scores were perfect for every learner, would render the e-learning project ineffective.

Narrowing the topic of instructional design outcomes to e-learning further complicates the subject of evaluation and definitions of program success. Using the four levels of the Kirkpatrick model, Strother, (2002), examined how private corporations assess the effectiveness of e-learning solutions. The study analyzed the evaluation efforts of numerous corporate entities and then categorized those efforts as meeting the criteria of one or more of Kirkpatrick's four levels of evaluation. Strother noted, "While there is

no doubt that we see an increasing number of case studies showing success with elearning, it is still difficult to find solid research measures of learner achievement in the specialized setting of a corporate training program" (p.2). In other words, valid evidence of e-learning success is necessary to justify its continued implementation and yet values related to learner achievement remain elusive. Instead, the low-cost often associated with e-learning (as compared to classroom-based instructional delivery) is the metric that takes precedence.

Other evaluation models for instructional design or e-learning are specific to a type of audience for which success is being determined. Since the constituency involved in this IQA study is comprised of practitioners that support e-learning programs targeted at adult learners, it is necessary to introduce the theorist often referred to as an adult learning pioneer. Knowles (1998) looked at factors likely to impact the success of an adult learning initiative. He noted that a learner undergoes critical changes during the transition to adulthood and that those changes impact learning transfer. These changes involve five critical characteristics: 1) the need for self direction, 2) an ever-increasing reservoir of experiences, 3) a readiness to learn, 4) a need to immediately apply newly-learned tasks, and 5) an increased internal motivation to learn (p. 12). Knowles used a new term, andragogy, to further distinguish adult learning from K12 learning, or pedagogy. Andragogy is essentially the same as pedagogy with the singular difference of learners being restricted to adults.

Measurement of learning success, then, has the capacity to be as complex as the myriad definitions of instructional design itself (and as multi-faceted as the well-meaning practitioners at the heart of this study). Another component playing a critical and ongoing part in the lives of most instructional designers (and potentially impacting the success of their e-learning projects) is the collection of knowledge, skills and abilities instructional designers take with them from formal/informal educational experiences to the workplace.

As they embark on new careers in the instructional design profession, entry-level practitioners attempt to utilize what they have learned in the real or virtual classroom. What they have learned, however, often differs from one formal/informal degree or certificate program to the next. Van Rooij (2013) states, "Unlike some other professions, instructional design competencies have been defined and developed by multiple professional associations, each focused on the practice of instructional design in specific industry sectors and career environments" (p. 35). If a common thread exists among programs, however, it likely involves an instructional design methodology, model or framework.

Methodologies, Models, and Frameworks

Since the conceptual birth of the instructional design discipline in the first half of the twentieth century, researchers and practitioners alike have largely embraced the concept that "...efficient instructional environments lead to better learning, faster learning, or both because they make the best use of limited human cognitive capacity" (Clark, 2006, p. 5). A critical ingredient to achieving that environment is a methodology, a model, or a framework—all of which are intended, to some degree, to streamline efforts and save time. Lack of time is considered one of the most prevalent impediments to the online course creation process (Stevens, 2013). This review will touch upon two of the most popular models: the Dick and Carey model, and the Smith and Ragan model. Both are considered by Gustafson and Branch to be "intended for use in a variety of organizational settings. It seems most likely that each of these models will be used by a skilled development team to develop a complex 'system' of instruction to meet specified organizational requirements or goals" (p. 28).

One of the most popular instructional design methodologies, (a systems approach model), was created in the second half of the twentieth century by Walter Dick and Lou

Carey (1978). The methodology, taught and retaught in instructional design programs across the United States and abroad ever since, offers a ten-component roadmap for instructional design success. The ten components (or steps) are described below.

- 1. In the first step of the methodology, the instructional designer identifies an instructional goal, ideally derived from a detailed assessment of needs.
- 2. The second step involves an instructional analysis to determine the type of learning, to reveal all procedural steps required of learners, and to identify subordinate skills (and to map the relationships among those skills).
- 3. The third step requires the instructional designer to identify entry behaviors and characteristics. These have come to be referred to as prerequisites and are different from subordinate skills in that they will not be taught or otherwise integrated with the instruction.
- 4. The designer composes performance objectives in the fourth step. Performance objectives include conditions under which the learner must perform a skill or complete a task as well as the criteria for successful performance (i.e. "with 90% accuracy).
- 5. The fifth step involves the creation of criterion-referenced test items—one for each of the objectives written in step four.
- 6. The sixth step involves formulating an instructional strategy. This defines the type of instruction to be created (classroom-based, e-learning or blended).
- 7. The seventh step is creating the instructional materials. In today's corporate training environments, this may involve the generation of storyboards for e-learning, writing participant and facilitator guides for classroom-based instruction and more.
- 8. The eighth step involves designing and conducting formative evaluation to help learners determine their own level of success and to provide instructors with insight into possible remediation needs before completion of the learning program.

- 9. Revision is the focus of the ninth step and is presented by Dick and Carey as a repeatable cycle looping back to formative evaluation.
- 10. Finally, the instructional designer conducts a summative evaluation of the learning program. Summative evaluation only occurs after program implementation and is not considered a part of the instructional creation process but yields valuable information about the program's overall value, worth and effectiveness.

This methodology has maintained strong visibility and popularity even through the twenty-first century. Recently, Bello and Aliyu (2012) commented, "Dick and Carey made a significant contribution to the instructional design field by addressing instruction as an entire system" (p.278). The Dick and Carey methodology (and many lesser-known methodologies that followed), with its criterion-referenced test items, well-defined boundaries and clearly defined steps, has strong roots in behaviorism (Skinner, 1958).

The Smith and Ragan instructional design model (2005) is, to quote its authors, "...a common model of instructional design" (p. 10). With roots in behaviorism similar to the Dick and Carey model, the Smith and Ragan model condenses the ten steps of the Dick and Carey model to just three: Analysis, Strategy and Evaluation.

In Analysis, the instructional designer defines the learning contexts, identifies and describes the learners, and defines the learning task(s). Upon the completion of these three analysis tasks, the instructional designer then writes the test items. In Strategy, the instructional designer determines the organizational, delivery and management strategies for the initiative. This determination is followed closely by writing and producing the instruction. And finally, during Evaluation, the instructional designer conducts formative evaluation activities and then revises the program at each of the three key steps as needed.

While much confusion exists around its origin and underpinnings, ADDIE is an actual model created in 1975 at Florida State University for the United States Army (Branson, Rayner, Cox, Furman, King, Hannum, 1975). It spread across the other branches of the armed forces and crossed from military training environments to federal, public and eventually private settings. Perhaps its catchy acronym and easy-to-remember steps played a part in its survival and increasing popularity. Derived from a number of pre-existing models, it stands for Analysis, Design, Development, Implementation and Evaluation. As a personal testament to the pervasiveness of this model, I first encountered ADDIE while working for training and development consulting firm in Virginia in 2000. Twelve years later, (and more than a thousand miles west), I began working with the training division of an aerospace software company where the ADDIE model is also followed during internal and external training initiatives. In recent years, however, ADDIE and other models have come under fire for the very epistemological foundations responsible for its effectiveness and longevity: behaviorism.

E-Learning and Voices of the Past

The field of e-learning is perhaps best defined as one that "...emerges at the confluence of educational psychology and instructional design, of educational technology and distance education, and of recent technological developments related to the Internet and the Web" (Friesen, 2009, p. 6). While a tendency exists to treat e-learning as separate from instructional design and instructional methods, most prominent scholars and practitioners avoid doing so. Clark and Mayer (2011) assert, "From the plethora of media comparison research conducted over the past sixty years, we have learned that it's not the delivery medium, but rather the instructional methods that cause learning" (p. 14). Perhaps for this reason, e-learning efforts that fail to achieve learning transfer and retention bring increased scrutiny not only to technology-driven delivery methods, but also to the methodologies, models and frameworks discussed previously. Garrison states

that "...the challenge is enormous and there are no simple rules or recipes for designing and delivering an effective e-learning experience" (p. 5).

Perhaps the first and most famous criticism of systems-based instructional methodologies is "The Attack on ISD" (Gordon and Zemke, 2000). The journal article presents four critical flaws with traditional behaviorist-leaning instructional design:

- 1. It is too slow and clumsy to meet modern-day training related challenges.
- 2. It has no substance.
- 3. When used as directed, it produces bad solutions.
- 4. It clings to the wrong worldview.

Another common criticism (focusing on technology-driven delivery methods) is that a systems-based approach is too rigid and restricts the many possible benefits of emerging technology. Clinton and Hokanson (2012) argue that "...the field of instructional technology has tended to give little or no formal treatment of the importance of creativity in instructional design" (p. 111). Concern about the widening canyon between research and practice is being communicated more frequently as well. Janzen and Edwards (2012) suggest, "Developments in educational theory compatible with elearning have been outpaced by advances in practice. New theory is needed" (p. 712). Criticisms and protest are often followed by suggested improvements and solutions. This has been the case to date with instructional design, its methodologies/models/frameworks and the abundant delivery affordances of the twenty-first century.

Small Steps

While some instructional design researchers and practitioners cling tightly to tried-and-tested methods with deeply seated modernist attributes, others are beginning to take steps to learn more about the need for change (and what that change might look like). Recently, Tennyson and Sisk (2013) acknowledged that "...ISD is too complex a system to be employed in a sequential fashion. Our view is that the content of ISD is rich and needs to be conserved but within a new dynamic systems approach" (p. 11). A study performed earlier examined what instructional designers do on the job and, more specifically, what heuristics they relied upon to remain successful with instructional design initiatives (York and Ertmer, 2011). Among the 61 heuristics identified were "Be honest with the client," "As a designer you need to listen more than you talk," and "When verifying information, you will often learn more information" (p. 851). These heuristics represent sage advice for any instructional designer, but do not themselves offer revised instructional design methodologies or new models. Perhaps the most peculiar finding from this study is that none of participants (who were skilled instructional design practitioners) suggested adding heuristics related directly to following an instructional design model.

Ozdilek and Robeck (2009) surveyed instructional designers about aspects of their work they considered to be most important. Their findings reinforce a theme that is prevalent throughout much of the contemporary instructional design research—that "...ID professionals voice a wide array of priorities, and that these do not distribute evenly across the ADDIE steps, nor do they address all of the concerns that strict adherence to a stepwise ADDIE approach would suggest" (p. 2050).

Summary

Instructional design practitioners who support e-learning projects have perhaps as challenging a time defining their profession as they do meeting the ever changing needs of learners who must acquire new knowledge, skills and abilities faster than ever before. The e-learning programs that practitioners create to achieve these goals are evaluated at

increasingly complex levels not entirely addressed by popular methodologies. While practitioners enjoy a strong job market and the instructional design industry outlook remains strong, practitioners struggle daily with models and frameworks that, for the most part, have changed very little over the last two decades. In contrast, learning environments have drastically changed. Instructional designers seldom perform research on their own and rely upon guidance and support from formal or informal degree programs to prepare for entry into the instructional design workforce. Components of these programs tend to grow stale against the escalating pace of changes in workplace learning and career development. The growth of e-learning (as an instructional delivery method) only exacerbates these shortcomings and researchers and practitioners alike are speaking out and actively seeking alternative routes to success.

E-learning instructional design research should seek to improve the lives of practitioners and increase attainability of success in the field—one initiative or project at a time. As this literature review demonstrates, scholarly progress has been made. The illustration of the e-learning instructional designer's world today, however, remains clouded. My contribution of this IQA study builds upon recent scholarly progress but also refrains from testing another hypothesis or proving that one learning strategy, methodology or delivery method is superior (or inferior) to others. Instead, it steadies the camera, zooms out, refocuses and—without friction or influence—allows the constituency of practitioners to create the system for what they do everyday on-the-job. Practitioners struggle daily with issues and challenges and they have earned the privilege of guiding and directing future e-learning instructional design research, development and progress.

The affinities of the e-learning creation system and the relationships among those affinities are derived from the voices of the practitioners.

I approach this research study in the same way that practitioners following a

methodology would likely approach an e-learning effort—through analysis of the environments. The environments, in this case, are the places in which practitioners work and the experiences practitioners encounter there. They are the office buildings, home offices, cubicles, classrooms, and the many diverse and complex events and occurrences common to the e-learning creation experience. My research questions are as follows:

- 1. What affinities do instructional design practitioners attribute to the e-learning creation experience?
- 2. How, if at all, do those affinities influence one another?

The next section discusses the methodology used to answer these two questions, Interactive Qualitative Analysis, (IQA).

CHAPTER 3: THE INTERACTIVE QUALITATIVE ANALYSIS (IQA) METHOD

Introduction

My study seeks to obtain and share enlightenment about the e-learning creation experience from the practitioners' points-of-view. In this respect, my constituency is comprised of practitioners who support e-learning efforts. They are the creators of the learning programs as opposed to the targeted learners and end-users. Having identified a clear phenomenon, (e-learning), and a discrete constituency, (practitioners), I then contemplated the type of study that would best help me answer my research questions. Merriam states, "If you want to understand a phenomenon, uncover the meaning a situation has for those involved, or delineate process (how things happen), then a qualitative design would be most appropriate" (p. 11). It became clear to me that my study needed a strong qualitative element and that methods I used had to support capturing accurate snapshots of the lived experiences of study participants.

Part of improving understanding of the e-learning creation experience, however, requires looking beyond mere identification of the e-learning creation experience system's affinities and examining how affinities associated with the experience influence one another. This is not a new concept; Dewey (1930) suggested that "[Behavior] can be resolved—it must be—into discrete acts, but no act can be understood apart from the series to which it belongs" (p. 69). In this regard, consensus of practitioners is involved and becomes as important as participants' anecdotal contributions. Consensus is often measured numerically and scrutinized by numerical values and so I realized that my study would benefit from, to some degree, a quantitative method. Studies that combine qualitative and quantitative methods have been increasing in volume and in acceptance for more than two decades. Salomon (1991) went so far as to assert "As with the case of quantitative and qualitative research in education, cohabitation is not a luxury; it is a necessity if any fruitful outcomes are ever expected to emerge" (p. 17). More recently,

Glesne (2011), while clear to establish the distinction between a methodology and a method, states:

If, however, you wanted to combine quantitative and qualitative methods or techniques, you could. The experimental researcher sometimes uses interviews and the ethnographer sometimes uses surveys. One method tends to be supplementary to the dominant mode of gathering data. That is, if doing ethnography, you might include a quantifiable survey in your study, but most of your methods would be qualitative (p. 14).

My two research questions demand a study with qualitative inquiry as the dominant mode of data gathering supplemented by quantitative methods, including surveys. I needed to capture the thoughts, feelings and experiences of e-learning practitioners in a non-leading manner through in-depth interviews while applying weight (numerical values) to the choices they shared with me regarding the ways in which affinities influenced one another. I chose Interactive Qualitative Analysis, or IQA, as my methodology because it provides a well-documented systems approach utilizing qualitative and quantitative methods. It is described in detail throughout this section.

IQA Methodology Explained

Background

Dr. Norvell Northcutt and Dr. Danny McCoy created the Interactive Qualitative Analysis (IQA) methodology at the University of Texas at Austin. IQA is a systems approach to qualitative research. The core of the IQA methodology is a series of interdependent protocols that, when followed in a specific order, allows the researcher to identify themes and draw systems based on a chosen phenomenon and based on collected qualitative and quantitative data. When applying the IQA methodology, several phases are involved. These phases include: 1) Research Design; 2) Focus Group or Affinity Production Interviews; 3) Interviews; and 4) Reporting. Appendix A of this document provides a detailed description of the IQA methodology authored by Northcutt and McCoy; it is shared with their permission. The following, however, offers an overview of the four key phases and the protocols found in each.

Step One: Research Design

Research Design is the first phase of an IQA study. It requires the researcher to identify the problem or phenomenon to be studied. The phenomenon of this study is the e-learning creation experience. This phase also requires the researcher to identify constituencies. Constituencies of an IQA study are populations that are simultaneously closest to the chosen phenomenon and least able to manipulate or control it. For example, the one and only constituency of this study is practitioners—individuals who contribute to the creation of e-learning solutions and experiences. Practitioners are closest to the e-learning creation experience phenomenon but possess less power to control it than administrative or executive leadership (who are also farther from the phenomenon).

Finally, IQA research design requires creation of an issue statement and a warm-up exercise to be administered during focus group or Affinity Production Interviews.

Step Two: Focus Group or Affinity Production Interviews

The purpose of this phase is to interact with members of the constituency in an effort to identify the affinities of the phenomenon. The researcher prepares constituency members for the experience by guiding them through a warm-up exercise designed to help participants clear their minds and focus on the phenomenon. Each participant then records discrete thoughts, feelings, and ideas as they emerge. What participants record is related directly to the phenomenon and participants employ a brainstorming approach without self-editing or judging what they have written or what they are about to write.

If focus group experiences are conducted, small groups of constituency members assemble in a room at the same time and complete the exercise together—first quietly recording what comes to their minds and then collectively organizing what they have written into categories that are appropriate to the phenomenon. These reconciled categories become the affinities of the system, although at this stage influential relationships among the affinities remains unknown. When assembling a small group is difficult due to participant availability and geographical location, Affinity Production Interviews are acceptable provided that the researcher possesses significant understanding of the phenomenon and of the constituency. During the Affinity Production Interviews, the researcher facilitates the exercise with one individual at a time and collects the discrete thoughts, feelings, and ideas that the participant has recorded. When an acceptable number of participants has completed the experience, the researcher combines the discrete contributions of all participants and organizes them into affinities (and possibly sub-affinities). The researcher then assigns a name to each affinity and sub-affinity and drafts the protocol for the next phase, Interviews.

Step Three: Interviews

The outcome of the Focus Group or Affinity Production Interviews phase provides the foundation for the Interview phase of the IQA methodology. IQA interviews are conducted privately, one-on-one, and conducted either in person or remotely through telephone or videoconference. Like participants of the Focus Group or Affinity Production Interviews, interview participants are also members of the constituency; in the case of this study, constituency members are e-learning practitioners.

During an IQA interview with a participant, the researcher asks about the affinities and sub-affinities derived from the previous phase. The goal of the interview is to collect highly detailed and personal qualitative information about each affinity and sub-affinity—information impossible to collect during the previous phase but critical to the creation of the system. Each interview consists of two parts: the axial, and the theoretical.

The axial part of the interview is structured by affinity and sub-affinity but otherwise open-ended. In this study, participants completing the axial part of the interview also ranked their experiences with each affinity and sub-affinity on a scale of "Very Negative" to "Very Positive." "Not Applicable," or N/A, was also an option. The details collected during the axial part of the interview coat each affinity and sub-affinity with the lived experiences of practitioners.

Whereas the axial part of the interviews is designed to bring affinities and sub-affinities to life with rich and relevant histories and experiences, the theoretical part of the interviews is designed to identify potential relationships among affinities. As Northcutt and McCoy (2004) state, "The product of an IQA study is a visual

representation of a phenomenon prepared according to rigorous and replicable rules for the purpose of achieving complexity, simplicity, comprehensiveness, and interpretability" (page 41). The visual representation consists of boxes, (one for each affinity), and arrows. An arrow from one affinity to another illustrates an influential relationship. The data used to determine whether an affinity is a driver or an outcome are collected during the theoretical part of participant interviews. During the theoretical interview, participants complete an Affinity Relationship Table (ART). Each affinity influences, is influenced by, or has no relationship with every other affinity of the system. The ART facilitates collection of participant beliefs about which of the three is the case for each possible pair of affinities. Typically, the theoretical part of the interview requires significantly less time than the open-ended axial discussion.

Although at times participants may share anecdotes or experiences related to their decisions made during the theoretical interview, the decisions themselves represent quantitative data. As such, precision of outcomes increases as the number of participants increase. Online or paper-based surveys may be utilized to ensure an adequate number of theoretical responses. In this study, an online survey was created and launched to individuals who did not participate in phase two's Affinity Production Interviews or phase three's axial interview.

Critical IQA Tables and Diagrams

The ART, described above, is the only table completed during an actual participant interaction, but it is not the only table critical to successful completion of an IQA study. All one-to-one IQA interviews are fully recorded and transcribed. Data from the axial part of one individual interview are used to create an individual Axial Code Table (ACT) for that one participant. When all interviews have been completed and transcribed and when ACTs have been created for all participants, one large, combined

ACT is generated from which prominent qualitative information may be easily referenced and used to interpret and analyze the resultant system.

During the theoretical part of an interview, as noted previously, participants sometimes share information to explain their decisions about influential relationships (or the absence of them). Transcriptions of this data are coded according to each possible relationship. The outcome is a combined Theoretical Code Table (TCT) rich with practitioner experiences that may prove helpful in supporting or reconciling the affinity relationships within a system. Reconciliation may be necessary due to a participant misunderstanding or a tie in the number of votes for a pair-wise relationship. In such cases, qualitative data shared during the theoretical part of the interview may both inform and justify corrective action by the researcher.

At the completion of the third phase, there should be one ART for each participant (including online survey respondents if applicable). Tabulating the participant decisions should yield the dominant relationship for each possible pair. These relationships, along with "IN" and "OUT" numbers for each affinity, are represented on an Interrelationship Diagram (IRD). Another critical element of the IRD is the delta value. The Delta value for each affinity is the total "INs" subtracted from the total "OUTs" for that same affinity. In general, the larger the delta value, the more likely the affinity is a driver for the system. The smaller the delta value, the more likely the affinity is an outcome.

The visual fruit of the labor described above is the System Influence Diagram (SID). Given a complete and reconciled IRD, each affinity is assigned its visual position on the diagram based on its status as a primary or secondary driver, a primary or secondary outcome, or neither. The result is a visual representation of the phenomenon.

Its loops and recursions reveal possible patterns, support predictions, and pinpoint areas for additional study.

Step Four: Reporting

Reporting consists of presenting the final SID, sharing results and analysis, and documenting interpretation and implications. Each shape is brought to life through constituents' stories and the lines drawn to and/or from it. Through reporting, loops and recursions are potentially given names and examined in detail. The research may suggest that a change or manipulation with one affinity may or may not impact one or more other affinities. IQA reporting closes the study not by solving a problem or proving a hypothesis but by illustrating a phenomenon, identifying its components, and clarifying how they influence one another. This study employs the IQA methodology to examine the e-learning creation experience. The remaining sections of this Chapter describe IQA's four phases as they relate to this study.

Information Related to This Study

Research Design

The results of Phase One, (research design), for this study are shown in the table below.

Table 3.1: Research Design Results						
Problem:	A contemporary, practitioner-driven understanding of the elearning creation experience does not exist.					
Constituency:	Practitioners (instructional design professionals who contribute to the creation of e-learning products or solutions)					
Phenomenon:	The E-Learning Creation Experience					
Research Questions:	 What affinities do instructional design practitioners attribute to the e-learning creation experience? How, if at all, do those affinities influence one another? 					
Issue Statement:	Tell me what it is like to work on e-learning projects.					

The research design process is the least time intensive phase of an IQA study, however, the results of the research design process for this study were more than fifteen years in the making. The researcher's experience as a practitioner was a critical factor in defining the problem, which is the lack of a modern-day understanding of what it's like to work on e-learning efforts. Efforts to increase understanding must begin with those who are simultaneously closest to the problem and least empowered to change it—practitioners. Practitioners comprise the constituency of this study; they are instructional design professionals who contribute to the creation of e-learning products or solutions. The phenomenon of the study is the e-learning creation experience.

The research questions are derived directly from the problem, constituency, and phenomenon. In order to illustrate a practitioner-driven system for the e-learning creation process, affinities must be identified. Additionally, all of the possible ways in which those affinities influence one another must also be identified.

Affinity Production Interviews

The next two phases of the IQA methodology requires practitioner participation. The researcher recruited study participants through social media sites (such as the instructional design and e-learning professional groups on LinkedIn), through the

professional networking site odesk, and through associations such as ATD.

The next phase of this IQA study involved Affinity Production Interviews. In this case, the researcher chose to facilitate Affinity Production Interviews with study participants individually to prepare participants to think about (and then share thoughts about) working on e-learning creation projects. This decision was made because efforts to assemble small groups of practitioners for focus groups were hampered by the professional and personal demands placed on adult instructional designers in geographically dispersed areas.

Building on the issue statement derived during research design, this second phase of the study began by drafting a warm-up script for the Affinity Production Interviews. The researcher read the script to participants either in person (one-on-one) or remotely (by phone or video conference). After listening to the warm-up script, participants typed their responses using laptop or desktop computers and word processing software and then e-mailed the researcher the final document immediately after the event without editing or changing what they typed. Each document file was named using numbers only and securely stored for future analysis. The script is shown in the table below.

Table 3.2: The Affinity Production Interviews Warm-up Script

I would like you to think for a while about working on an e-learning project—that is, about supporting or contributing to (in some way) the e-learning creation experience. In a few minutes, I am going to ask you to tell me about your experiences with being on e-learning Projects.

So let's begin.

- Please allow yourself to be as comfortable as possible.
- Put your thoughts from the day aside and allow your attention to focus on being on e-learning projects. Close your eyes to increase your state of relaxation and your ability to focus on being on e-learning projects.
- Now imagine yourself supporting an e-learning project. (long pause)
- See yourself in all of the places or at all of the events associated with an elearning project. Imagine yourself during the entire e-learning project life cycle.
- See all of the places, events and people associated with e-learning projects. See yourself engaging in e-learning project activities.
- Notice your surroundings. Looking around you, take in the sights and the sounds
 that are associated with being in the e-learning creation environment. Allow
 yourself to become aware of your environment with all of your senses. Focus on
 what it feels like to be totally absorbed in the e-learning creation experience. Be
 there in your mind.
- Review all of your recollections up to this moment. Allow all these thoughts to remain calmly in your consciousness and ready to be revealed.

Thank you for allowing these valuable observations and recollections to come forward. Please once again focus on this time and place and, when you are ready, open your eyes.

And now please—without consulting with others—write your thoughts. Type the things you sensed and felt on the blank document open in front of you. Write one thought or experience at a time, and separate your thoughts and experiences by hard returns. Feel free to record a word, a phrase, or a sentence to capture that thought... anything that reveals what came to your mind when thinking about supporting an e-learning project.

The researcher facilitated Affinity Production Interviews with thirteen e-learning practitioners. Contributions from one participant, however, were rejected due to substantial self-editing and what the researcher perceived as an attempt to draft an essay as opposed to following the guidelines in the warm-up script. The researcher printed the practitioner files, cut out each of the 254 discrete thoughts into separate pieces, and, based on experience as an e-learning practitioner, organized the discrete thoughts into categories of similar meaning. Twelve of the discrete thoughts were rejected for one or more of the following two reasons:

- 1. Other participants failed to replicate the discrete thought, (such as "brain food, fish oil, yogurt.")
- 2. The discrete thought was overly broad or otherwise lacking meaning, (such as "design" and "work.")

The researcher organized the remaining 242 thoughts into twelve affinities and then assigned names to each affinity. The table below illustrates a clump of like-minded thoughts to which the researcher assigned the affinity name "Communication."

Table 3.3: Participant Data Related to the Communication Affinity

- Getting too much of the wrong information
- ♦ Jumping in on a partially developed course without adequate documentation
- ♦ Not having adequate background information for a course the "do this" edict
- ◆ Long phone calls, too much back and forth
- ◆ Getting filtered information what someone thinks you should know, not all of the background
- ♦ Discussion sessions
- ◆ Trying to explain myself, stumbling over the words, or repeating things like our development process so many times that they become rote
- ♦ Making discussions discussible
- ♦ Documentation of action items from meetings
- ♦ So many emails
- ♦ Trying to explain concepts I don't fully understand
- ♦ Short bursts of meaning
- **♦** Synchronous
- **♦** Asynchronous

The researcher performed an Affinity Name Crosswalk with affinities derived from previous IQA studies conducted by Dr. McCoy involving e-learning and Computer-Based Training (CBT), adults in professional settings, and organization assessment. The crosswalk experience enhanced the final affinity names through integration of related data.

Table 3.4: Affinity Name Crosswalk						
McCoy CBT Training Development Study	Military Model (DOTMLPF + Policy)	McCoy Organization Assessment Model	Derr The eLearning Creation Experience Focus Group	Final Affinity Names		
◆ Client Relationship		◆ Client Relationship	♦ Clients/SMEs	Client		
◆ Communication		◆ Communication	◆ Communication ◆ Working with Others	Communication		
◆ Competition		◆ Competition				
◆ Employee Satisfaction		♦ Employee Satisfaction	◆ Emotions and Feelings	Emotions		
◆ Leadership	◆ Leadership	◆ Leadership	◆ Project Management and/or Supervision	Leadership / Project Management		
◆ Resources	◆ Materials	◆ Material	 Authoring and Design Tools/Applications Instructional Content/Media Time 	Resources / Material		
♦ Team	♦ Personnel	◆ Personnel		Personnel /Team		
♦ The Product		◆ Product	♦ Learners	Product		
♦ Winning Contracts		♦ Winning Contracts				
♦ Work Environment	◆ Facilities	◆ Facilities		Facilities / Work Environment		
	◆ Doctrine		 Review and Revision Theories, Methods and Methodologies Learning Strategies and Practices 	Instructional Systems Design Process		
	◆ Organization	◆ Organization		Organization		
	◆ Training	♦ Training		Training		
	◆ Policy	◆ Policy		Policy		

After assigning names to the twelve affinities, the researcher drafted sub-affinities based on the discrete thoughts provided by participants and the researcher's e-learning knowledge and experience. The existence of sub-affinities increases the structure of the axial, open-ended interviews by offering the participants more specific and less broad topics to discuss. For example, the Communication affinity is comprised of nine sub-affinities including Written, Verbal, and Social Media. A full list of affinities and the sub-affinities of each is presented in the table below.

Table 3.5: Affinities and Sub-Affinities						
Affinity	Sub-A	Affinities				
Leadership	 Vision Project Management Management Style Guidance / Direction Communication 	 ◆ Knowledge & Experience ◆ Coach / Mentor ◆ Character ◆ Accessibility 				
Policy	 ♦ Standards of Conduct ♦ Recruitment & Hiring ♦ Compensation & Benefits 	 Employment Policies Work Schedule Performance Reviews & Promotions 				
Organization	 Structure → Hierarchical Structure → Flat Structure → Divisional Structure → Bureaucracy 	Culture ◆ Collaborative Culture ◆ Competitive Culture ◆ Control Culture ◆ Creative Culture				
Instructional Systems Design Process	 Learning Theory Planning Analysis Design 	◆ Development◆ Implementation◆ Evaluation				
Personnel / Team		 ♦ Subject Matter Experts ♦ Editors ♦ Quality Control & Testers ♦ Office Staff ♦ IT Support ♦ Trainers 				
Training	Formal Education ◆ College/University ○ Bachelors Degree ○ Masters Degree ○ Doctorate Degree ◆ Technical/Trade School	Informal Education ◆ Professional Development ◆ Apprenticeship, Mentoring & Coaching ◆ Self-Directed Learning ◆ On-The-Job Training				

Table 3.5, cont.

	◆ Computers / Hardware	♦ Multimedia Equipment
Resources / Materials	♦ Software	◆ Office Equipment and Supplies
	Media / Content	♦ Network
	◆ Location	♦ Safety & Security
Facilities	♦ Office Spaces	♦ Home Offices
	◆ Environmental Conditions	
	 Official Messages 	◆ Feedback
	♦ Written	♦ Rumor
Communication	♦ Verbal	♦ Social Media
	◆ Collaborative	 Miscommunication
	◆ Meetings	
	♦ Adversarial	♦ Sharing
Client Relationship	♦ Transactional	◆ Collaborative Partnership
•	♦ Consulting / Informational	
	◆ Proposals / Contracts	♦ Storyboards
Product	◆ Project Plans	◆ Courses
	♦ Reports	♦ Source Files
	♦ Analysis / Design Documents	◆ Evaluations
	◆ Contentment	♦ Anger/ Rage
	◆ Excitement	♦ Anxiety
	♦ Fun	♦ Boredom
	♦ Happiness/Joy	♦ Depression
	♦ Inspiration	◆ Disappointment
Emotions	◆ Pride	◆ Exhaustion/Tired
	◆ Satisfaction	♦ Fear
	◆ Surprise	◆ Frustration
	◆ Trust	♦ Isolation / Loneliness
		◆ Overwhelmed
		♦ Stress

Interviews

Interviews were conducted in two parts: axial, (or open-ended), and theoretical, which involved focus on the relationships among the affinities. The following two sections of this document explain the axial and theoretical interview experiences.

Axial Interviews

Ten participants, (e-learning practitioners), completed the axial part of the interview. The researcher facilitated the surveys individually by phone at an agreed upon date and time after e-mailing the interview protocol file to each participant. The researcher advised each participant to locate a quite space in front of a computer so that he or she may view the interview protocol during the interview. Axial interviews lasted between 90 minutes to more than two hours, and the researcher regularly offered breaks to participants if they were necessary. Each interview was recorded and fully transcribed.

At the beginning of each axial interview, the researcher read aloud and reviewed the following text:

In a few minutes, I am going to ask you to tell me about your experience with elearning creation. Previous efforts have revealed a dozen common themes that describe practitioner e-learning creation experiences. See yourself in all of the places the e-learning creation experience occurs. Imagine yourself from the first day of the e-learning creation to completion. See all of the places, events and people that are part of the e-learning creation experience. See yourself engaging in the activities of the e-learning creation experience.

The common themes that describe the e-learning creation experience are:

- Leadership
- Policy
- Organization
- Instructional Systems Design Process

- Personnel / Team
- Training
- Resources / Materials
- Facilities
- Communication
- Client Relationship
- Product
- Emotions

Tell me briefly about your background and job.

Before we look at each of these themes in detail, tell me a little about the elearning creation experience. How would you describe the e-learning creation experience? What does it mean to you?

Lets look at each of the themes in detail, one at a time. Tell me about your experiences with each theme and sub-theme.

The researcher then walked each participant through the twelve affinities and sub-affinities using the following tables. To facilitate understanding and to avoid confusion among participants, the researcher used the term "themes" rather than using the methodology-related term "affinities." After participants discussed each of the sub-affinities, the researcher then asked participants to rate their experiences with each sub-affinity on a five-part scale from "very negative" to "very positive." Participants were also given the opportunity to select "not applicable" or N/A if they had no exposure or experience related to the sub-affinity. Finally, before moving on to the next affinity, participants were asked to rate their overall experience with the affinity. The rating format related to the twelfth and final affinity, Emotions, differed from the rating formats

of the previous affinities in that participants were asked to rate the degree to which they may have experienced the emotion. The researcher verbally explained this difference prior to facilitating the rating experience.

Leadership Leadership describes the management and controlling of the affairs of a business, vision/goals, and the implementation of change. Describe your experience with each of these components of Leadership. Very Very Not Negative Neutral Positive Negative Positive Applicable Experience Experience Experience Experience Experience Vision N/A 5 **Project Management** N/A 5 **Management Style** 2 3 5 N/A 4 1 **Guidance / Direction** N/A 3 5 4 Communication N/A 5 3 1 4 Knowledge & Experience N/A 2 3 4 5 1 Coach / Mentor N/A 3 4 5 1 2 Character N/A 1 2 4 5 Accessibility 2 3 N/A 1 4 **Overall Leadership / Project** 3 5 **Management Experience** 1 2 4

Policy Policy describes the set of documented guidelines that establish standards in areas such as proper procedures and employee behavior, which governs or guides the way the organization conducts business. Describe your experience with each of these components of Policy. Very Very Not Negative Neutral Positive Negative Positive Applicable Experience Experience Experience Experience Experience **Standards of Conduct** N/A 2 3 4 5 1 **Recruitment & Hiring** N/A 2 3 5 1 4 **Compensation & Benefits** N/A 1 2 3 4 5 **Employment Policies** N/A 3 5 1 2 4 **Work Schedule** 2 3 5 N/A 1 4 **Performance Reviews & Promotions** 2 5 N/A 1 3 4 **Overall Policy Experience** 2 3 4

Organization Organization describes the structure and culture utilized to conduct the operation and business. Organizational structures may be hierarchical, flat or divisional structures. Describe your experience with each of these components of Organization. Very Very Positive Not Negative Neutral Negative Positive Applicable Experience Experience Experience Experience Experience Structure **Hierarchical Structure** 3 N/A 1 4 5 2 **Flat Structure** N/A 5 **Divisional Structure** N/A **Bureaucracy** N/A 1 5 Culture **Collaborative Culture** 3 5 N/A 1 2 4 **Competitive Culture** N/A 1 2 3 4 5 **Control Culture** 3 5 N/A 4 1 **Creative Culture** N/A 2 3 4 5 1 **Overall Organization** 2 3 4 5 **Experience** 1

Instructional Systems Design Process

Instructional Systems Design Process describes the systematic process and established procedure by which instructional materials are designed, developed, and delivered.

Describe your experience with each of these components of Instructional Systems Design Process.

	Not Applicable	Very Negative Experience	Negative Experience	Neutral Experience	Positive Experience	Very Positive Experience
Learning Theory	DIA					
	N/A	1	2	3	4	3
Planning	N/A	1	2	3	4	5
Analysis						
Analysis	N/A	1	2	3	4	5
Design						
Design	N/A	1	2	3	4	5
Development						
	N/A	1	2	3	4	5
Implementation	N/A	1	2.	3	4	5
	11/11	1			–	3
Evaluation	N/A	1	2	3	4	5
Overall Instructional						
Systems Design Process		1	2	3	4	5
Experience						

Personnel / Team Personnel / Team describes the people with the knowledge, skills, abilities, and competencies needed to perform a job or task and who make up the team. Describe your experience with each of these components of Personnel / Team. Very Very Negative Neutral Not Positive Negative Positive Applicable Experience Experience Experience Experience Experience Program/Project Managers N/A 1 2 3 4 5 **Instructional Designers** 5 N/A 3 4 1 2 **Developers / Authors** N/A 4 5 **Multimedia Experts** 4 N/A 5 **Graphic Artists &** Animators N/A 2 4 5 1 **Programmers** N/A 2 3 4 5 1 **Subject Matter Experts** N/A 2 3 4 5 **Editors** N/A 1 2 3 4 5 **Quality Control &** Testers N/A 1 2 3 4 5 **Office Staff** 5 N/A 1 2 3 4 IT Support N/A 2 3 4 5 1 Trainers N/A 1 2 3 4 5 **Overall Personnel / Team** 2 3 4 5 1 **Experience**

Training						
Training describes the types and amount of education one has obtained. Describe your experience with each of these components of Training.						
	Not Applicable	Very Negative Experience	Negative Experience	Neutral Experience	Positive Experience	Very Positive Experience
Formal Education						
College / University						
♦ Bachelors Degree	N/A	<u> </u>	2	3	4	5
♦ Masters Degree	N/A	1	2	3	4	5
♦ Doctorate Degree	N/A	1	2	3	4	5
Technical / Trade School	N/A	<u> </u>	2	3	4	5
Informal Education						
Professional Development	N/A	1	2	3	4	5
Apprenticeship, Mentoring & Coaching	N/A	1	2	3	4	5
Self-Directed Learning	N/A	1	2	3	4	5
On-The-Job Training	N/A	1	2	3	4	5
Overall Training Experience 1 2 3 4 5						

Resources / Materials						
Resources / Materials describes the tools and other equipment needed to perform all						
tasks. Describe your experience with each of these components of Resources / Materials.						
	Not Applicable	Very Negative Experience	Negative Experience	Neutral Experience	Positive Experience	Very Positive Experience
Computers / Hardware	N/A	1	2	3	4	5
Software	N/A	1	2	3	4	5
Media / Content	N/A	1	2	3	4	5
Multimedia Equipment	N/A	1	2	3	4	5
Office Equipment and Supplies	N/A	1	2	3	4	5
Network	N/A	1	2	3	4	5
Overall Resources / Materials Experience 1 2 3 4 5				5		

Facilities										
Facilities describes the buildings, communications support, logistics, and other things needed to support operations. Describe your experience with each of these components of Facilities.										
	Not Applicable Very Negative Experience Neutral Experience Neutral Experience Positive Experience Very Positive Experience Experience									
Location	N/A	1	2	3	4	5				
Office Spaces	N/A	1	2	3	4	5				
Environmental Conditions	al N/A		2	3	4	5				
Safety & Security N/A		1	2	3	4	5				
Home Offices	1	2	3	4	5					
Overall Facilities Exp	1	2	3	4	5					

Communication Communication describes the exchange of information between groups and individuals. Describe your experience with each of these components of Communication. Very Very Not Negative Neutral Positive Negative Positive Applicable Experience Experience Experience Experience Experience **Official Messages** N/A 1 2 3 4 5 Written N/A 3 4 5 1 2 Verbal N/A 4 5 Collaborative N/A 4 Meetings N/A 2 4 5 **Feedback** N/A 2 3 5 1 4 Rumor N/A 2 3 4 5 **Social Media** N/A 1 2 3 4 5 Miscommunication N/A 1 2 3 4 5 **Overall Communication Experience** 3 5

Client Relationship Client Relationship describes the connection between client and team and their involvement with each other, especially related to to how they behave and feel toward each other and communicate or cooperate with one another. Describe your experience with each of these components of Client Relationship. Very Very Not Negative Neutral Positive Positive Negative Experience Applicable Experience Experience Experience Experience Adversarial N/A 1 2 3 4 5 Transactional N/A 2 3 4 5 1 Consulting / Informational N/A 1 2 3 4 5 Sharing 5 N/A 1 2 3 4 Collaborative **Partnership** N/A 1 2 3 4 5 **Overall Client Relationship** 2 3 4 5 **Experience**

Product Product describes the deliverables produced for the client as well as all of the products generated to fulfill e-learning contract obligations. Describe your experience with each of these components of Product. Very Very Not Negative Neutral Positive Negative Positive Applicable Experience Experience Experience Experience Experience **Proposals / Contracts** N/A 1 2 3 4 5 **Project Plans** 5 N/A 3 4 1 2 Reports N/A 4 5 **Analysis / Design Documents** 4 N/A Storyboards N/A 1 2 4 5 Courses N/A 2 3 4 5 1 **Source Files** N/A 2 3 4 5 **Evaluations** 2 3 5 N/A 1 4 **Overall Product Experience** 3

Emotions

Emotions describes the many positive and negative feelings one experiences about his or her job, the work product, and others on the team.

Describe your level of experience with each of these components of Emotions.

Describe your lever	71 011p 0110110	- 111111 0000		- COLLEGE		***************************************
	Not Experienced	Very Low				Very High
Contentment						
	N/A	1	2	3	4	5
Excitement						
Excitement	N/A	1	2	3	4	5
_						
Fun	N/A	1	2	3	4	5
Hannings / Jay						
Happiness / Joy	N/A	1	2	3	4	5
T 4						
Inspiration	N/A	1	2	3	4	5
n • 1						
Pride	N/A	1	2	3	4	5
G - 42 - 6 42						
Satisfaction	N/A	1	2	3	4	5
G						
Surprise	N/A	1	2	3	4	5
T						
Trust	N/A	1	2	3	4	5
, , , , , , , , , , , , , , , , , , ,						
Anger / Rage	N/A	1	2	3	4	5
Anxiety	N/A	1	2	3	4	5
DJ						
Boredom	N/A	1	2	3	4	5
Danwagian						
Depression	N/A	1	2	3	4	5
D:						
Disappointment	N/A	1	2	3	4	5
Exhaustion / Tired						
Exhaustion / Tireu	N/A	1	2	3	4	5

Emotions, cont.

Fear	N/A	1	2	3	4	5
Frustration	N/A	1	2	3	4	5
Isolation / Loneliness N/A		1	2	3	4	5
Overwhelmed	N/A	1	2	3	4	5
Stress N/A		1	2	3	4	5
		Very Negative Experience	Negative Experience	Neutral Experience	Positive Experience	Very Positive Experience
Overall Emotions Experience		1	2	3	4	5

When a participant completed all twelve affinities of the e-learning creation system, the researcher asked for completion of one final rating exercise and closed the axial part of the interview with an invitation to open-ended sharing about the e-learning creation experience, as shown below:

Overall E-Learning Creation Experience									
Very Negative Experience									
1	2	3	4	5					

Is there anything else you would like to say about the e-learning Creation Experience or what would you tell others about it?

Theoretical Interviews: Telephone

Each of the ten participants who completed the initial axial interview by telephone also completed the theoretical interview. To facilitate organization of the audio recordings and to accommodate the need for a break, the researcher terminated the phone connection and then called the participant again several minutes later, initiating a new recording with a different file name for each interview experience.

The researcher provided each participant (via e-mail) with a file containing the following information and strongly suggested that the file be open and viewable to the participant during the interview. During the theoretical interview, participants completed an Affinity Relationship Table (ART) by selecting one of three possible relationship statuses for each of the 66 pairwise relationships. The contents of the file provided to participants are displayed below:

This study seeks to identify the factors that make up the e-learning creation experience and how they relate in a system of influence. By identifying the relationships, we can draw a picture of how life works and how events lead to certain outcomes. The system will be used as a discussion tool to better understand the e-learning creation experience.

Many of the themes have some kind of relationship; one affects, causes, or influences the other. This survey asks you to look at each theme and decide if or how it relates to the other themes. Please take the time to think about each relationship. See yourself in all of the places the e-learning creation experience occurs. Imagine yourself from the first day of e-learning creation to completion. See all of the places, events, and people that are part of the e-learning creation

experience. See yourself engaging in the activities of the e-learning creation experience.

Choose whether a relationship exists and then choose the direction of the relationship. You may find that some relationships may be reciprocal. If that is the case, choose the direction of the relationship as it occurs most often in your life. Please respond to all relationships.

Affinity Name

- 1. Leadership
- 2. Policy
- 3. Organization
- 4. Instructional Systems Design Process
- 5. Personnel / Team
- 6. Training
- 7. Resources / Materials
- 8. Facilities
- 9. Communication
- 10. Client Relationship
- 11. Product
- 12. Emotions

Possible Relationships

 $A \rightarrow B$

A ← B

A x B (No Relationship)

Affinity Relationship Table										
	ity Pair ionship		Affinity Pair Relationship			Affinity Pair Relationship			Affinity Pair Relationship	
1	2		2	10		4	11		7	11
1	3		2	11		4	12		7	12
1	4		2	12		5	6		8	9
1	5		3	4		5	7		8	10
1	6		3	5		5	8		8	11
1	7		3	6		5	9		8	12
1	8		3	7		5	10		9	10
1	9		3	8		5	11		9	11
1	10		3	9		5	12		9	12
1	11		3	10		6	7		10	11
1	12		3	11		6	8		10	12
2	3		3	12		6	9		11	12
2	4		4	5		6	10			
2	5		4	6		6	11			
2	6		4	7		6	12			
2	7		4	8		7	8			
2	8		4	9		7	9			
2	9		4	10		7	10			

Theoretical Interviews: Online Survey

Applying the IQA methodology involves a higher minimum participation rate for the theoretical interview experience than for the open-ended axial interview experience. The research employed a popular online survey tool to create an asynchronous, Internetbased theoretical interview experience for geographically dispersed participants.

The online theoretical interview, like the telephone interviews, provided participants with detailed explanations of expectations and descriptions of the twelve themes. Twenty-six individuals completed the online survey. The following images represent portions of the online survey.

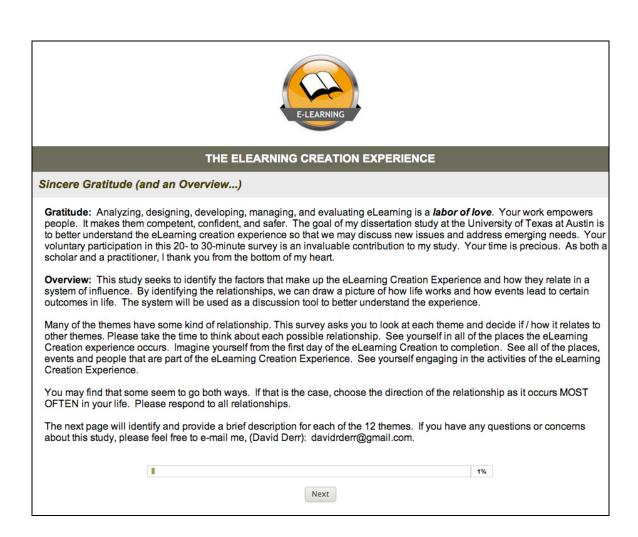


Figure 3.1: The Online Theoretical Survey Welcome Screen

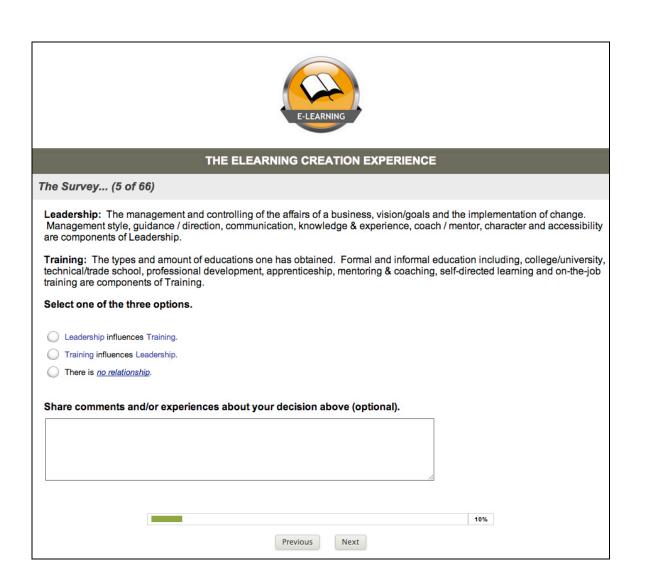


Figure 3.2: The Online Theoretical Survey Decision Screen

CHAPTER 4: ANALYSIS OF THE E-LEARNING CREATION EXPERIENCE SYSTEM

System Affinities and Sub-Affinities

This IQA study involved Affinity Production Interviews to identify system affinities, theoretical interviews to establish relationships among the affinities, (thus illustrating the system), and axial interviews to capture constituency stories related to each affinity and sub-affinity of the e-learning creation experience system. The researcher conducted axial interviews synchronously, remotely, and one-on-one. Axial interviews involved participants from ten different work environments across the continental United States, though all shared a general focus on the creation of e-learning solutions.

Open-ended, qualitative interviews such as this seek to "...mine the sources of data in order to understand what is really happening and then to communicate the essence of this to others" (Willis, 2007, p. 291). This chapter organizes the voices of participants into composite affinity descriptions. Composite affinity descriptions are organized by affinity and sub-affinity and are essential to capturing the "essence" of what is really happening during e-learning creation.

Composite Affinity Descriptions

Composite affinity descriptions are quotations from multiple participants organized in meaningful ways in order to frame their stories, thoughts, and opinions about the system. Quotations were derived from axial interview transcripts. Transcribed files were typed verbatim from the recorded audio of all ten axial interviews. The researcher then edited transcribed text to improve grammar and to remove information having the potential to reveal the identity of a participant. For example, an instance of "the Acme Corporation" would have been replaced with "the firm" or "the organization."

The composite affinity descriptions presented in this chapter are free of researcher comments and interpretation reserved instead for Chapter Five. Each quotation block represents information shared by one participant, and no two blocks represent the same participant.

The E-Learning Creation Experience System

Leadership

- ♦ Vision
- ◆ Project Management
- ♦ Management Style
- ♦ Guidance / Direction
- **♦** Communication

- ♦ Knowledge & Experience
- ◆ Coach / Mentor
- **♦** Character
- ♦ Accessibility

Vision

"Leadership is more distinct from the e-learning work and e-learning solution in most cases. I do not think that is necessarily a good thing but leaders care about whether or not the client is happy and whether or not certain numbers and financial goals have been made. That does not always necessarily mean that they care about whether or not we delivered a quality product or something that might be a Brandon Hall Award winner."

"For me, when I think about vision and leadership if I look across my career, most cases there is very little in the way of vision. The companies and organizations that I work with all have these training development teams or programs. For some of them, that is their pure purpose. With the big defense contractors, it is a little tiny drop in the bucket of many other things that they do but always within that group, vision is extremely lacking. Vision is nothing more than "we have got to create some courses so we can keep our clients happy and we have to go out and get more."

"Senior leadership usually lacks vision. Again, they are not educators. They do not seem to have what I consider vision of better training, making people successful. In the military, it is about building training that saves lives."

"In my experience, vision is one of those imponderables in that people think they have it. They describe it. They are quite passionate about it, and very frequently that is far as it goes. It is like watching a movie trailer and the movie never shows up. It is depressing on many occasions. Once or twice I have had the experience where someone has had a vision and it has been communicated and they had the wherewithal to implement it."

"We seem to change directions a lot with our vision. It is not consistent. We have a little bit more control on a project level of vision of a project, of what we want the end result to be, and how we are going to get there. I have been with the same company for several years and I have seen the vision change a lot."

"My experience has been that leadership provides vision if you go and look for it. In my experience, leadership was not directly involved with the e-learning projects themselves. When I say leadership, I am thinking of executive leadership. It was really up to the team of individuals building the e-learning to go and fish out how this particular project would align with the vision of the company."

"A lot of the vision of leadership comes from, specifically in an organization, the trends that are happening in our field and also from the overall objectives of the firm or the goals that kind of trickle down."

"Typically for full-time positions, the vision tends to be pretty important to the people who are hiring me. If your were hired in the past specifically because they had a vision for their professional development or their e-learning program, then they saw somewhere they needed to go and they knew they had a position that had to be filled and decided that I was going to fill that need, to get them to where they wanted to be. There was a time with one particular company that we called it "The Drinking of the Kool-Aid." You really had to buy into it. I actually thought that they were on the right track of integrating technology into education. I have never really been on the ground floor building a vision, but I have been a part of helping that vision come true for leadership."

"To me leadership with vision means they have a clear sense of the direction in which the business or unit within the business needs to be heading, taking into account the talents that are available on a given team and the overall vision of the company itself. For me, within e-learning, I would say that vision might be as specific as guiding a group toward a higher order of thinking."

"I think in terms of creating a vision as it relates to e-learning, the majority of my experiences have been positive. E-Learning tends to be the bright, shiny thing. I have seen companies and the government really want to develop their training products. There tends to be a natural desire for that kind of delivery mechanism from the get-go. There is generally more support from my client entities; they tend to be very receptive to whatever vision that includes e-learning as a training product."

Project Management

"Project management could go both ways. It could be a pure project management professional, somebody who is certified and does not really care all that much about elearning but just wants a streamlined, profitable project, or it could be a project manager who has e-learning and ISD experience and wants to see the quality and all the different steps of the process."

"Project management has always been difficult. As the senior instructional designer, I do a lot of project management. I would prefer to work on teams where there is an additional separate project manager, one that manages the day-to-day personnel, the books, the accounts, and some basic contract stuff where I work closely with them, where I manage the entire design process and the team and people, and they manage the bureaucracy part of it. Project managers do not understand anything about the design process or the whole ISD process. But some of them are adequate at managing the books."

"I am looking and thinking sort of through my entire career; I think the project management of e-learning projects tends to lean more towards an overall negative experience."

"I have had some very good experiences with companies that have laid out a management style and that have followed it where the project is very specific. You have a start and a finish with a clear goal in mind and it has been very progressive; nothing has deviated and all of the necessary pieces were in place. In each of those instances, it was a really wonderful, exceptional experience because everyone had a clear purpose and the management end of things, from a day-to-day basis, was very well defined and it was a very nice experience. In other instances, I do not think that I have had true project management. It is just, "Here is the project. Manage it yourself." If you are allowed to do so, that is fine, if you are given the tools, but someone who gets their foot in, so to speak, with coming up after the fact and managing or coming in to say, "Oh well you should have..." and that information from management was not delivered in a timely manner, that ends up being a very negative experience."

"Leadership is really important in project management because otherwise the project manager is doing nothing but clicking off boxes on an Excel sheet, which I have seen happen before. To me, a project manager who is a leader is looking at the big picture, is taking into account how to motivate people to do their best work, to make sure that all of the details are as they should be to please the stakeholders. Project management also can mean, within leadership, basically determining who needs to take the leadership role, which may not be the project manager. In many cases it might be a subject matter expert. It might also be an instructional designer depending on the project. My bad experiences with project management have been where people have forced a process (that did not belong to the end product) on everybody else."

"I think that there are some really good project managers out there who can look at a project and see the whole project, and manage that project and any risks and conflicts. Then I think there is a different set of project managers who like to drown you in paperwork and see how confusing and convoluted they can possibly make it and not do anything. I have worked with both. The shortest distance between two points is more my style. They are going to try to throw up as many roadblocks as possible to derail what you are doing if you are not doing it their way."

"In our field, project management is not highlighted enough. I do not think it is necessarily something that in a lot of learning development groups people give as a role. They just assume that learning and development professionals should be their own project managers. If you work for a vendor or something like that, you have a project manager. There is someone managing the whole project. But in companies, usually there is not anyone, or maybe there is just one person managing millions of projects."

"Usually project management was always left up to me. I would make sure that I knew where I had an end date and I would work back from that to make sure I hit my

milestones. I tried to pursue my manager to make sure they knew exactly where I was on the timeline. The only time that I really ever had a project manager assigned to me was when I worked at this one firm and I met with the person once a week. I was assigned certain things I had to do. I had a due date and once a week I would call and check in with him and make sure that I was on the right track. If I had any problems, I had to let him know. Project management is kind of built in to everything that I do mostly because I have never had a team to work with. It is part of what I do."

Management Style

"I think management style can make or break an effort. If there is an e-learning engagement and the management style somehow impedes the creativity and freedom of the ISD professionals to prescribe the best approaches and solutions, that could essentially ruin the entire project."

"If there is no incentive for managers to produce a quality product, if their incentive is to ensure availability and acceptable margin, then I think ultimately the people involved in the project and the end users, (the actual targeted audience), will all suffer in some way."

"Most leaders are a little authoritative in some ways and delegative in others. The best way to describe management style is that they think they are the bosses and you do what the bosses say. Some of them will work, share, and collaborate, but leadership tends to think they know what they are doing and they dictate across the board."

"I think that my experiences overall have been positive when it comes to management style. I have been fortunate to work with managers who understand training development. When I was more in a role of an individual contributor, they understood, again, the development life cycle that was required. They were careful to provide me the time to do what I needed to do as well as provide that level of defense between myself and the client, that level of top cover."

"I think it has to do a lot with whether someone is competent or not. It does not have to be someone who is constantly touching base or someone who is in your face about it. It is someone who relies on you to do your job and is there if you need assistance or advice. That, I would say, would be a good management style. There are other managers, however, who are essentially lurking in the bushes waiting for a mistake to happen so they can pounce and essentially ride to the rescue and sort of show their value to the company. "Look, I saved the day!" when in fact your day was almost wrecked because they really were not doing their job properly."

"Management styles certainly are all over the place. I think it is a positive trend that many places are moving more toward guide-on-the-side than stage-on-a-stage. Typically it is not the manager who is doing most of the work, except in a very small situation. I think a management style has to account for who is on the team, what needs to be accomplished, how to motivate people to do their absolute best, to support them in what they need, to help them when they need to but not restrict their ability to grow, partially because you need that to grow new managers and partly because it is just the way work ultimately goes better. If a manager is too heavy-handed, then unless the whole team is trouble and should not have been hired in the first place, typically that is going to lead to an inferior product because it is not bringing together all the talents that exist."

"We have had some leadership in the company who have been more about micromanagement and wanted to manipulate e-learning the whole way instead of trusting their employees to do the job that we have been hired and paid to do and that we have been doing for many years. I have a really good manager right now who is more laidback.

He does not micromanage at all but he knows exactly what I am doing, probably more so than I do just because of how he goes about gathering his information. He does not hover and hang on and try to force us all into doing it the same way."

"I think some people leniently manage, and some people are micromanagers. I think some of the older-school corporations do a lot more micromanaging while you have newer technology corporations who have trust in their employees even in learning development and in any group really. That management style is a lot more lenient, and they trust you."

"My favorite management style is the one that allows me to get on with my job at the time and at the intensity in which I need to work. A lot of my jobs allow me to telecommute, so I have a home office but I am also a mother and a wife and I also do a lot of volunteer work and I home school my children. Being able to work my own hours has been a very important thing to me, which is why I prefer to telecommute. Management style, then, is very important to me. My most favorite person in the whole wide world was one of my first bosses. She was hands-off and would let me do my thing at any hour unless I had a meeting. I was always very good about delivering things on time. I like a hands-off, macro level type of management style. She is still one of my very great friends by the way. I really detest micromanaging and my last full-time position was very micromanaged. I had to be in my seat from 8:00 a.m. to 5:00 p.m. You were trapped all the time. I have also had no management, which was a kind of interesting time in my life where I worked a full-time job and we had no manager for our division. We were on our own doing whatever there was that we were assigned to do from the top-level people. We did not really have anyone to report to. That was awful, by the way."

"Leadership is pretty hands off. We have what you would call your typical review cycles. They would review a script for the e-learning design. They would take a look at a

storyboard and provide some feedback. Not much direct involvement in articulating objectives or reviewing how those objectives were really met in the e-learning design. It was up to the designer to do that. They would basically review at a very high level just to make sure that the points that they wanted communicated were covered in the materials."

Guidance / Direction

"I am not a business development executive or professional. I support the people that design and develop and program and deliver web-based training. In that respect, I feel it is a very positive experience. I am approaching this purely as somebody who wants to deliver a product that is going to do what it was intended to do in terms of being instructionally sound and relevant to the targeted audience and appropriate to the content and at the same time contained within the constraints of life-cycle and budget, but at the same time something that we would be proud to release and put our name on if we had the opportunity."

"Guidance and direction typically tends to be "Do this. Get it done and do it my way. We have to do it this way because I do not know any other way to do it or because the client says it and I do not know how to convince the client that its not the right way."

"With regards to the whole e-learning creation process, none of leadership understands it enough to guide me or anyone else below me on the team in the e-learning creation process. They can tell you to do the different steps but they cannot tell you why you are doing it or how to do them or figure out when things are right or wrong."

"Where my head immediately goes to is the client requirement. It is about helping clients understand the power of e-learning and how it differs from instructor-led experience. I have a client I am working with right now who wants e-learning and understands the value of it. But we are working on a module now. We believe best practice with e-learning modules is you really want to keep them 15 to 20 minutes in length because that is really about the amount of time that anyone can be engaged with something that you are doing online. While our client sort of understands that, they are also in conflict with it in that they want more and more content added. Really what we are looking at is a module that is potentially an hour long. I think clients sometimes struggle with understanding how to size their requirements to fit within what is industry best practice in terms of the time that you want someone dedicated to consuming e-learning."

"In most of the projects that I have worked on I have really taken charge of managing the project and have given guidance and direction more than I received it."

"It's important to steer a project in general to where it needs to go with a strong view to the future, not just the immediate end of the project. For example, I had one situation in which direction was given more by the subject matter experts and that really pulls the project behind and made the job of the instructional designers much more difficult. When instructional designers were given the support and guidance that they needed to understand what management needed but also encouraged to look at the instructional necessities of the course and to understand who the learners were, things worked a lot more efficiently and ultimately more happily when everybody respected everybody else's abilities, roles and talents. I think that is where direction and guidance should be headed."

"I prefer leaders who actually set you up like, "Here is all the information that you have, go get it done." The other type I have dealt with would say "Here is how we are doing it, this is the only way to do it, and it may not be the most efficient way but we are

doing it this way anyway." My current boss is more along the lines of, "What is the whole big picture, where might we have some problems, okay, now you brought up this issue so let us go chase that down and see how big of an impact that is going to have." You have ownership and you feel like it is yours and you want to do a good job as opposed to showing up every day and being tortured. There is no personal satisfaction, and if I have to do it your way and your way is not my way and you cannot seem to think there is any other way except your way, then there is no fun in that."

"Guidance and direction from leadership can be very vague. I think sometimes people in leadership assume that you know what they are talking about or may assume that they know what you can do. They might not have the technical skills, so they are not really great at guiding you or directing you sometimes."

"I really like it when leaders know what they want. The problem is when you come in to an instructional design position, they kind of know what they want but as the designer, you are almost like a detective. You have to figure out if it is really what they need. The wants and the needs do not necessarily match. The guidance and direction, having someone to help make decisions where even though they are kind of in-charge, they have the final say, but being able to give them options and being able to bounce ideas off of them becomes really important. I think that is a really important part of a good collaborative working relationship between a manager and a worker. When you do not have that, you flounder and potentially do not get done. Direction, in the sense of the manager being able to know where the company is and what the company needs but also being able to listen to the people who are helping make that come true, becomes really important."

Communication

"Leadership communication is a negative experience because we have a new planning system, which was designed by somebody who previously led an illustrating team. Illustrators had one effort that they repeated throughout the day. On any given day an illustrator could complete 30 or 40 images. Our project life cycles are very different. We have somebody who might spend days on one task and that task then goes to quality control and comes immediately back to the instructional designer for revision. Designers may touch a task multiple times at different points.

The planning system that was rolled out recently does not seem to accommodate the way that people naturally want to work. I see that as a huge problem that has impeded communication. It is only getting worse and I do not think things are going to get better until that system is removed."

"Leaders communicate only what they think you need and is important."

"I think of communication from a leadership standpoint in terms of working with leadership of other organizations that may be playing a role in developing e-learning. So, leadership over organizations that I would call shared services, where you might find your media development people, where you find your programmers, where you find people who are going to help you make your material 508 conformant and do the testing to ensure that they are. I think that most of my experiences along those lines have been quite positive."

"I think the more that a business talks about communication the less they actually are communicating because the more a leader says, "We need to communicate," the less they really do. I think communication should be direct and forthright."

"I am cynical about communication. I think that in my experience and more and more recently with emails and methods of communication, people tend to read the first line and not really understand it even if you have it in caps in the subject heading. I am getting very concerned with understanding. I have been a party to it myself where after I have answered an email I have to go back and go, "Wait, wait, I was too quick in answering. I realize I did not actually answer the question that you asked. I answered what I thought you asked," and those two frequently are not the same thing. Even with all of the different methods of communicating that we have with instant messaging, with email, with leaving voice messages, I think we have become very relaxed in actually understanding what is being asked of us... you write something in the moment and you send it and then later on you look at it and you realize that you could have been much clearer."

"Communication is really important. I think one of the things that the project manager or the lead instructional designer or the head of e-learning or whoever needs to determine is how much communication is going to be helpful. Too much can bog things down. If there are too many people involved in a discussion, for example, and everybody feels compelled to say something, that can be counterproductive. It is also counterproductive if people feel entirely excluded from decision-making or are not given the chance to understand the big picture as well as the part that they are working on. I think communication needs to be as open as possible. Find out how to best make people feel included even when they may not actually have a voice in certain situations, which is often true particularly in a company where management is very vertical."

"If companies are not doing it, they should be. It is one of the most common complaints I keep hearing, that leadership could communicate more or communicate better and more clearly. Transparency is one of those words I have a love/hate relationship with. I think it is used way too much. In some cases, I think we need to see

the bigger picture. Communication is important. Being able to communicate well is just as important. In person, communication is probably easier and the best way to do it. If you are going to do it with email, then let us try not to write a book. Keep it short and sweet and to the point as opposed to rambling on and on and on."

"I have always experienced pretty good communication, but I find that when working with people in leadership, they have so much on their plate and so much going on that they will forget to sometimes communicate. I think that is something that can be worked on everywhere."

"On one hand, I want to know where the company is going just to make sure my job security is there. On the other hand, there are times when over-sharing needs to stop. From the very top level, it is nice to know that the company is doing well and where we are going as far as being able to steer the ship towards the horizon. Having them send you an email every day letting you know the minutia of their life is over-sharing. I think communication between the management and their direct hires is important."

"Over the span of my career, I would say it sort of trickles in. If there is a problem with something that has been designed, then you get pretty clear communication and the flow is good. But if what you are putting out is what they expected and they are happy with it, you may not even hear anything. Communication really is driven by need on a given project. If the leadership is happy with what is going on, then communication will be low. If they are not happy with what is going on, then communication will be high, and there will be a lot of it."

Knowledge & Experience

"I think it is important for people to approach leadership or management of an elearning initiative or multiple initiatives in a way that reflects best practices of the profession. There are certain things about project management that everybody should know. The second side of that would be knowledge and experience specifically with elearning projects and educational materials. I think ideally a person would have both and would have had exposure to both areas. That does not always happen and it is not always possible. In most cases, I think, knowledge and experience could be a positive thing if the right mix is in place."

"There is very little of it. Knowledge and experience in most cases with management of a business, sure, they have in most cases a decent amount of that. But, if we are talking knowledge and experience of leadership within the whole e-learning creation experience, it lacks greatly."

"I do not encounter leadership that really knows the e-learning creation experience and process. They may know business. They may know their client very well or the sector very well, which is important, but they are still lacking in the fundamentals on e-learning creation."

"I have been fortunate within my career to have people in leadership who understand my world. They are part of training as well or have come up through the ranks of the training leagues, if you will. They have understood what I need to do and they understand the work that is involved in creating something that is e-learning in nature. I have just been fortunate in that way."

"There is a certain amount of inertia that comes from knowledge and experience and that is kind of a negative connotation because you feel secure in your knowledge, you feel secure in your experience and that kind of renders a certain kind of inertia."

"There needs to be an understanding of what makes a leader, what will motivate people to follow the leader, and how the leader can be effective. So, reading some leadership literature can be helpful there. I also see knowledge and experience connected with the people who are being led. Good leaders understand enough about what team members are doing to be able to guide them, not necessarily down in the weeds. For example, if someone who is an instructional designer is leading a team that includes coders and programmers, such a person would not need to know how to code him or herself, but would need to know enough about what the person is doing to be able to set reasonable guidelines, to be able to recommend development opportunities, and to make accurate assessments of the levels of quality being obtained."

"You look up to your leader. You want them to lead you. That is their purpose. It should never be a situation where your leader is just a figurehead. They need to have some background and be able to bring something to the table. If not, you are not going to have any respect for this person. If they are just putting on a show, then that eventually is found out. You cannot keep that hidden. My current director has been on the job now for a year. Now that we are better aligned in the company, I am seeing him in action, and I am like, "You actually know what you are doing. You are not just up here drinking the Kool-Aid," as I like to say, "and padding the company line even though the company is heading into the wrong direction. You come from a different background and you have that knowledge and experience that can help this company grow and move into the next phase. You can help people out of the rut that they are in." It is seeing that knowledge and experience in action and then seeing the results that is important."

"There are a lot of people in leadership positions who I feel have just jumped a bunch of rungs and they do not really have a lot of experience. I feel like they are directing people, but they do not necessarily know the "how to's." I think a lot of people in leadership positions are directing people who they do not know anything about or what they are actually doing. They do not know what the person's role is or what the person is doing day-to-day."

"Typically, I am hired specifically because of my skill set. So they have a general understanding of what that entails with e-learning, not necessarily the minutia or the details but they have a general understanding of it in the product stage, like they want a class online. I have not met anyone yet who has hired me, except for at one company, who really knew the process leading up to that point. They just knew that they wanted a final product."

"When I do have interactions with leadership, I am always amazed at their knowledge and experience. These are the busiest people in the organization. No matter which organization I have worked in, they are the busiest people. They have the least amount of time and they are the most knowledgeable and the most experienced so those are the people that you really need to harness in order to put the best materials into your e-learning. You really have to think ahead of time how you can maximize any interaction you are able to have with them."

Coach / Mentor

"I am able to give myself the bandwidth to review and provide feedback to everything that we produce. So, I might have feedback about a learning strategy or a concept that people wanted to illustrate or map out or some kind of threaded case study. In any situation I feel like my presence with the team helps maximize the effectiveness of their ideas."

"The mentoring and coaching tends to be very superficial with every experience I have had. There have been some leaders that ultimately understand business development and many more additional parts but if you look at leadership with coaching and mentoring towards the process, again, if they do not know what the process is, they cannot coach and mentor you about it."

"I have been very fortunate to have had people in my professional life who were available to help me understand some of the latest development tools for e-learning. I am thinking about back when I was an individual contributor, working with people who were probably more excited than I was about the tools. Back in the days when Abode Captivate and Abode Presenter were the big things, they would go out and find those tools. They would bring them back to the team once leadership had decided to go source for those things, coming back and coaching us and mentoring us on how to use those tools or providing us the classes that we might need to take to understand how to use those tools. I have been really fortunate in getting that kind of support from my leadership."

"I think businesses that have good coaches or mentors within their organizations should value those people greatly. I think in many respects they are sort of the unsung heroes of organizations who step in and can provide a word or two, a little assistance, and a little emotional support. I think it is a very nice thing to have in a group of people."

"Mentorship has certainly become a lot more important in industries pretty much across the board, assuming that publications such as *Chief Learning Officer* are accurate. It sounds as if it is definitely a trend. You do not need a mentor to teach MS Word

because you can download something from Microsoft. But, if the application of MS Word involves certain processes, procedures or whatever that are very specific to a company or to a client, then one-on-one support is going to be much more useful than something that is generic. Also, if the people are paired up properly, which I think is very important in mentorship relationships, that can also add an emotional aspect that really helps. For example, the person being coached needs a lot of positive reinforcement and the coach is someone who thinks people will just slide if you give too much of that. That is not going to be a good relationship. If someone is a very visual learner or is a reading/writing learner and the mentor is the other way and insists on delivering instruction in a way that is not as effectively received by the person being mentored, that would be problematic."

"Several years ago, I had a manager who showed good coaching promise. There was this huge project and she helped with the budgeting and with getting all the pieces rolling. Instead of being this small little project, we were overhauling a library of 150 courses all at one time. It was massive. She was really good about coaching and mentoring and guiding along on how to get information from third-party vendors who might build this course, who could help with this, finding SMEs, and then editing and all of these things. She was really good at that. As the project launched, I was learning all about how to budget on a grand scale. It was like "Wow, I am learning so much on this." Then as the project progressed, some problems arose, and then her coaching and mentoring slipped a little bit and it kind of switched around into "We will do it this way. It is the best way." Instead of coaching you and helping you grow and improve your skills, it was back to this, "Okay, well you might be doing it right but you are not doing it my way," type of a thing. It kind of derailed and went downhill fast. Needless to say, I do not talk to this person anymore."

"I think it is important that you have leadership who can coach and mentor you but who are also comfortable enough letting you do it your way."

"I think it is a little easier to coach and mentor from a high level, but once you get back into that knowledge and experience piece, that is where you run into issues. I think overall coaching and mentoring at a high-level works, but then when you drill down to those specific things, it gets a little messy."

"People who hired me are not in e-learning. They are not instructional designers. They just know they need to hire someone with that skill set. With that being said, I have had at least one manager who was very much a mentor. He had been in education for a really long time and had been in e-learning for a long time. He knew the process and was not only able to correct me when I was not really onboard or was not following the steps that had been laid out as far as the design process, but was really there to kind of cheer me on. In my experience, it is not necessarily a big part of their job description to be a mentor or a coach. I think those people are really rare actually, in my experience."

"Leadership has a lot on their plates; training, to be honest, is usually not a priority. They are running around putting out fires and dealing with critical, urgent issues. If you can get them to focus on training and e-learning, then they usually have very good input and they can be good coaches and mentors if you get someone who is focused."

Character

"I think there is the perception that people in leadership roles have favorites and that those favorites can do no wrong, but other people are judged differently for various reasons. So, I would say in that respect character has been lacking."

"In most cases, character of leadership has been pretty good."

"I am thinking back over 30 years of working with people in the business. I think for the majority of the time I have had very positive experiences in that I have worked with people of integrity. I am really trying to recall any situation in which I was asked to maybe do something bad or shortchange something and I felt it was unethical and I cannot really think of any instances. I have been fortunate in that way."

"I think that you have to be someone who understands the importance of that elearning experience. If you view it as something that is essentially just a cash cow, I find that disgusting."

"I see character as being very similar to a sense of ethics. A good leader is trusted by people ethically and has a certain believability, whether that is in the subject matter or whether that is in leadership in general. A leader who is not believed to have character, no matter how talented that person might be in a particular field, is not going to be an effective leader because there will not be any trust, and without trust, leadership cannot happen in any positive way."

"Character is important. I do not want my leader to be my best friend. I do not think we necessarily need to socialize outside of the workplace unless it is a businessrelated function. I do not want to be your bestie. I want you to be of strong character. I want you not to be wishy-washy or changing just to change. You need to be able to have your employee's back if they need it. Do not throw people under busses. Accept accountability and responsibility. Care for your department and your people. Without that, you are not going to have any loyalty and respect is going to be nil. No one is going to enjoy where they are. They are not going to trust you and it is just not going to make for a good workplace environment."

"I think a leader with good qualities would be someone who can put themselves in your shoes and someone who is proactive and present. Bad qualities that I have seen occur when leaders feel entitled and they just command their team to do whatever they want, like asking someone to schedule appointments when it is not that person's job or create presentations for them and things like that."

"I admire the leaders that I have met. I make a very good point to work for companies that I admire. I really admired this one company before they got bought out by another company. I admire some of the companies that I am working for now. These are people who are trying to do good for others. I try to look for those qualities. Are they in it for themselves? Are they trying to make the world a better place? It is okay if they are making money while they are doing it, but the end goals have always not been about money. They are just trying to be better. I typically try to work for people who are in education, who want to educate people in whatever field it is. Those character qualities are what I always look for and those are what I admire the most."

"I have never had to deal with leadership that had poor character or was not very supportive of projects. They want the training to be good. They want the e-learning to be designed appropriately and they are just too busy. I have never had a problem with character at all."

Accessibility

"In speaking strictly about leadership, people who are in control of budgets and processes and how things operate, accessibility is very negative because they are never there. The people in charge often leave town for two weeks at a time or more. They are completely out of the office and out of the picture. I think many people feel as though they are forgotten until they do something wrong."

"Accessibility is usually pretty good with some of the smaller companies. If I look at the really big ones, accessibility of the leadership is difficult at more than two rungs above you. Talking to the CEO of one of the big consulting firms is very difficult. You get to do it a few times a year."

"When I look at accessibility at the level I need it in most cases, I would say it has been a very positive experience. But I also think this is because I am so close to leadership and in a lot of cases I could even be considered part of leadership."

"Most people in a leadership position think they are accessible, say they are accessible, but I think frequently they are not. I think that frequently they do not behave in a way where you feel like you can trust them with information or with concerns and expect that they will honor and respect what you are coming to them with. I have worked in too many places where something was supposed to be essentially private between a cohort and going to the leadership of the company and then you find out literally seconds later everything that was going on. It is like when you take a survey and it is supposed to be confidential. It may be my cynical nature, but the more someone says it is confidential, the less I think it is."

"It needs to be more than a statement of having an open door policy. A good leader is as reachable as possible. Nobody is 100% accessible because typically leaders have things that they have to do. If a team is beyond a certain size, that may limit the frequency of interactions. It is the leader's responsibility to not only communicate accessibility, but to also set up situations in which interactions can happen. At the last training magazine conference I attended, one speaker was pretty clear; if you do not have a half an hour a week to spend with your direct reports, you have no business leading."

"We can always find one another if we need. We have phone numbers, email, instant message accounts, and Skype accounts. Leadership has always been pretty available even if we are going on vacation or anything like that. Especially if it is a long one, then it is, "Hey, I will be checking my email between these hours or if you need me holler at me." They have always been accessible on that level if you need to stop and talk or anything like that. With my current director, there have been a couple of times where something flared up all of the sudden and I am like, "Hey, do you have five minutes?" and he is like, "Yes, I am walking outside right now. Can you walk with me and talk?" I am like, "Yes. I can walk and talk at the same time." I think accessibility is a good quality. You want them to have that open door if something is on your mind so you can bounce an idea off of them. I have had pretty good luck with leadership in that they have been accessible and they do not act like it is a huge burden to be so accessible to us."

"In my experience, people are accessible. I think you can call someone or email someone and they will get back to you. But, in my experience with working with other people who work with leaders, they value the leader's time more than anyone else's time. They will say we need to not take as much time as we need to. We just need to do it fast because the leader's time is more valuable than ours. I have found that a lot in the past. I feel that is one thing that is off-putting."

"It just depended on for whom I was working. Most of the time the high leadership, like the CEO, was totally out of reach. I have never worked for a company that had an open door policy for the CEO. They probably said they did. When you are told that everybody has an open door policy and if you have questions you just go ask, when you actually do that you get slammed by your boss for doing that and then you stop doing it. I found that they say they want to be accessible but they are not actually. Accessibility above your immediate boss is usually a joke."

"They are tough people to get. Again, when I think of leadership, I am thinking VPs and CEOs and CFOs, the executive management suite definitely. It is difficult to get them."

Policy

- ♦ Standards of Conduct
- ◆ Recruitment & Hiring
- ◆ Compensation & Benefits
- ♦ Employment Policies
- ♦ Work Schedule
- ♦ Performance Reviews & Promotions

Standards of Conduct

"We have standards that are fair and that promote a safe and productive environment for everybody. We have core hours. We expect people to be in the office during core hours. At the same time, that allows for some flexibility for people to come in earlier or later as long as everyone is in the same place for, I believe, five or so hours in the middle of the day. Some people choose to come in at six. Some people might want to stay until seven at night. All of that is fine, but there is a core set of hours where we know that everyone who is currently working will be there and I think that has helped a lot."

"Most teams and organizations that I am a part of have some form of employee manual whether it be a hard form or online or even just some kind of paper document out there that exists with standards of conduct. Standards of conduct are pretty much the same across the board"

"There may have been one or two instances that did not go quite as I had hoped but I think overall I would say my experience with standards of conduct have been positive."

"I think what is most obvious to me is that there is a distinct difference between people who are freelancers and people who are employees in how they view standards of conduct." "I think you need to approach your job on a professional level and try to maintain that professional level. I know in instances, sometimes, your emotions boil over. I think that is true almost of anywhere and it is about catching yourself after the fact and making the necessary apologies and trying to maintain that standard of professionalism as much as possible. But we are all human, so I would have to say that one should try but one does not always succeed."

"There are a fair number of differences across companies and that could be standards of conduct I could see as anything from policies on telecommuting and attendance to dress to ethical behavior and so forth. A surprising amount of variation, but I have not seen very many that I would consider problematic. Some a little less trusting than perhaps a situation warrants, but nothing problematic."

"Our company is laid back; we are pretty casual. It kind of has an e-learning company vibe to it although I will say it has grown. The culture has changed. So, our standards of conduct, our policies, and the things that go in the employee handbook are fairly standard. There is nothing that is too extreme one way or the other. They are right down the middle, mainstream. Standards are clearly laid out. They are posted where we can easily get to them on our intranet. If we ever have any questions, we can always ask. On the flip side, we do have a high turnover rate in the HR department so it seems like there is always a new HR manager who may or may not be up to speed because they are new. That is the downside. Every now and then a new HR person walks in and then all of the sudden there is this random, odd change to standards of conduct and we all are like, "Wait a minute. Hold on. Who are you and why are you changing this?" Usually that person moves on because it is just not a good culture fit. Other than that, our standards of conduct for the company are all right. They are what they are. They are nothing extreme."

"In working as a consultant in a big corporation, my consultant agency's standards of conduct were not great. They were not very clear. Working in the corporate world, they were relatively clear. I would not say overly clear or very vague. I would say that as a consultant, it has been pretty vague but working for a corporation, it has been a little less vague. It is more drawn out, and I think they hand it to you right away. There was an instance where I was working with a curriculum and I wanted to institute social learning. As a consultant, I was not allowed on the corporation's social learning platform. I had absolutely no idea, and I was told after I did it that I was not allowed. It was not written in the standards of conduct, but it was a standard of conduct."

"Other than signing off on the HR handbook, it has always been "Be polite, do not upset the client, and try to be as communicative as possible." Standards of conduct have never really been like at the forefront of... I have never been called on my conduct so I am assuming I have been doing everything okay. When you work from home as a telecommuter, your process is not as important as when you work in the office and you are face-to-face with your clients all the time."

"Standards of conduct have been very well defined at the various companies that I have been affiliated with or worked with. There is no doubt."

Recruitment & Hiring

"Recruitment and hiring now is great because we have on-site support and we have technology. We actually have an HR system that handles the approvals of new job releases and goes and manages and routes requests involving multiple people in different departments. So, I would say it is a positive experience."

"You have some HR folks out there that are scanning resumes and stuff and they will dump some of those on you. It always seems that there are other people doing the hiring and they really do not know who to hire, what to hire, and what good is. Sometimes it has been fine but I think in regard to policy, again, leadership does not know what they really need so it has affected their recruiting and hiring process."

"Very frequently, job descriptions are not explicit enough as to what the job is. When someone is recruited and hired they frequently find that the job that they are actually doing is not what they thought it was, or else it has quickly evolved into something else."

"It is not good when very structured and when too many steps are put into place and when there are prohibitions against doing one's own recruiting. That is when I have found it the hardest to find good people, when I am forced to go through an HR department or when a painful amount of detail needs to be filled out to justify hiring or not hiring. I would say the most negative, in terms of my own trying to get hired when I was on the job market, would be the high number of jobs that are not real openings but rather just something that has to be advertised so somebody can "CYA" hiring the person they had already chosen in the first place. People spend a huge amount of time applying for jobs. I am thinking about jobs with the government and also I guess some higher-level jobs where you really do spend a lot of time preparing for interviews, writing letters and so forth. In so many cases, it was not a real job after all. It is just a way for the company to say, "Well, yeah, I looked at other people outside the company and this person I had already picked was the best one." It is unfair and disrespectful to the time of those who apply."

"In our field at least, I think it is very, very easy to get a job. I have positive experiences with it every single time. I have always had HR representatives reach out to

me and ask me about job postings and they have been extremely accommodating so I have always had a positive experience with being recruited and hired."

"When I hire SMEs, I have a topic that I know nothing about and I have done everything I can to learn about it but I am at the point where I actually need an expert. I draw up a set of requirements and then I usually tap the people that I already know or see if they know of someone who could fit the bill. If not, then that is when I start putting out feelers in the communities that I am attached to. The only thing that would really affect that is how much the company is willing to pay for a subject matter expert per hour and how may hours they can work. It is really a set contract, when you draw up the contract, because the company usually has a policy on that. I already have a boilerplate set up for that."

"Recruitment and hiring practices have been extremely well defined because of the types of companies that I have been affiliated with. They have to be."

Compensation & Benefits

"Compensation currently for the people, for non-managers who actually perform e-learning work, is hourly. They have a salary but they are hourly. They have to bill 40 hours a week in order to get their salary. If they do not, they are forced to use leave without pay. I feel like that restricts people from really just being creative and letting loose and focusing on a solution."

"When I do take a position with a company for a while, they compensate me well. I will even allow, at some point, for my compensation to decrease a little bit for a little more stability or for a project that I am interested in. As for the benefits part of it, typically they tend to be traditional benefits like insurance and things like that, and some

paid time off. None of those is ever exceptional. I am able to negotiate, in some of my contracts, business development bonuses so money that I bring in from a new project or from proposal writing benefits me financially. When I am working independently as a consult there are no benefits. Benefits are what I have to do. I have also noticed that compensation is going down greatly within the field. They do not seem to value the knowledge and experience anymore as much as they want just simple developers with simple education."

"I think that benefits of a good working environment and actual benefits where you know that your health care is taken care of and things like that are important. I think that sometimes businesses do not quite understand that. Maybe they cannot give people more money, but if a project is done and it was done well it would be nice if they got something. I have worked in places where they are like, "Okay, we draw a breath and everybody take Friday off." I have to say that goes a long way. In places where I have worked that have done that, the next Monday people come in to work very refreshed and tend to work a lot harder. Whereas in places where it is strict and by-the-book and you come in at this hour, you leave at this hour, then people have a tendency to, when 5:00 comes around and if they are people who have to be in exactly at 8:00, they are going to pick up and leave exactly at 5:00. If work is not done, it is not done. I think that a little bit of flexibility goes a long way."

"Too many companies, particularly some big ones, think in terms of union jobs and seniority rather than actual expertise and accomplishment. Compensation, I am assuming we are including bonus structures and so forth since both are typical parts of the compensation package, can really be all over the place. Some companies worry so much about being able to justify things that they actually demotivate their top performers by treating everyone equally and that does not work so well. Studies are showing that benefits have become more important to a lot of workers than total compensation.

Knowing, for example, that there is flex time, that there is not a lot of overtime, that the company supports a work/life balance and perhaps invests in employee education, those things are often more important to a person than a salary. Not that everyone does not need a living salary, but a good benefits package can certainly motivate someone to accept lower compensation because, on balance, the experience will be better."

"We are a multinational company. One of our chief complaints here in the United States office is that is seems like our counterparts in other countries have a much more beneficial holiday schedule than we have here. The difference is huge. It is noticeable. That is probably our biggest complaint. I do not do health care or any of those benefits through the company. I am on my husband's policy. Compensation is low. They do not necessarily keep up with industry trends and they are not necessarily rewarding tenured employees who have been there for a long time. There are no benefits, pluses, or extra compensation for that. That is a negative for the company. I think compensation is a huge thing that needs to be looked at and possibly revised. Benefits can always be tweaked a little bit."

"I think that a lot of places, at least when you first come out of say a Master's program, you are not necessarily aware of how you should be compensated and what type of benefits you should get. I feel like a lot of people get cheated right off the bat. I somehow was lucky, so I got a good pay rate for my first job. Overall, I think the pay has been fair. I know a lot of people who do not get paid very fairly. They do not get paid the standard."

"Being a freelancer is a bit of a roller coaster. On one hand, you have the really great benefit of having your own hours and being able to pick the people you work for in general. On the other hand, the hours are not consistent and the pay, man, there is a big difference between being a freelancer and a full-time employee, let me tell you. I will not even get into the differences between us and the [practitioners] in third-world countries and how hard it is to compete. Certainly, the benefit is that I have time to spend with my kids and I can kind of make my own hours. My husband works full-time so we have benefits and I do not worry about that so much but having to put away for the 401k is always worrisome. My compensation tends to put me in the mid-range of my career. People are either willing to pay or they are not. As a freelancer, I come down on my price mostly so I get the job and to compete with others. It just depends."

"I have had varying experience there depending on the type of company. Sometimes it is very transparent. I have been involved with universities where it is very transparent down to everybody's salary being openly posted along with benefits. With most private companies, there is not that level of transparency."

Employment Policies

"So many of those are standards across businesses. I do not really feel like we are any different from a lot of companies."

"Employment policies are kind of like the standards of conduct. They are fairly routine and you know what you are supposed to do and what will get you in trouble with your job and you just do not do those things."

"Very frequently, I find them strange, odd, and bizarre in that some of the things that are in sort of a code of conduct tend to apply at different levels and at different times. In my experience, it is a policy unless they need to change that policy for a specific purpose. I think that most businesses are very situational when it comes to employment policies and that some people are allowed to bend and break the rules and others are not, or else rules will apply to certain people all the time and certain other people not at all."

"They are positive when they are flexible and negative when they are not. That would go back to the things I already mentioned such as compensation, benefits, recruitment, hiring. When a company is absolute, everything is written in stone and there are no variations, that can be somewhat problematic. I am thinking, for example, of people I really wanted to reach out to in order to hire. Our current head of HR does not allow direct contact or recruiting. I have lost people that way. Not being able to tell someone, "Hey, you are the top candidate. Do not take another job," because a policy says you cannot communicate until already scheduled interviews are done, is problematic."

"I know that even within our little department of production, we have hired people and then had to wait a while for their work visa or anything else to come through so they can show up. There is no discrimination along those lines and everything is fairly clear-cut. We know what we are doing and we all kind of show up. The job descriptions and all those things are all lined out plus that added line of "other duties as assigned." Along those lines, I think we are all right. I mean, it is not one of those things that I have ever had a whole lot of experience with."

"I have run into minor issues with things like employment policies. I know one company that I did work for did not send me my tax sheet so I had to call them. I have had issues like that. I do not think that is really specific to our industry or anything like that. Overall, I have never had other really big issues with employment polices. Sometimes with contracts, however, I have had issues."

"To me these are things like non-disclosure agreements and having to sign those and agreeing not to work for anyone else while you are working for a certain company. Things like once you leave the company, not reproducing the work you did for that

company for at least a year. I have had to sign those. If they give you equipment, like computers and software, you have to take care of the equipment and make sure everything is returned. No personal emails and that kind of thing. It kind of puts a cramp on my style because I cannot show what I can do or help other people do the same thing. I am under agreement that I cannot do that so I have to look to other ways of being able to either prove what I know I am talking about or look at different types of training."

Work Schedule

"I think there is a tendency with leadership to view managers as just having to be always available and always on, even when they take time off and over the weekends. I will sometimes check my mail on a Sunday morning and I will have five emails from my boss saying things fairly urgently and yes, that is a challenge."

"Work schedule for me has always been something that is highly flexible. I work on a 24-hour cycle. I often work very late at night, get a few things done in the morning, sleep through part of the day, work in the afternoon, take a break, and work nights. I work in 4-hour schedules. A number of companies want us in seats. They want you there from 8 to 5, one-hour lunch, all at the same time and of course you are going to be doing overtime but you must be there at that time because that is just an old, antiquated policy. I design virtual education. It is e-learning. People can take my stuff anytime, anywhere. I do not have to be a "butt in a seat" to do this. I can live and work the same way I design. To me, the optimal policy is as instructional designer and PM, you build your work schedules around deadlines and when people are most effective. To me, it is a 24-hour clock. I need something done from you by this time tomorrow. Whether you get working on it now, tonight at midnight, or tomorrow morning, I do not care as long as you put in eight hours a day within a 24-hour cycle."

"I have been in situations where the work times have been very flexible but it required a great deal of communication on everyone's part because if you expected someone to be there at a certain time and something was due, then somebody needed to be there. I can appreciate having a flexible work schedule, but having managed people before, it is really important to also have the necessary coverage. I think it is one of those things that has to be adhered to, but it is also nice if there is flexibility as well."

"I have really come to like telecommuting part-time. I do not think telecommuting 100% works well for anyone who has supervisory responsibilities. That can be problematic unless you have highly motivated people. If you have highly motivated staff that works really well, I think flex time is really important. Ultimately people perform better and are a lot happier when they are allowed to work at times when they are most productive. I am thinking of an experience with an employee who was fresh out of the military, had been accustomed to being told what to do every minute of the day and when that was no longer the case, even though I think he was basically a good and ethical person, he just did not know how to structure his day and that did not work well. So, some people need a little bit more structure, at least in the beginning, in terms of schedule. But, on balance, I think when employees do prove themselves to be effective, ethical workers, the more flexibility they are given, the better."

"Our work schedules are fairly normal, 8 to 5. We have a standard work schedule, but the other plus to this company is that we are flexible. We have employees who work remotely all the time, who are not located here, who are located in other countries. We have people who work remotely from offices or from their homes or from wherever. All of the offices that I know of are hugely flexible. "Oh my goodness I have to take my kid to the doctor this afternoon. I have to leave at 2:30." Okay, fine. Bye. Do not worry about it. We are hugely flexible. We do not have to be in the office. If we need to work remotely, we can. That is probably the biggest perk of this place. You can take the

skimpy benefits and compensation policy and balance that out with the flexibility in our work schedule. We have offices in multiple countries. We are dealing with various time zones. If I know that I am going to have to work late at night talking to one of our other offices, then I balance that out with the actual daytime hours that I am in the office. You are either not seeing me early the next morning, or I am cutting out early in the afternoon because I have to log on and be online tonight or tomorrow night to talk with the development team in another office in another time zone. It all balances."

"With the more old-school corporations I have worked at, they were about recording time with everything. They do not even want you to leave your cubes to go to the bathroom. It was absolutely horrible. I have had very, very negative experiences with that, especially for being someone who does not take all of her paid time off. On the other end, with the company I am with now, I work remotely and they are very lenient with my work schedule. If I want to take off during the day and then work at night, they are completely fine with that as long as I let them know in advance. I have been on both ends of the spectrum where it has been just crazy to amazing."

"My work schedule has always been whatever the employer wants unless I am in a freelance position, then it is what I want. The schedule has always been like 8 to 5 or 7 to 4. Companies that I have worked for tend to be international so there have been evening hours as well as weekend hours. Some companies compensate you for that, some say that is just part of the job and you drive on. When freelancing, I tend to work in the afternoon and evening and on the weekends because those are my personal preferred hours. I like 11:00 a.m. like no one's business. I am not an early morning person and I am not a really late night person but during the middle of the day, I am golden. Unfortunately, most business hours are not during that time. I am very good, however, at meeting the needs of my clients so if they are in Australia, I make sure that I am available for their meetings. I try to Skype or they have my cell phone number so that they can

catch me whenever. My work schedule has always been during the day even though I prefer it more to be like afternoon."

Performance Reviews & Promotions

"We have a process in place, but I feel as though following the process is so tedious that it prevents any real or helpful outcomes from being achieved. The focus is just getting it done and getting it where it needs to be and documenting as opposed to truly helping people, either in their current role or helping them to migrate to something else. Basically, performance reviews and promotions, that entire system, is being choked out by the process itself so I would say it is a negative experience."

"I have had the 360-performance review where you write your own, your boss writes you another kind of write up about you, and they go in a file. Often performance reviews are just nothing and routine. That is one thing that has always been different about the e-learning creation process; promotion is not something that happens. Most people that tend to be promoted are popping in and out of that process for some reason. They did something else in the company or corporation, they come over here for a short while, and they move on. They were never truly part of the real team."

"I cannot think of any real negative experiences with performance reviews or promotions."

"I am very self-critical. I also think that, for the most part, businesses have a certain pool of money and they are going to give out a certain amount of money and you go through all of this stuff to fill out these forms that do not necessarily describe what you had to deal with on an annual basis and then most leaders, whether they feel good about their performance review or not, seldom have a significant amount of money to

hand out at the end of it all. By and large, both performance reviews and promotions are tied to what the business itself is doing and frequently not tied to what that person is doing or related to what the person deserves. That frequently is kind of, well, ridiculous is too strong a word but it is kind of joke-like at the end of the year when you look at it and look at people who have really done a stellar job and there is just simply nothing there to reward them appropriately."

"A lot of people do not know how to conduct reviews or promotions. Going back to company policies, it is unfair and demotivating when a policy says you cannot give the person the highest ranking because he did not accomplish some sub-aspect of the job description and that person never even had the opportunity to do that in a given year. There are bad managers whose favoritism is reflected in reviews and promotions. Most people do respond better to positive reinforcement than negative reinforcement. Telling a high performer that he is average when he is above average is counter-productive."

"The first year, reviews/promotions were absolutely horrible. The format that they used for performance reviews was odd. Then, in the last several years, it got better. It is still not very clear and it seems like they go around it a little bit backwards. The results are clear and you have an opportunity to discuss them with your manager and you can ask your coworkers "Hey, can you provide some feedback" or "You've worked with me for the last year. How am I doing?" The performance reviews are not perfect yet, but they are getting better. There are no career growth plans, so it stagnates a little bit in the world of promotions. They figured out this last year how to change our titles a bit so that kind of looks like a promotion but when you think of promotion in the true sense, they were not necessarily promotions. I think there should be some more opportunities for career growth so that employees can feel valued and feel like they are growing and improving."

"As a consultant, I have had performance reviews but they were not really recorded or anything like that. It was basically just sitting down with my manager and talking about how I did and how I met my goals. I have been at other companies where I have had to record all of my goals and make sure I met them and that they were measurable goals. I have been in both situations, where it is really relaxed, to everything being recorded and you have to make sure that you meet your goals to get your full bonus."

"I hate performance reviews. I hate them. I understand the point of a performance review. I do. But I cannot stand them mostly because you have to come up with these goals, like these big smart goals at the beginning of the year and then nobody ever really tracks them during the middle of the year and nobody really cares until the very end of the fiscal year and suddenly it is like, "Oh we forget our goals. You have to write something." If you have not been on top of it because you were really busy, because you actually have been working, then you have not written anything for the performance review. It is subjective too. Yeah, I really detest performance reviews. I love promotions, though. Most of the time with promotions, I have always been the only instructional designer and so it has never really been a promotion but rather a pay raise. Those are really welcomed, too."

"I have yet to work at or be affiliated with any organization that conducts performance reviews and promotions well."

Organization

- ♦ Structure
 - Hierarchical Structure
 - Flat Structure
 - Divisional Structure
 - o Bureaucracy

♦ Culture

- Collaborative Culture
- o Competitive Culture
- o Control Culture
- o Creative Culture

Structure

Hierarchical Structure

"Everyone on my team is responsible to a project manager or project lead with regard to the projects that they are assigned. Then there is also the VP of the practice area who works out of the office and he likes to be involved. He might kind of step in and enter himself in situations where hierarchically it did not make sense, but people are kind of forced to respond in however ways that he wants."

"I definitely have plenty of experience with hierarchical structure. When I think back to most of my big defense contracting companies, they are very hierarchical where I can have five or six people ahead of me to the CEO and I am one of the most senior people on the team. You lose a lot of the collaboration necessary as part of the team or you find yourself separated from the higher leadership."

"I think that I probably worked in those organizations more towards the early part of my career and maybe I feel a greater affinity to that because when you are entering into the workforce, at least for me, I tend to have an affinity for structure anyway. So, I think when you are earlier in your career, having sort of clear swim lanes was what I needed. I think that felt more positive. I am also of a generation that probably appreciates hierarchy more than some of the younger generations."

"I find that having a hierarchical structure tends to pit groups against each other and one group always perceives itself to be sort of higher up on the food chain than the others. It is kind of what I would think of as the royalty structure because in the hierarchy, there is always a king and queen and then the dukes and duchesses and then the peasants. I do not have a particularly good opinion of a hierarchical structure. I just do not like the concept."

"I have seen a fair number of hierarchical structures. They work well when the Peter Principal is not going on, as unfortunately often happens. Hierarchies are good when the people who are leading others are good leaders and can inspire confidence and actually know enough about the roles and responsibilities of those they lead to be able to provide some of the things like the vision, the guidance, the mentorship, to put all of those good things in place. But that presupposes that at each rung, people are offering what they should."

"My current company is more along the hierarchical line. We have a CEO and an executive team. Each of our departments has a director or a senior vice president. Then it trickles down to the rest of us. There may or may not be an additional layer of middle management. The organizational structure works because our CEO is an ideas guy. The next layer down from the CEO is like, "Hey, hold on a minute. Let us look at this a little bit more. What are our opportunities? Let us build a business case. What can we do for marketing?" It seems to make sense for what we are doing. There are not too many negatives, unless all of the sudden your director quits and then it is the CEO having a straight line into the development queue and saying, "Hey, let us build this" or "All these courses should look like this." It makes you wonder where they got that idea."

"I think the only thing that can be an issue is that leadership, people at the top, can sometimes be hard to approach because you are a little bit fearful of approaching them because they are so high up."

"At least half of the companies I have worked for have been hierarchical. There has definitely been a manager and then a manager above them and maybe a manager above them like the CEO. I have always been like two or three steps removed from the CEO when I do a permanent position. But there is always definitely a chain of command. It has not necessarily been a good thing or a bad thing. It was just the way that particular company operated."

"This goes back to the problem of getting leadership engaged in building training and e-learning materials. With a hierarchical structure, a lot of times you do not have access to the person who knows the most about what it is that you are trying to build. It can negatively impact the e-learning experience."

Flat Structure

"I think of the smaller companies that I have worked with or I think of kind of core ISD team, not more than one or two levels of management to the very top, management overseeing a team of people who are all fairly equal. You do not have the communication problems that you do with the hierarchical structure. With the flat structure, one person says it and he says it to all and everybody across. My experience with flat structures is very positive."

"I definitely worked in that kind of organization and the experience was equally positive. I think it caused me to have to flex my own personal style a bit. But

understanding that I needed to do that and that it was an acceptable thing, it was positive."

"I cannot see how it would work because it does not seem like you would go anywhere or get anywhere with something that is based on a flat structure. It seems like something that is not going to progress anywhere."

"I worked for a company that had as flat a structure as possible. It was great because you had access to everyone and you did not have to go through your manager to get to your manager's manager. I think it had a positive impact on the e-learning design, for sure "

Divisional Structure

"Each stovepipe of the company has been designed in a way that they must compete against one another and not support one another. I think overall that ultimately hurts the company financially. So, I would say that is a very negative structure."

"Divisional structure tends to breakdown any form of collaboration. That group over there is doing what they are doing. That group is doing what they are doing. My group is doing what mine is, and no one is doing anything. There is so much repetitive and redundant stuff occurring that it really hurts everything. The best talent is distributed maybe only in one division. Maybe it is broken up everywhere and there is no benefit from that high talent because it is diluted throughout the rest of the division. When I have work with a division-structured organization, it has always been a very negative experience."

"I worked in an organization where I was serving as the leader of a learning design team that needed to... it was not siloed. We were a resource that was available to the different divisions in this company. But, I found that in developing learning programs that were intended for internal employees, getting cooperation between the leaders of those different organizations was sometimes really challenging, not because of what I was necessarily trying to do, but because there was this turf war that was set up every single time. You know, who really owns that, who really has the final say on that. That made it challenging for me to get my job done in an effective way and in a timely way because I was spending so much time trying to navigate the politics."

"I have worked in areas where the division of labor, if you will, was appropriately structured and the people who needed to do what they needed to do were in the appropriate divisions. The problem is when the divisions do not talk to each other or when they are pitted against each other. But a divisional structure can be a good thing and I have worked in places where it has been a very good thing because you knew who to go to for what. They were funded appropriately and no one division was perceived as being more important than the other because of the way the organization was structured."

"I have seen a lot of problems there when people who need to be able to collaborate and work together are prevented from doing so by some artificial siloed structure. Where silos are logical and need to be totally separate, that is very different. Sometimes dividing things out is not good. I am thinking of two firms where I worked where people leading divisions were more concerned with the wellbeing of their own groups and making sure nobody worked too hard, took on too many projects, and so forth. They failed to recognize what the big picture was, and failed to corroborate with other teams. In e-learning, programming cannot be 100% separate from instructional design and the same with graphic arts. If artists, programmers, instructional designers, subject matter experts and the research people do not have access to each other, do not

have some kind of reason to support each others' goals and deadlines, that can be a real recipe for failure."

"My employer has tried to make us more divisional a few times over the past couple of years. That is how they have tried to set up budgeting across departments. I think that probably works better in our business for maybe accounting purposes. But, when you get right down to it, we have so many crossovers. There is so much collaboration between software and our training and a little bit of marketing bleeds over into that, and we have a regulatory department so that we can get our things approved and so on. There is a huge section within our company where it is more of a collaboration and it is more of a "Hey, we are going to do this" and "Oh, wait. We need to talk to technology to make sure that we can do this" or "Are we are going to need something built or can we do this on the platform?" It is much more of a collaborative thing. We are not necessarily just by the division. We need to have more of a talk about it."

"It is frustrating. Of all the structures, divisional is the most frustrating because you may work within a division or a section of the company and you work really tightly with those people, but you should not work in a vacuum. When you do need to go out to a different division, it can be not necessarily frowned upon, but not encouraged either. That never makes for a really good, happy company."

"I have seen divisional structures a lot and they definitely have a negative impact. You have multiple divisions, departments doing the same things, and nobody is leveraging what the others are doing. It leads to a lot of wasted effort. There is not much alignment; I see that a lot."

Bureaucracy

"In terms of marketing what we do, that is a big negative. Meaning they want to control every word that is published anywhere. They really do not know about e-learning, so having them market is almost laughable. If you were to go to our website and try to find out what training services are offered, it is laughable. It makes no sense to me and I was flabbergasted not to have been asked to support marketing efforts."

"I am bad at bureaucracy. Personally, I hate it. I understand it. I just prefer to not deal with it. It aggravates me. I think bureaucracy gets in the way of doing good education."

"I personally do not like bureaucracy at all because it is very difficult to get anything done because people are totally in it for themselves and focus on what they can gain from it. I have nothing but a negative connotation about that type of structure."

"Often in bureaucracies, people are not empowered to make decisions that they need to make. They are so weighed down in policies and procedures and those may or may not be relevant to what it is that they are trying to accomplish. That can be problematic."

"Bureaucracy does not work for our e-learning world."

Culture

Collaborative Culture

"Within the training department itself, there is not a strong understanding of training from all the different practice areas. I think people are kind of kept isolated in their own areas. I would say it is a very negative set-up."

"This is the culture I prefer to work within and I prefer to build. It takes leadership in some hierarchical structures to facilitate collaboration. You still have to have someone to make the final decisions, but collaborative culture works well in this process. It takes a team. It takes that collaboration to make e-learning work."

"I think a lot of it has to do with my personality profile and my information processing style. It is a culture that I personally find that I thrive in. I really enjoy bringing in different perspectives toward the creation of the e-learning products or any product that I have ever created. Some people might find that sometimes less efficient, and sometimes it can be, but I feel like you just end up with a better product."

"I love those; I always have a very positive experience with collaborative cultures."

"Collaborative culture, to me, is a group of people who will support each other and everyone brings something to the table with different skills sets. Within that environment, I think a lot of good things can happen. I think that everyone benefits from it. I think everyone kind of rises to the occasion if it is a successful collaboration."

"Collaborative cultures are good when people generally want to work with each other and support each other. The problems come in when collaboration involves not respecting other people's areas of expertise. I think that is something I see as essential to collaboration, being able to give thoughts, suggestions and so forth, but at the same time being able to say, "Well, that is your call" or "I respect your opinion." It is good to acknowledge if someone has more experience than you do."

"For the last several years, our development department has had more of a waterfall approach to learning systems where it is, okay, you have done your part. Now we hand it off and here is somebody else and we take their part and we hand that off and so forth. With our new director, it almost has more of an agile approach to it. We are trying to build it and grow it and we are consulting with more people and trying to figure out how to get the best product or the best results out there. The collaborative culture, while I think it has been around in our company for a while, has been on a much smaller scale. In the last nine months, it has gotten a little bit bigger and we are inviting more people to the party to share in that collaboration and to make sure that we are capturing all the information that we need to do the best possible job."

"I have had really good experiences with all my jobs being collaborative. I would say they were all positive. I would say that all the companies that I have worked with have encouraged people to work together to achieve our goals."

"I find that collaborative culture is not just about working together to create a product; you have someone to bounce ideas off of. In the best kind of collaborative culture, you make each other better. You can take an idea or you can take something and you can brainstorm it or work on it and not have the other person or the other people within your team be negative about it or they can give you better ideas and you can work on it together. I have worked with people who make you want to go to work each day.

You want to hang out with those people because they are just so brilliant, you are in tune, and you can really talk about what you love to do. I would not be in the position that I am now if I did not really love what I do. I would have given up a long time ago. It is not a job for the faint of heart."

"The same organizations that I worked with that had a very flat structure also had a very collaborative culture and my experiences were very positive there."

Competitive Culture

"There is no room for competitive culture within e-learning design. I have experienced it. You are competing against the others in some way to get better projects or to get the resources necessary. The competitive cultures that I have been in have all been very negative."

"I have actually had some more positive experiences competitive cultures than I might have thought, especially given that I have more of an affinity toward the collaborative. But, sometimes if it is done well, if competition is done in such a way that people who are on the losing end of things do not feel it is completely punitive and that they do not have an opportunity to sort of redeem themselves, if the competitive nature is done in such a way that, for lack of a better word, is friendly, like who can be the most creative, who can be there the fastest, who can build on the most efficiencies, it can be very effective. It is when it is set up in a mean way, a mean-spirited way, that it has been ineffective."

"There is a positive competitive culture and there is a negative competitive culture. A positive competitive culture is, for example, if two groups are essentially designing the same thing with an equivalent resource pool to draw from and you sort of

see who gets there first. That can sometimes be a very good thing. A negative competitive culture is where people are vying for the same resources and you have bottlenecks and you essentially have what amounts to backstabbing. That is not a good thing at all."

"Competitive cultures can encourage secretiveness. It can be a disincentive to work effectively with others. If a group or person is being judged or compared to others, particularly in a situation where ranking exists, that can cut productivity and negatively affect quality."

"We have practiced competitive culture more on a fun basis. When we first built our learning content management system, to get us used to using it and what not, we did a couple of different competitions of who could build the best course and who could utilize all the different features this thing had in its very earliest stages. Our competitive culture is within the department and it is always for fun. We see some really great things come out of it."

"I have been in sales departments where competitive cultures are common. I do not know that necessarily it is a company culture but maybe the department's culture because you have to be competitive in sales. I have experienced that. I think it drives people to do better and I think it drives people to be more innovative, but I also think it drives people to throw each other under the bus."

Control Culture

"My experience with control cultures has been very negative because of the planning system that has been forced on the e-learning group. That is really the main reason, but I would say right that people will not be happy and productive until that whole thing goes away."

"As an instructional designer, I must maintain control over the quality and integrity of the design process. It cannot be so restrictive as some of the control cultures that I have been a part of that allows for no collaboration and no creativity. Control culture companies that I have been a part of have fostered very negative experiences."

"When someone says control culture, I immediately think of a big thumb, sticking the thumb down on everybody and everything. I do not think that a controlled culture is particularly beneficial. I think there tends to be a great deal of resentment and I think people tend to dig in their heels. If someone is feeling like they are being controlled, they will do what they need to do, but absolutely nothing more. They will not volunteer anything. They will not go beyond at all. They will do just what they need to do to deal with the person doing the controlling, but they will not contribute anything beyond that."

"I think there needs to be some kind of control. There needs to be a system of checks and balances. There needs to be someone who is able to say, "We need to move on now" or "This is a great idea, but it is not what the client wants even though you are right. We have to do it this way or we are not going to get paid for the contract." I think some degree of control needs to exist, or there is chaos. But, if control gets out of hand, to where somebody who does not have expertise, is not a good leader, and does not have a good vision is instituting requirements on people who know better and holding back productivity and creativeness, then that is a problem. That has a huge negative effect on morale as well as on whatever the end products are."

"When we built the LMS, the gentleman who built it probably lived and breathed control culture. He did not consult anybody about what we needed it to do and how it

needed to work in the real world. He just built this thing. When he rolled it out to us, we thought "Wait, we need it to be able to do all these other things. How are we going to see these things?" He is like, "You do not need to do that." It was his way or no way. It made for some very interesting meetings."

"I have had a little bit of experience with a controlled culture. I think those cultures show up in the old-school corporate environments. I think it is extremely, extremely negative and I do not think it works at all."

Creative Culture

"I try to promote creativity within the group itself. But I sometimes have challenges getting the resources I need; those resources include time, billable hours, administrative time, and more."

"It is fun, but with some of the creative cultures, nothing ever gets done. It is all about the creative process. Within creative cultures, everything sounds good and everybody is going to do something or it should look like this, but no one ever agrees on what it is and nothing moves forward. Again, like all of it, I think you need little bits of all those forms of culture. You need points where you can allow the team to be creative but not to the point where creativity runs into chaos. Without the creative culture to produce it, e-learners are not going to enjoy or be engaged in what you are designing."

"I have had the fortune of working in those environments where you have a lot of people who, to use a cliché, think out of the box. Here is the problem. Here is the client problem. Here is the problem we are trying to tackle with this internal training. Nobody ever has any money. Nobody ever has any time, but we still need to build skills. We need to build knowledge. How can you do that? I have had some great experiences working

with people who just came up with some amazing ideas to kind of get past those hurdles."

"When you have the opportunity to have a free flow of ideas and kind of grab the one that suits the situation and move with it and grow with it, it is quite a rewarding experience. I think that by and large, business constraints tend to put the kibosh on really creative cultures unless you are in a marketing area in say advertising and stuff. It tends to be always about the all mighty dollar, so true creativity is something that is hard to come by in a business environment."

"Creative cultures have been responsible for some wonderful innovations. I think it is 3M where they give everybody over a certain level a half-day every so often just to think creatively with no particular expectations. That has led to things like sticky notes and all kinds of things that people would not have thought of if they did not have free reign. Within e-learning, I worked very hard to encourage creativity and bounce ideas off people's heads and encourage brainstorming. Encouraging weird, whacky ideas has led to much better products than would have happened if, for example, everything had been controlled, or if people were competing against each other and not collaborating. Two people with no expertise, one of my administrators and somebody who was a metrics person, each came up with great ideas to make a learning game more creative. That would not have happened if we had not sat together in a room and I had not said, "Let us think the sky is the limit. If we had all the development time in the world, if we had money, let us think about what we could accomplish." Even if the original ideas are not doable, the next step of the discussion can be about how close can we get to that. I see instructional design as being a highly creative endeavor. Creativity needs to be nurtured."

"I do see our creative culture shine through when we are doing something custom for a client. Then we get rather creative. I have one course that is totally custom. I had conversations with the client, I gathered details, and I sent them to our development team. I said, "This is custom. We do not necessarily have to follow the same guidelines that we do for the rest of the library. This guy is paying for all these bells and whistles and he wants activity." I turned my development team loose on this. It is an awesome looking course right now."

"I would say that all the corporations that I have been in really, really want creative stuff. They say that they want creative stuff, but there are all these policies and things in the way saying you cannot do this and you cannot do that. It is kind of like you have to find a workaround. But, for the most part, every company that I have been with has pushed innovation and creativity."

"A creative culture was nice but it was a little scary too because there was no weight on the creativity. You could be as creative as you wanted to, but at some point, you had to be answerable for your creativity. It was a lot of fun, but I also had to make sure that I was actually doing the job at the same time. I can be really creative when I put my mind to it."

"I have a lot of experience with organizations that foster creativity and those experiences were very positive."

Instructional Systems Design Process

- ♦ Learning Theory
- ◆ Planning
- **♦** Analysis
- ♦ Design

- **♦** Development
- ♦ Implementation
- **♦** Evaluation

Learning Theory

"Learning theory should be part of every effort. Unfortunately, in my situation with the e-learning professionals I support, I want to say it is not applicable. With ninety percent of the work we do, we receive what we call turned in material that subject matter experts create. In most cases, we just crank it through what I call a meat grinder. It basically is Articulate or Captivate and we create web-based training out of the storyboards that SMEs give us with very little learning theory applied to them. Unless it is specifically required as part of the project, it is in many ways not applicable. I think this is wrong."

"It is amazing how many people are in this profession who have zero understanding of learning theory. They think this is all applied or I will just take my personal experiences and slap together some training and it is going to be good. Learning theory comprises the fundamentals of the instructional systems design process. Now, there are many different types of theories and not all of them apply at all times. Some of them are good. Some of them are bad. You really need to understand all of those, be able to pull them all together, and understand a much bigger picture of what instructional design is. You must have experienced a lot of learning theory before you can say what is good or bad and what works. Learning theory is something not used a lot by many people and the vast majority of people in the field do not understand it. Not everybody needs it, but a good design team, even multimedia experts and everyone on the team, need to

understand some of the implications of learning theories. When I look at learning theory over my career, it has been the kind of thing where I always use it. I cannot separate myself from it. Some of the projects try to force you not to use it. Clients will say, "Well, do not do that because we just need something dirty and fast" or "The budget does not account for it" or "The client does not want it" or "We do not have the people to do it." Whatever the excuse is, people try to cut that out because they do not know what it is. They do not know how to apply it."

"I would say that the majority of my career has involved the ADDIE Model. But it has been about jumping right into development and not having the opportunity to do the analysis or really much of a design."

"I love it. I have a positive experience with it."

"That is a big thing. Learning theory to me is the methodology in whatever form it takes that enables someone to grasp information, to incorporate it, and to utilize it."

"Learning theory means an understanding of how people learn, which processes, modalities, and styles should be applied for good effect. There is increasingly a lot more out there. I would say in the earlier days, a lot of learning theory could be subtitled "This is What I Like Doing," where people said what they thought was good without the research aspect. I think it has become a lot more rigorous as we have more research-based things. We have a better understanding of cognitive science, for example, and how that plays into learning theory. But it is a little all over the place. It is unfortunate that instructional designers are often just accepting whole cloth. This is what something says and so therefore it must be correct. There are instructional design mills, including one I could think of on the east coast, where instructional designers are essentially taught these learning theories are absolute. If you do A, B, C, this is going to absolutely result. One

thing anybody with experience in education or training knows pretty quickly is that what works at 8:00 might not work at 9:00. There are so many things that need to be taken into account. I think learning theories have been getting much better. I think there is a trend toward instructional designers asking things like, "You say A works better than B; why? What is your proof?" Designers are starting to ask if there is a study or if there is something in the way the brain encodes information that is going to make a difference."

"The company I work with likes to think that they prescribe to the ADDIE model but really they do not. They like to skip a lot of steps. My experience with learning theory, outside of a classroom, is more of a "trial by fire" type of thing. I know how the ADDIE model works. I know what we should be doing, but it is not necessarily how we do it. Part of that is how the company does things. They want it fast and so they do not necessarily want to stop and do needs analysis or any of those things. Are they important? Is the learning theory we are going to prescribe to important? Yes. But the company I am with now does not have a set one. They do not have one that we all work with or subscribe to. Would it be nice if we did? Yes. As an e-learning company, we do not really have a learning theory that we hang on to. That is so sad."

"I like to work with learning theory, but lots of corporations like to hire people who do not even know what learning theory is and put them in a learning development position. My experience has been probably at one side or the other side because I have worked with learning professionals who understand and know what it is and can apply it. Learning theory is positive. It is the opposite spectrum that is negative."

"There are so many learning theories and, as designers, we are bombarded with them all the time. Learning theory has always been a really big part of what I do. My takeaway has always been look to at the situation, who is your audience, and what is the best way that they can potentially learn. My learners are working adults who are maybe from an older generation or may have a totally different way they extract information and interact with their peers than millennials who are more technically savvy. How best am I going to reach them? As a designer, yes, you have to know all of these really great learning theories because they affect everything that you do."

"I have had a few different experiences with learning theory and they ran the gamut from theory being intensely integrated into the design process to not even being discussed or thought about. My overall experience has been somewhat positive, just not very positive because I do not think it is ever integrated into the design process enough."

Planning

"With planning, the focus should be on the quality of the product, the instructional integrity, the creative solution, and how appropriate it is to the learners. But instead, 100% of the focus is on whether or not somebody has completed a task and noted it somewhere in a document or a spreadsheet that they have handed off to somewhere else."

"When it comes to inexperienced project managers, planning is no more than "Do we have people, who is going to be assigned to it, what are the deadlines, and how much money do we have to cover the budget for those people between now and the deadline?" That is planning to them. You know, what are the milestones? What is the delivery date? You put those on a calendar and that is planning, rather than understanding the true process and mapping out the ADDIE phases and planning each of those. There is very little time to plan, and those that I am planning with really do not know what they are doing. They can do simple management plans, but they cannot plan for the instructional design process."

"Particularly with e-learning, I have found, and this kind of goes back to project management, that when you are talking about e-learning in particular, you can start off with a great plan. As you are working with either your internal clients or external clients, because you are having to educate them on the process and on what they can and cannot do and as you start to see your storyboards or they start to see sort of your online alpha versions, the plan just goes down the toilet. It is really difficult to maintain your plan. It is even more difficult, I think, to educate your client because we all know that what they are hearing you say in presentations or what they are reading on paper, they are sort of intellectually getting it but they do not really get it until you roll out that first online version of whatever you have created."

"I think that planning is a definite requirement. I think that we never do it well enough. There is always a surprise. I do not think that you can see everything that is going to come. I think it is a wonderful thing to be able to do but I also think that people who feel themselves to be masters of planning also refuse to believe that their planning could be in any way, shape, or form, inadequate."

"I think planning is absolutely essential. It needs to involve a lot of the things. For me, planning is part of analysis."

"This last year we had someone in our department with PMP certification. She would work well for a government agency. She is big on paperwork. She created training about work breakdown structures and the documents you might need when developing a course. It was not something this company had ever had. We had a much simpler way of looking at things. It was an eye-opening learning experience. A lot of what she put through we all worked on and tweaked and made work for this company. We still use them today. Part of that included an official project plan document, schedule estimators, and cost estimators. Those documents are good. We use them when we are starting off

our project planning and trying to figure out what the product is and what we want it to do. The planning process has gotten better. There is talk about growing that planning process and encompassing even more aspects. There is a lot that we capture in that planning phase. I think that is only going to grow at this point."

"I think people do this differently. Some people do it better. Some people do not. I have found that vendors plan extremely well. They are good at planning. I have found that when you are trying to work internally on things, people are terrible at planning. They think they can do things super fast and it never happens. Nothing is ever out when it is supposed to be. I feel like they do not plan efficiently, nor do they prepare well."

"Planning is probably the most important part, and people do not give it enough credit. I am not saying things do not change down the road and it is okay to make changes down the road. But, if you do not have a solid plan, if you do not know where you are heading, then you will take side trips you never intended to go down. I tend to be a bit of an over-planner actually, so I watch myself with that. I make sure that I know where my adjustments are and that I break down the topics. Then I start pulling in what kind of medium I am going to use. I make sure I have a solid plan, and then I make sure that the people are onboard with the plan so that they know what is going on. As far as planning is concerned, it is like the cornerstone of your project."

"Planning, in my experience, is one of those things you can never really do enough of and rarely do you do enough of. It is a negative experience overall just because there has not ever been enough planning."

Analysis

"I believe analysis is incredibly important, and probably the most important part. But in the work that I do, analysis is hardly ever a component. Even though we claim to use the ADDIE process, most of our clients want to engage us in the design or development phases and not in analysis."

"As a professional instructional designer, I will not do work that does not involve analysis. If it has already been done when brought to me or if it is not done but it will be done as part of the project, okay. Analysis must occur. Analysis is not done anywhere near enough. It is not robust enough. It is highly critical and just not done."

"I think when I have been able to do any kind of analysis upfront, it has been a positive experience. It has been a positive experience going through the analysis. It has been a positive experience being able to have that data, to actually be able to go into your design and/or your development. So, anytime I have been able to do that it has always netted me a great result."

"Analysis is one of my favorite things and I do not think we do enough of it. I think when you are trying to come up with a solution, you look at what the end result needs to be and you need to break it down. I think you need to reveal the smallest components of it. I think you need to turn it upside down, turn it the other way, roll it around a little bit, and basically beat it to a pulp until you have the smallest bits that you can, and then see if that is in fact what you want."

"It is great when it happens. Problems happen, in a consulting world, when a client thinks analysis does not have to happen. They think they already have all the answers. Then because of the high probability that they are wrong, unless they are

instructional designers themselves, that is a recipe for disaster. Front-end analysis and sometimes root cause analysis as well are absolutely essential to behavior change or learning. If you do not take the time to profile who the learners are, determine what the objectives are, figure out how the learning needs to be applied, what the situations are going to be, and what examples are going to be encountered in the real world, then there is a very high probability of failure."

"Analysis is a skipped stage at the current company. We could do better at that. For some of our industries, we either have a really good grasp of who the audience is or we are just telling ourselves that we do. We had a couple of problems in the analysis world. With the shrinkage in the production department, I have inherited extra industries. I found some problems where the analysis was not necessarily correct. The individual who handled them either did not know the right questions to ask or blatantly ignored them. We now have some courses that might have some extra bells and whistles to them, but that is not what the target audience needs. We missed what these courses were intended to do. We have had some discrepancies in analysis and people have asked how I did not catch them before. There are probably a couple of reasons. Either you were not paying attention to whom your target audience is, or you were not involved in the conversation."

"I have had extremely negative experiences. No one wants to do analysis. Every company that I have worked for has completely left out analysis. You can mention it to them like five million times. They just want what they think they want and that is what they are going to get no matter what. I do not know if it is different in higher education or other industries, but for corporations, analysis means nothing to them."

"I just had an interview with a company that I am going to be working with. They are using all third party stuff right now, and they want to create their own stuff. I asked,

"Why? If it is working, why reinvent the wheel?" I am a big believer in not reinventing the wheel. The answer was because they could not make changes to the content depending on their customers' needs. I said, "Okay." That is background information I did not have that will actually affect the design going forward. That kind of analysis is really important, but nobody ever wants to do analysis. They want to get on with the design. I have never had a client or an employer say, "Wow, let's really think about this ahead of time to get our numbers and our facts straight." It has never been like that."

"When it is done, it works well. The key is getting the subject matter experts and stakeholders to see the value in the analysis. I have had pretty good success there."

Design

"We have to take what we are given and we do not have the option of tweaking or improving it. Meaning, if we were to touch it and we changed a word or even two words, even if it was a mistake that we corrected, that would be going against the protocols of the engagement. Design really doesn't occur in this respect, and I think that is not conducive to achieving learning outcomes."

"For some of the groups I have been with, design has been nothing more than putting some text on a storyboard whether you slap it in a PowerPoint presentation or some other thing, or maybe they enter it into some online version of a storyboard. Design, in a lot of cases, is nothing more than assembling content in words. I think in the industry, the ADDIE process just blurs. Design and development are the same."

"When I have been able to or when my team has been able to really focus in on a good design, even if over the course of development that design is changed significantly,

it is still better to go in and have it and it has always served me very well. It does help me in terms of managing the expectations of leadership and of the client as to what they are going to get as an end product. It gives me that cover that I need so as we are in the development phase, I can point back to it and say, "This is the design we agreed upon. Now we are changing it." So, if we are changing it, that is fine, but then it kind of helps me to have the conversation around why the project plan needs to change and why maybe I need more time or need additional resources."

"Design is a really critical element because you can have something that is intrinsically good, intrinsically what you need it to be, and I think if the design of it, the workability of it is not there, it is going to be a failure. I think design is a very important component."

"Design is a stage in which, in some ways, a huge amount of creativity can happen when you figure out how you are going to structure the knowledge that needs to take place, what the objectives are, and how things are going to be assessed. When you are building out outlines, design is really essential. If you hop right into development, you could be doing a heck of a lot of rework later. It really helps to be able to lay out structures in advance and to bring in any relevant stakeholders, perhaps to develop a prototype to be sure that you are really heading in the right direction."

"We do not have an instructional design team. The people that dabble in instructional design have no clue what they are doing. My instructional design is an on-the-job training thing. It is how I started first at this company as a writer and editor. That is where I have learned my instructional design skills, by talking to the people we had working at the time. When we switched to this learning content management system, we got away from storyboarding things. They are just in a plain old MS Word document and we send them over. We might denote an animation. We do not have a true design process

at this company. We rely on our development team to think of and create these great and wonderful things. We do not script them out."

"I enjoy doing design and I try to design as much as possible before development, but I feel like now, how things are going, if you have a small team, they just want you to do rapid development and skip design. You write the script and you do not even get the script approved. You go ahead and do it and they are like, "We have to go redo everything." They want things so quickly and there are such limited resources that everything just goes to development. I understand why they have to do it because everyone wants something when they want it and they need it done quickly. I think design is a critical part of the process and I am not happy that people do not do it. I am an individual contributor. I do not have a say."

"Design is always both my favorite and my most hated part of the process. It is like you have this unlimited potential of what it could be, you are sitting on the precipice, and you have to take that first step off, like how am I going to organize all this information? What is it that I am going to be doing? What is the final goal of the course? What is it that the learner has to be able to know? I use paper and pencil and I outline things, old school outlining. Then I start fleshing it out. Once everything is in place and I have written the content, preferably I'll have someone else double-check it."

"Design, for me, is a very positive experience that is done and done well on every project that I have been involved in."

Development

"Development is strong because we use new tools that we evaluate often and either change or upgrade if we need to. For example, going from the older version of Captivate to the latest version of Captivate. We can now develop materials that can be delivered more easily through a mobile device. That is a good thing. It is about the tools we use and the capabilities of those tools in combination with the expertise and creativity of the team. I think the tools help amplify what people already bring to the table."

"If you do not know the full ADDIE process, development is nothing more than the use of a tool to put the things together. Development is, as part of the ADDIE process, the phase in which you put things together. With a lot of groups, development is the entire ISD process. They will pay homage to ADDIE, but really all they are doing is little design but mostly development and then they are out the door. To me, development is the use of multiple forms of talent to create the media, the visuals, and to put everything that was in the design materials together. There are no words written or produced in the development phase. All the words were done in the design phase. The only thing in development is taking those chunks of words and making the images or bringing together the animations or interactivities that were described. But no one writes anything in development. It is all about producing things."

"While development is one of the most rewarding pieces of instructional design, it is again going back to when you get that first version of the e-learning product, when you get that first online version that the client can touch. The satisfaction is that they are often excited but the dissatisfaction comes with the client then wanting to change it."

"I think it is probably the least attractive of the process elements because it is where what I guess you call the "scutwork" is. It is the actual "getting it done" or getting it to where it can be done. It is almost like the housekeeping, the dirty work, of putting the pieces together and figuring out how they are going to work. I think it is sort of the hard work of it."

"Development has been really good in a non-siloed situation where people are collaborating. Where the problems have been, and where schedules have been essentially sent to hell, has been where people are not available when they need to be. I think development has to allow for certain changes. I think there are problems if everything is set in stone at each stage and you cannot go back. I have had some very negative experiences with that, particular at one company where things that people needed to learn actually changed such that the goals were different and the subject matter was different. Their process was such that once the design documents are there, they are set in stone. You are going to develop it anyway even though it is totally irrelevant and the courses will be useless."

"Our development team gets a MS Word document and it looks like a giant essay you would have written in school, with sub-headings and topics and divided paragraphs. They break out the content and divide it and it goes into our LMS. We have audio recorded, we source images, and we develop the course. It goes through development, QA, and any regression rounds it needs until it is a finished, final product. Then it is released from development."

"I do development almost every single day. I have had really positive experiences with people developing and with me developing things. I would have to say it is probably the most positive thing. I think it puts a damper on development when all the other things do not get done. That would be the only negative is that the other things do not get done. I have had issues working with people who think they know how to develop and they say they want to develop and then their product looks terrible or their design is terrible. They have never taken an art class in their life. They have never taken a computer graphics class, either."

"Usually by development, you already have a pretty good idea of what tools you are going to be using. When you get to the development phase, usually and hopefully you have the content. It is ready to go into the tool. To me, development is like the easiest part because by that point, you already know what you are doing. The hard part is design, the creation of the content."

"There are always issues; development, no matter how much analysis and design you put into the project, always runs into problems. Leadership, when they peak over your shoulder to see what is going on, can derail development. I have found that to happen quite a bit."

Implementation

"Implementation is a very positive experience because we happen to have some administrators on staff that are learning management system experts and they have been granted administrative access to some of our clients' LMS environments. So, when we implement an e-learning course, it goes incredibly smoothly because we have people that know inside and out what to do and how to do it. To the degree that marketing is part of the implementation, I cannot comment on. I think getting the word out to learners should be part of implementation, but it is not something that is part of our agreements with clients. We deliver the course and it is up to them to make sure that people actually get to it."

"Implementation, in most of my cases, is just testing that final product, making sure it works, and turning it over to the client and hoping that they say, "Yeah, it was good. Thanks." I do not get the opportunity to see how it all works, in most cases."

"I have had positive experiences, although I would say that throughout the entire process, despite having whatever plan we had in place for implementation, when the rubber meets the road, there is always a hiccup. There is always something that you did not plan for or you thought you planned for and when you load that e-learning module on whatever platform you need to load it on and you start testing, something goes awry."

"Implementation is once something has got to the point of being done, how it goes forth into the world. Whether the project is going to be a success or a failure has to do with the implementation of it, with making sure that it is where it needs to be and how it needs to be and that you are responsive to whoever is using it."

"There are problems when a client just says, "Okay, give it to me. I will get it out there." The client may not know how to test, may not have a good understanding of how to reach different groups, may not recognize, for example, that perhaps not everyone has high speed Internet connection. Perhaps sometimes the e-learning needs to be presented as part of a blended learning solution, which means a different style of implementation. I think the input of an instructional designer is really essential to be sure that the courses are being used for maximum learning impact. There are too many situations in which e-learning is not implemented the way it should be."

"The timeframe on implementing anything varies. We may have to submit courses for regulatory approval and then wait for that approval, or deal with any of the back and forth. Once development is complete and it is approved, it is published. We publish it out of production for the first run and then it goes to our product line managers to make sure the metadata is correct and has the pricing in there or anything that they need to add. Then they publish it out to all the different areas it needs to go."

"I implement everything myself. I have done that in the past. I have worked with vendors who have done it. I prefer to do it myself because I know I will get it done quickly. I have had bad experiences working with vendors because they take forever to implement something. I do not know what they are doing. I have had negative experiences with learning management systems because a lot of learning management systems are really terrible."

"Once they have everything into the LMS and it is ready for its first trial run, then it is just about having a secondary person go in and push all the buttons as a student and make sure all the links work and the buttons are working. Then it is ready for primetime. Usually by that time, once it is in the LMS, it is out of my hands and I just let them know it is ready to go, this is where you can find it, and good luck. Usually after that first iteration, it is mostly out of my hands."

"I would definitely say that implementation has been a negative experience. The reason is that typically, leadership did not communicate what their vision was for that project. It gets implemented, and it does not have the desired impact."

Evaluation

"If there is any evaluation at all, it is a smile sheet at the end of the course. So, level 1 of Kirkpatrick with no real measure of the impact of the course on people's jobs and no measure of how the experience impacted their lives."

"If you think about evaluation as part of the ADDIE process, it is very simple and not much. You do not do much more than the internal evaluation. A little formative, a little summative, and maybe you will build a smiley sheet or something that will go along

with it and possibly get some feedback from a pilot test. Evaluation is not done often enough and rarely up to the standards that I would prefer."

"Evaluation has been so rare in my career that I have rarely gotten evaluation data back. What I typically get back will be, you know, at the end of your e-learning, I am going to give you a 5-question survey. Tell me if you liked it or if you did not like it. Is it going to help in your job or is it not going to help you in your job? I might get that data, but that is just that reaction to the experience and it does not give me that, "Hey, did you really do something different on the job after you got of this experience?" I think for many clients, it really boils down to budget and resources. I think that to allow someone to come in and really follow-up after 60 or 90 days to say, "What have you done differently on the job?" and to analyze that data and to do what needs to be done there, I just do not think clients feel like they have the time or the money. I will say that over the span of my career, I think in the earlier part of my career, it was that the client did not get the value of that. I think now, from my present role, I see people understand the value, but they just do not have the money and the time."

"Evaluation is often not done well enough. Clients never want to spend the money to do evaluation appropriately."

"Evaluation is the thing that is never done, in my opinion. I feel that it is the unsung aspect because we can certainly learn a lot from evaluation. I have participated in evaluations and many times they have not been deemed successful because the right questions are not asked. Most of the time people are afraid of criticism or when someone is evaluated, if they have had a bad experience, they are not really being rational about why they had the bad experience. You have to be able to perform a good evaluation. I think that is where it is seriously lacking. And then a lot of times evaluations are done and nothing is ever done with what was being evaluated. The data was not utilized. It is

just, "Oh, yeah, those surveys are off in the corner" or "Yeah, that file is sitting in that computer over there." Evaluation is something that seems to be the proverbial caboose on the train. It is there. Somebody occasionally waves to it as it goes by. But it is not used for anything."

"Evaluation is great when it happens. I am looking at evaluation as the fifth stage in ADDIE rather than the kinds of quality checks that should be happening at each stage of ADDIE. Good evaluation helps you go back and fine tune and figure out which aspects of a course are not being well enough understood. For example, if everybody is missing assessment questions tied to a certain objective, then that objective should be better explained. Usability comments, user comments, and so forth, can be invaluable in ensuring that navigation is as intuitive as it should be and that things we instructional designers thought were engaging actually are engaging. All of those things are very important. Poor evaluation questions can go the other way in determining the value of a course. Where I currently work, we have someone who has been dubbed the evaluation specialist even though he has no background in it. Our courses are being rated on questions that are flat out stupid. For a compliance course such as Workplace Harassment that people have to take every single year, if you ask a question such as "Did you acquire new knowledge in this course?" of course the answer is no because they took it last year and the year before. A question along the lines of "Did you discuss the training with your supervisor?" is totally beyond the control the instructional designer, developers, and designers. Not all supervisors do that. The fact that a supervisor did not discuss a course is in no way a reflection on the quality of the course. It is a reflection on the kind of supervisor the person has."

"Every course that we develop has a survey at the end. Learners are either getting our generic survey, or they are getting a regulatory-required survey at the end. Our generic one is asking questions about your learning experience on this course or what did you think, what did you not like, and what can we improve on. At one point in time, we were receiving a report every quarter. Then they stopped doing that. At any point in time, we can go pull that information for any of the courses and see the feedback. Not everybody makes improvements based on that feedback. Some feedback you cannot act upon. Like, we do not want the timer on. Well, I hate that, but I cannot turn that off because that is a requirement. We cannot address all of the feedback. Some of our courses are old and need a lot of revision. You see that in the evaluation. That brings us to the bigger topic of maintenance and revision on these courses. When your library is massive, it gets harder to do. I think everybody in the company knows at this point that you have to do maintenance and revision. If not, you are just turning up content bugs and student issues that we are going to have to solve at some point in time. We do have some sort of evaluation process. It is just not perfect. It could be better."

"I feel analysis is like an evaluation. However, no one wants to do an analysis but everyone wants to have evaluations to make sure something works. I would say everyone over evaluates things. I think everyone in the e-learning industry wants to evaluate every little thing and every little click and I think it is over-used. I think there should be evaluations, but I do not think to the extent that people want them done. I have gone through summative evaluation forms as an evaluation and I have had good experiences with them, but the people doing evaluations do not want to do evaluations right. There is a specific way to do them and to validate test questions and all that type of stuff."

"I always really enjoy getting evaluations back because it makes me better as a designer. I can look at it and say, "This is what I missed" or "I hadn't thought of that." You have to really think about whether or not it is going to be helpful right now or if it is going to change the path of the course if I make the change today. I always take evaluation very seriously."

"Evaluation is almost, in my experience, never done."

Personnel / Team

- ◆ Program / Project Managers
- ♦ Instructional Designers
- ◆ Developers / Authors
- ♦ Multimedia Experts
- ♦ Graphic Artists & Animators
- **♦** Programmers

- ♦ Subject Matter Experts
- **♦** Editors
- ◆ Quality Control & Testers
- ♦ Office Staff
- ♦ Information Technology (IT) Support
- **♦** Trainers

Program / Project Managers

"They drive the production of the e-learning solution, so from the moment an opportunity moves from sales to operations, a PM is assigned and that person tracks the completion of all the required deliverables from start to finish."

"My experience with most program project managers leads me to believe they are adequate and they may even have some kind of certification in project management, but they are too general. They apply some basic understanding and procedures for project management to a very specific process that requires collaboration and creativity and they do not understand that full process. In most cases, program/project managers within the e-learning creation field are highly capable at basic management, but they really lack greatly in understanding the field, which damages their ability to manage these projects in a way that yields great products."

"Gosh it really depends on how good they are, does it not?"

"These are the people with the information that you need to do your job. They seem to segment the information they give you. It is like parsed out to you as they think you need it. I think that in many situations they are not looking at who they are managing or who they are dealing with and it would be nice to be able to see more of the big picture

and understand what your aspect of it is instead of just having something doled out to you because you are working on a jigsaw puzzle only you do not know what the picture is you are working on."

"It is not good when they do not know anything about e-learning and presume that we are creating widgets. It can be good when there is an understanding or at least a respect for the expertise that instructional designers bring, but I would say that has not typically been the case."

"I have worked with quite a few of them. Some are really good and know what they are doing and are good at sharing their knowledge and have something that is worth learning. I have worked with some who had no clue what they were doing. It was usually made apparent about the time that person left the company or moved on to something else. It was like, "How did you all not see that?" I have worked with some really good ones. I have learned a lot from them. They have been assets to the team."

"I think I have had sort of a neutral experience just because internal project managers have not been great. They completely discombobulate it. They try to either overthrow everything and micromanage people or they do not do anything at all. I have had absolutely amazing experiences with vendor project managers. They have just been terrific and very responsive."

"I have had at least one project manager that was specific to the PM role. It was nice not having to do project management and to really be able to focus on the design portion. On the other hand, you kind of feel a little restricted because you have to march to someone else's beat a little bit. He made sure that we knew what was required of us. He would ask us what our milestones were and how many hours we thought it would take. He was pretty collaborative on it."

"I have quite a bit of experience working with program/project managers. The projects have really varied in their project management style from agile, to the more traditional Microsoft project management. In general, I would say that it has been a positive experience working with them. Projects that did not have someone leading the charge actually suffered."

Instructional Designers

"I think they have a lot of great ideas on how to best present content. And they have been incredibly patient with a lot of the initiatives that have been handed down, which really seem to be impeding the work that they do."

"The field has managed to slap that title on just about anyone that has been a part of an education design team. I am not even saying just e-learning. Really, education is even being generous. Anyone who has put together some content for purposes of what they call training becomes an instructional designer, and I do not see that as the real qualification. I think the qualifications for instructional designers are Master's degrees and Ph.D.'s. I do not even see anyone with a Bachelor's degree capable of being an instructional designer because it takes so much more. When I look at true instructional designers, there are not many of them. But the vast majority of them are adequate to good. There are some exceptional ones out there but again there are not many exceptional instructional designers because they are diluted in some cases by the team, the managers, and other things they have done."

"Instructional designers are those folks figuring out the information and how the project is going to end up being presented to the learner."

"I have been lucky to meet a lot of good instructional designers and that has been a really terrific experience. They are creative, care about the content, care about the learners, and do their best to design a good, engaging experience that is going to achieve the desired objectives."

"I have seen some good ones and I have seen some not so good ones. There is one that I used to work with at this company, then she moved on, and I have used her a couple of times since. She just has the specific training to see my vision and make it happen. Others, I am a little bit lost as to why they call themselves instructional designers because the results are not comparable. It is important to have instructional designers. When you find good ones, you kind of want to hang on to them."

"I work with instructional designers who have a background in instructional design and they have always been amazing. Then I have worked with people who are called instructional designers and have absolutely no background and worked in some other position and became instructional designers and they have no idea what they are talking about. Once, they read a book, and now they know everything because they read one book. Horrible experiences. I work with people who are instructional designers and have called themselves CLOs when they have absolutely no background in instructional design. How can you be a CLO if you have no background in adult learning or anything like that? It does not make any sense. I could go on forever about that, too."

"I worked with some instructional designers before and usually they are a pretty awesome lot. They are really creative and highly intelligent. It is interesting; some are very, very analytical and very logical, then you get them up against other designers who are very creative and very organic. It is when you start putting those two together and working with them and kind of mesh their styles that life becomes kind of interesting. I enjoy working with other designers. I like having someone who knows the design process

and understands what I am talking about when I say, "If I do this, do you think this would work?" They can actually think about it, know what I am talking about, and actually give me feedback that would be constructive."

"Instructional designers are very creative, open people who like to listen to different viewpoints and work together to find a good solution."

Developers / Authors

"Many people calling themselves instructional designers are actually developers and authors. They are people capable of writing some technical material, researching. They may be subject matter experts. They run a number of different tasks. They may even have some programming capabilities. They lack the fundamentals of learning theory, but understand a little better what education is and what the components of it are, how it works, and how some of the media work together. Given guidance by a true instructional designer, developers and authors can help assemble all of the content information. Instructional designers are the architects. They set the blueprints. Developers and authors, along with some other folks, get together and build the thing. To me, they are a big part of the team. They are the one that gets the big visual work done. They are the structure for all that visual work."

"Good developers or good authors make everyone's life very much easier. Bad developers and bad authors ensure that the tools you have to work with, the content that you have to work with, is going to end up being very problematic."

"When a situation is such that a storyboard or something is just handed off to developers and they make decisions that should not be within their prevue, that it is problematic."

"When I have worked with developers / authors who were with vendors, some have done really, really well while others came back with the exact opposite of what we told them we wanted."

"I have only worked with one and he was less than stellar. I know that there are really great e-learning developers out there; I just have not worked with them very often. The one person I did work with was a poor experience. The developer understood the tool, but was not dedicated to the project. She was actually on-loan from the IT department. The things I needed her to do she said she could, but in reality, it turned out that was not the case. I ended up having to do most of the work myself."

"I have worked with people who can take the storyboard and turn that into reality. I have done that myself, also. The communication has always been good. If something is not understood, they simply ask questions. I just really have not had any problems with developers."

Multimedia Experts

"They create the images, animations, audio, basically anything that is doing something on the screen would be their domain. They have created it. They may not have come up with the concept, but they actually make it happen."

"Everyone that I have ever worked with has been exceptional. They have great eyes for media. They know their software well. They know how to maintain quality. Multimedia experts, while very narrow in what they do, have been very positive to work with. I love working with creatives where I can give them some guidance and some vision and they turn around and take what I had envisioned and make it real."

"Someone who is good with multimedia can give something that is cogent, is to the point, is very useful, and is pertinent to the project. There are other people who, for them, it is pretty, it is flashy, it is entertaining, it really looks good, but it does not serve the purpose. If you related it to food, it would be something that is very meat and potatoes and very satisfying or something that is kind of a meringue or a whipped thing where initially the first few bites are good but then when you get down to it there is really nothing there. That is how I would describe my experience with multimedia experts."

"It is good when instructional designers and multimedia people are sitting together making good decisions, particularly when project deadlines are an issue. The instructional designer needs to be there to say, "Okay, we can film a video instead of developing an animation that will work instructionally." That can be very positive; multimedia is so important to the learning process."

"They are creative geniuses. Everybody on our multimedia team is awesome. They are this great group of creative, make it happen, tweak it and get it just right people. They're like "Hey, take this and go have it verified by our subject matter expert." I have always been super thrilled with our multimedia experts, the whole team. They are able to troubleshoot and if I say, "Hey, can we do this?" they may be like, "Yes" or "No" and if it is a no, then they will say, "Here are some options of what we can do that would have the same affect." I appreciate that a lot."

"I have worked with amazing, terrific vendors. Internal multimedia people, for the most part, have been really, really good. I have had maybe a few experiences where the person did not deliver on time and/or they did not deliver exactly what they were saying they were going to deliver."

Graphic Artists & Animators

"Graphic artists and animators impress me greatly. While I have done some of that stuff, I was never able to spend the time and energy to master or become really good at it. When you have people that do that all the time and they have had preferably some experience, some formal training with visuals and aesthetics, and the software, but they know how to be artists and they have had some formal artistic training and put that together with their technical, it just blows me out of the water. I love graphic artists and animators."

"Someone who has a good grasp of how to visualize information is invaluable. There are some people who can take a concept or an idea and organize information and present it graphically so that your mind can take a snapshot of it and kind of retain it and it is a reference picture that you can bring up and use in the future. Then there are others where even with labeling and explanation, you stare at it and think, "Oh my God. What is it I'm supposed to get from this?" Again, that is one of those things where if you do it, if you can do it well, it is a great thing. And if you are messy about it, it is an awful thing. When it is bad, it is like watching a movie and hearing a dialogue and the camera is not focused, where you want it to be focused and you are like, "Wait, I need you to look over there. I need to see this." I think that is kind of a big issue if your brain is trying to figure it out and you are not getting the information you need and it is not matching up. I think that is frequently an issue."

"When I hear somebody say, "That's a graphics call" usually that is a good alert for me that this is not a collaborative person because in e-learning, ultimately the instructional designer has to be in charge. A graphic artist needs to know how to execute a vision, but the graphic artist is not the primary author of the vision. Sometimes that can be problematic. I am thinking, for example, of a lesson having to do with the ocean and the instruction is about salinity and chemicals. The multimedia person wants to do wave movement because it was fun and, yes, it was very pretty, but it communicated absolutely nothing instructionally that related to the objective. If he and the instructional designer had been collaborating together a little bit more effectively, he would not have wasted his time developing something that was eye candy at best and could have instead developed something along the line of perhaps an animated molecule that could have communicated something useful."

"I do not have a graphic, paint, artistic, or creative bone in my body and so I am glad that some people do."

"Mainly, I have worked with vendors on key instructional assets and they have done amazing work with 3D animations and augmented reality and things like that."

"I enjoy working with people who are very artistic. In some cases, you are getting them by the hour and they are under contract for so many things and you have to be really, really specific. You cannot just sit down and say, "I didn't really like this. Let's do something along these lines." You have to know exactly what you want."

Programmers

"Because we use object-oriented tools that are fairly simple, we do not currently have programmers that might use JavaScript or some other language or the more refined authoring tools."

"It is the programmers that take all of that stuff together and give it the true interaction that is there. They are hard to find because of the nature of the industry. Most of your really good programmers that are capable of building great interactions are doing

it in some other field. You do not get too many of them that even know that there is programming going on beyond just some simple authoring tools in training and education. When I think of programmers, I also think of my gaming developers, those that use the game engines and use some of the programming to make those things and so on. I have much respect for them. It has always been a positive experience. It is just kind of hard to find them. You either have them or you do not."

"My issue with programmers has always been that they usually do not have to deal with the results of their labor. For instance, imagine a screen design when you constantly have to scroll down just that little bit. It is like, "Please, if you ever had to use this yourself, the fact that you have to do this additional keystroke 40 times a day is something that you could have cleaned up." I think programmers certainly make our lives easier in many respects, and I think they could make our lives even easier if they also had to use what they programmed."

"I have seen a lot of duds out there, I would have to say. Where I am currently, upper management, who understands nothing about e-learning, decided that the technical manager did not need to have a technical background and an LMS person did not have to have experience in more than one LMS in order to implement a very complicated system. That has been a recipe for disaster. We have had so many crashes and so many issues. When the programming expertise does not meet the programming requirements or needs, that can screw up things tremendously for learners."

"I have experience with one programmer who helps build our templates. He is very responsive to a schedule and he knows what he is doing. I just used one of his game templates not too long ago and when I loaded all the questions in there and had it ready to go, I clicked Preview to make sure it played correctly. A warning sign popped up that said, "Hey, you have a problem with two of your questions. Here is what you need to go

fix it." I was like "Awesome. Who put this screen in here that tells me what I did wrong?" They are like, "Yeah. He put that in there so that people like you who do not pay attention when they set these things up have everything working correctly." I was like, "This is awesome. Where is his email?" I just had to send him a note to say thank you for doing that, because if not I would have never known there was a problem."

"One time, I was in charge of developing the entire e-learning suite including the Website and so I had to work with the programmer. He was highly intelligent, knew exactly what I wanted, and it was a lot of fun to work with him. I have also worked with some programmers that did not have a lot of social graces. They were very linear thinkers. You had to be really, really specific as to what you wanted. I have had both good and bad experiences. I tend to speak their language a little bit easier than most people."

"With programmers, I have had difficulties. To me, they have not really tried to match the overall style of what it is we were trying to accomplish. I do not want to be negative about the programmers I have worked with, but they see things in more black and white terms and do not seem to want to work together or collaboratively come up with solutions. They want to go off and just do their own thing and hand you something and say this is what you get."

Subject Matter Experts

"Too often, rather than just sharing information with us, they want to tell us how to teach something. So, for whatever reason, SMEs that are assigned to work with us have been told that they have more power to influence the final outcome of an e-learning project. I think that has hurt us in the past."

"I see subject matter experts as another member of the team. They are not the client. They are not independent. They do not hold special power. They are not senior to the instructional designer or anyone else. They are just a normal part of the team like everybody else that we have talked about to this point. When there are no true subject matter experts on the team, it is a very negative experience."

"I have found generally that there are always certain struggles that are fairly common. You can interview them and get the information from them that you need, but then there is that struggle of when they have to approve what you have done, helping them understand that you were trying to develop a product for a particular target audience and that target audience is not them. The scope of the content that you are going to include may not match what they think is important. You have to help them understand that they are subject matter experts and they are not the target audience and that the target audience has a different need then they do. You also have to help them understand what learning objectives are and that you are developing towards those learning objectives because those are going to translate into the performances or the competencies that you are trying to train your target audience to achieve. So, that is a struggle. I think also, the struggle is getting them to understand your timelines and to make themselves available according to your timeline and to understand the urgency of completing their review within the time that you are giving them."

"There are subject matter experts that are truly experts in their subject. You can ask them a question and they can immediately come up with a response. They can speak eloquently on the subject. They are very good at explanations. They understand what students need to know. They are fully conversant and are able to make the subject come alive. The bad ones hem and haw and talk circles around something because they cannot exactly describe it, so instead of saying, "Oh, that is a circle," they are going to say,

"Well you start at one end and you move around until you come back to that end."

A bad SME is an awful thing to get."

"SMEs need to be controlled. What makes a SME a good SME is being excited about all aspects of the subject. They often do not understand that the instructional designer's role is to figure out what a learner actually needs to know and then to make it interesting. Often the conflict between SMEs and instructional designers comes in what is left out as opposed to what is put in. SMEs are very important to the integrity of a project and to ensuring content accuracy. But a SME is not an instructional designer. A SME should have the right to ensure content is correct but should not be the primary author of the content."

"I work with SMEs a lot. I have had some that are really good and laid back and very easy to work with. Then I have had the flip side where they are more hands-on and needy and higher maintenance than the others. We have had some problems in the past with some of our subject matter experts with plagiarism. For the most part, we have been able to get some really good people to be our experts. Most of them are really nice. If we end up with a question about something a little bit down the road, I can say, "Hey, we have this question. Is this right? Do we need to change something?" Subject matter experts are important. They hold the content."

"Every subject matter expert I have ever worked for left me wondering why I am even there because they just want to do my job for me and tell me what to do. That has been my overall experience, which has been negative. They do not really want to be helpful. It does not seem like it, at least. It seems like they kind of resent you being there and wonder why you are there."

"SMEs are so wonderful and so horrible. It depends on the subject matter expert. I worked with a slew of subject matter experts. They are all passionate about what they do, but the best ones are the ones that will sit down and talk to you about it and really want people to understand what it is they do and why they do it. I love working with subject matter experts. I always learn something. I walk away a better person for it because I gain some kind of knowledge. I win at Jeopardy a lot. Some SMEs have been more difficult to work with than others, personality wise, technology wise, and because I do not live in the same area as any of my subject matter experts. A lot of the meetings take place by Skype or through Adobe Connect. I had one subject matter expert who was not familiar with technology at all. She ended up emailing me documents and I would version everything and then talk with her on the phone. I typically do not record conversations, so when I am asking questions I am writing their answers down word-for-word or they are putting something into a document as we are talking about it. I have never actually worked with a SME face-to-face. It has always been through some kind of technology. I think it makes them feel like they can give me more information because it is anonymous. They know who I am or they know that I know who they are, but there is space between us. They are able to give me information that they may not have normally given someone else being in the same room."

"I have been very lucky that the subject matter experts have always been responsive, have always wanted to share, and have always wanted to pitch in, learn insights, and help guide the project."

Editors

"Working with editors is a daily struggle. I receive dozens of emails everyday about our quality and editing group because they insist on making changes that either do not make sense or change the meaning of a sentence or an entire screen."

"Editors are an extremely critical part of the process. They are not a full-time thing. We do not need them all of the time on any particular project. Working with editors, when I have had them, in most cases has been a very positive experience. If they are not a good editor, I get rid of them immediately and do something else. I do not get to work with them enough."

"With editors, it is kind of like, "Oh cripes; I have to deal with them."

"A good editor is someone who can take language that is less than clear and reword it in such a way that there is clarity and the learner is not going to be confused by what they are reading and is going to have a good experience. When information is presented and the sort of archaic rules of English will apply in all cases at all times, I sometimes have difficulty with that. Occasionally, you just need to sort of stick your finger on it and point it out and be done with it. In many cases, particularly with English as a second language, for example, the rule where you spell out single digits when you are writing the word "eight" instead of putting down the number 8, I find that just ludicrous."

"I think happy editors are essential, but substantive editors can be dangerous. A substantive editor would look at the general flow, tone, style, and all of that. That can lead to corrections that change meaning and affect instructional content. A very good substantive editor can be helpful. But substantive editing means a second round of instructional design and a second round of SME review to be sure that meaning did not change. When I was at one firm, editors went back and changed a lot of "cans" to "mays" because they thought it sounded better. The meaning was changed, and it was no longer consistent with the joint doctrine that had to be taught. That was a total mess. The average instructional designer may not be a super comma jockey and might need some

help with punctuation. Spellcheck certainly does not catch everything. It is good to have a second eye. It is good to have an editor who has an eye for formats. But I think it can be dangerous to have an editor actually rewrite content. If you need an editor to rewrite content, you need a new instructional designer, because I believe that writing is essential to what an instructional designer does. Too many editors overstep and change meaning or think they understand grammar and punctuation better than they actually do."

"Our editors have always been pretty good. We usually specify what type of edit we are going after. Does it need to be grammar and mechanical issues or do we need an editor to also be looking for extra things? If we are doing a big overhaul, then we make sure we have a style guide so that we can hand it out to the entire editing group. We all make mistakes. Go find me the number one best seller this week and I will point out the typo. I am sure there is one. We all make errors. What I have noticed throughout the years with editing is if they get overwhelmed, then it can get a little sloppier. I try to make sure I am not overwhelming any of my editors and I am making sure that due dates are all good."

"With rewording, I think that they are just a little too anal."

"Some editors are kinder than others. I like the ones that you pay better than the ones that are on your team. The reason is they are more professional about it. This is not because the people on your team are really horrible people. It is just that they know you, and there is some liberty taken, not necessarily being unprofessional, but being kind of detached about it. I actually prefer the copy editors that you have on contract that are required to be polite to you. Not polite in, "Wow, this is the greatest thing I ever read and there is nothing wrong with it," but professional in the sense that these are the things that are wrong or these are the things I found that need to be corrected according to your style guideline as opposed to telling me that I should have known better."

Quality Control & Testers

"It is difficult to get teams and companies to justify the use of or to spend the money to get one. On some bigger teams, you may get lucky and have one, but in most cases, it has to be done on the fly by another member of the team. It is kind of hard to quality control and test stuff that you have been working on yourself. You have to have other eyes."

"I think that it is a definite plus to have a good quality control team and testers to make sure that everything works the way it is supposed to work and that there are no clicks to nowhere or things freezing up. There is nothing more frustrating than pounding your mouse and trying to get a response. I am all for quality control."

"Quality control folks and testers can be tremendously useful and helpful. Some people really have a gift for knowing the goofy kinds of things that most of us would not even think of, like what happens if you hit Enter three times in a row really fast. That can be really helpful because learners do goofy things, too."

"We have a QA department that is part of our development team to make sure that everything is matching up to the content or the storyboard. Then we have a separate department that does acceptability testing. Those are the people who try to break it. For quality control, we have it on the course level and those guys are a trained group. They are paying attention to spelling, punctuation, spacing, and content."

"When I work on a team, it is usually someone on the team who performs testing. We swap courses or whatever, you hand it off to someone who goes through it and tries to break it, pushes all the buttons, checks all the links, reads all the content, that kind of thing. That is just part of the development process because you do not want a bad product going out to your customers. In one case, ours were master-level courses. You did not want incorrect grammar. God forbid the grammar should be incorrect. That was always a really big focus, or your bibliography was not in the correct format. Oh, no, that would be awful. Those are the kinds of things that would get scrutinized."

"Quality folks I have worked with have all been good at what they do and they do it in a timely manner."

Office Staff

"They are incredibly supportive. They help us obtain things that we need. They ensure that we have a lot of activities planned throughout the week to build team morale and to bring people together or get them out from behind their desks. Overall, I think they promote a very positive experience."

"We constantly have to travel or set up a conference room or things that the office staff is good at doing like printing documents or getting materials and things like that. You need someone that is a general helper. I do not rely on them like an executive to check my email, write my email, or write letters or stuff like that. It is nice to say I need to let people know something and have them zap out some kind of a memo on occasion. Office staff is valuable. They are a luxury in a lot of cases. For larger teams, that one person can really fill many of the little gaps."

"I think having a good office staff, having a good support team, is kind of critical even for things like making sure there is paper in the copier. Also, if you are trying to do a fax and the fax machine is broken and nobody has bothered to get it fixed, that's a problem. Office staff is there if you have someone visiting the office so you do not have

to be positioned at the front desk to make sure that they are greeted and brought into the conference room. I think support staff is very important."

"I think it is a little bit dangerous that my immediate supervisor thinks any receptionist can be an editor, which is definitely not the case. I have had very positive experiences with office staff, however."

"Our office staff is pretty good I guess. It is a small group. It seems a whole lot smaller than it was last year at this time."

"I have had good and bad experiences because some office staff do not really understand what our role is. I think it might also be because I am pretty young. I do not know if it is the whole millennium thing; there is just some tension sometimes. Overall, I have had a pretty good experience where people have been extremely accommodating and we work as partners."

Information Technology (IT) Support

"I have had very negative experiences with IT support. Nothing gets fixed. We have a process where tickets need to be submitted online. Those tickets are either ignored or closed without any sort of follow-up. Numerous people have complained about it. I think that entire department, because it is a shared service and it is not part of the instructional design team, is unhelpful. We have no control over the ability to just reprimand IT folks for lack of support."

"You need someone who is an expert who can just do it quickly and they are always maintaining things, maintaining Cloud-based storage or networks or whatever it is. You need IT support. You need people to grab the computer and load software or at least let you load software and get that stuff going. They are highly critical. Usually, what I get with IT support is that I am their burden. That you call and ask or I need something for my team and to them, it is a burden. You are just a short little fire problem that they have to put out and they do not want to handle it or mess with it. They have other things that are more important to do. I have always had a fairly negative experience with IT support."

"IT support is wonderful when you need them and someone is there with an answer and a response. I think that very frequently, IT folks do not quite grasp the fact that if you are dead in the water, you are indeed dead in the water and you need a response now. I think sometimes it is a very adversarial relationship. I think it is bad when IT speaks "IT speak" and you are at the receiving end and you are like, "Yeah, if I knew what you were talking about, I could have fixed it myself." I think in many cases, there is a language issue."

"IT support is sometimes good, sometimes not good. My experience has been all too often that if an IT person does not know how to fix something, he says he cannot work that way. Often, time to make corrections or employ changes is grossly padded. IT support staff often presume that nobody else knows what they do and therefore they can get away with a lot and it usually works. Since instructional designers tend to have relatively decent technical profiles, usually it does not work so well with us and sometimes there is a little bit of head-bumping there. There have also been some really good IT people. Where I am currently, the IT staff is phenomenal."

"We have a couple of different ways to get things to them. We can submit a ticket to keep it all official and get it moving. But IT folks are usually also available on our IM account so we can chase them down there if it is pressing and urgent. They are a pretty good, responsive group. There is a little bit of lag when we need a level of effort but I

think that is just because we are an e-learning company and our IT department has lots going on. If your computer quit working or this activity does not work like it should or the new rollout just caused massive bugs, then they are pretty responsive. If you are looking for a new feature or something, you might have to wait a little bit."

"I do not know why, but I have had the best IT people ever and they are so friendly and you can just talk to them. I actually have this one guy who I worked with, he was an IT, and he would come and say hi to me every day and he would stay so late and work so late and if I had any issues he would leave and just come and help me. I have had really great IT support."

"IT is always really suspect of e-learning designers. They think we know enough of technology to catch them when they are trying to blow smoke at us. We also have enough knowledge to be dangerous, but not enough to quite get us out of really bad situations should we find ourselves in them. I have never really had to but heads with them, but I always treaded carefully and was respectful. They kind of have the understanding of where the line in the sand is drawn but it depends. We were always in contact with the IT department because we are constantly developing. We were the ones breaking the system and if we did not break the system, then our customers would find the problem and then IT would get really upset because our department also served as the testers."

"IT professionals often, to their credit, are very busy people. They are overworked, and if you need something, then you are going to have to wait a while to get it and usually e-learning projects are on a pretty tight timeline."

Trainers

"I do not deal with trainers often. The vast majority of what I do tends to be pretty much e-learning and stuff like that."

"It is a very good thing if you have good trainers and you can provide them with the material they need and know that they are going to make it work, that they are conversant with the needs of the class. Good trainers are very hard to come by. It is a tough job. They are frequently dealing with materials that they are not an expert on, so hopefully they can provide the class with enough guidance given all of the work that you have done on the class material itself."

"Often trainers are worried that e-learning is going to replace them, therefore, they do their best to subvert the use of e-learning. Sometimes trainers just assume they know better and will not follow whatever instructor guide or learner guide is given to them. Then when the evaluations come back, we are totally dependent on written feedback to know the real reasons learners did not like the course. A good trainer can really bring training alive and is essential to making a blended learning situation that involves ILT work successful. It is important to check on trainers to be sure that they are supporting e-learning components and also to check, if there are instructor guides and learner guides, that those are actually being used as intended."

"We have a few of those on staff now for a specific client. Happily, I do not have to deal much with blended learning and those guys. They kind of keep that separate from our world. They can take the courses as they are and go do their blended training approach to it and if they need anything, they let us know. It is kind of a separate world."

"I am laughing because I worked with so many trainers before. A lot of trainers I know hate technology. So, I have had this love/hate relationship with them where they love instructional design but they hate technology and they just want to get up in front of a class and talk to people. That is all they want. They do not want virtual classrooms. They do not want any of the other nonsense. I would say I have had a neutral experience with them."

"Mostly, it was the subject matter experts we hired who served as our trainers. I would be on-hand to either help out or make sure the technology was going correctly. I guess the trainers have always been someone who has been in education or who has facilitated before. You did not really have to hold their hand too much."

"I have had quite a bit of experience with trainers and overall my experience has been negative because trainers have not had a good background in learning theory or overall design. They basically teach the same things over and over again and there is no evaluation. There are no objectives. It is all about the content dump, basically, and that has been pretty much across the board."

Training

- ♦ Formal Education
 - Bachelors Degree
 - Masters Degree
 - Doctoral Degree
 - o Technical / Trade School
- ♦ Informal Education
 - o Professional Development
 - Apprenticeship, Mentoring & Coaching
 - o Self-Directed Learning
 - o On-The-Job Training

Formal Education

Bachelors Degree

"My liberal arts background has given me an opportunity for a great deal of understanding of the world. I think a good instructional designer needs a good liberal arts background because we deal with so many different subjects and areas that we need a broader understanding of it."

"My bachelor experience was very positive."

"I think a Bachelor's degree holder is someone that has had the commitment to go through and obtain the degree. For a lot of people, it is not an easy thing to do both timewise, financially. I know a lot of people that have earned their Associate's degree to sort of jumpstart their career and they then have gone through and obtained their Bachelor's degree. I have a lot of respect for people with Bachelor's degrees."

"I have had good experiences with getting a Bachelor's degree. I would say all in all that I went the traditional route. There were not that many alternatives when I was there. I did get a non-traditional degree also. I have two Bachelor's. One was self-study, and one was regular classroom. I would say they were both pretty good. I will say,

however, that the Bachelor's degree is not worth what it used to be. It is abysmal that something like one-third of students in a lot of institutions have to take remedial courses and there is too much social passing even in Bachelor degree programs. For example, at one university system, for anybody who got a B average in high school and maintains a B average in college, tuition is paid for. A lot of people end up getting B's because the professors feel sorry for them and nobody wants to be the person causing them to lose their support. I have encountered a lot of job candidates who have Bachelor's degrees but who also cannot write a literate sentence."

"Working with people who have a Bachelor's degree, I do not think that what they do is extremely specific unless it is like in finance or something like that. Overall if you have a liberal arts degree or something like that, I would say my experiences have been kind of neutral because it is not good or bad. They have a background of some sort, and they know what they are talking about, but it is just a little limited, usually."

"My Bachelor's degree is in art and history. It is totally not related to anything I do now."

"I think on all of the e-learning teams that I have worked with, the people have had at minimum a Bachelor's degree. Most degrees were not in instructional design per se but I think it is important that e-learning specialists and instructional designers can think critically, which is something you get from any Bachelor's degree nowadays. I do think that critical thinking is an important aspect of being an e-learning professional."

Maters Degree

"It was instructional technology. It was back when it was very new and it was incredibly intensive, immersive, and difficult, but I would say the experience was very positive and prepared me well for my career."

"In my Master's program, I learned some of the software, but I learned much more about learning theory. I learned formal instructional design at advanced levels. I learned a little bit of business. So, my Master's degree was very vocational in a lot of ways. It began to teach me to apply and design. The Master's experience was good."

"My graduate degree is in curriculum and instruction. So, back in the day, it was the equivalent of instructional design and instructional technology. Those are the terms we use today."

"I think it is a nice thing for someone to have earned a Master's degree. I know a lot of people who have tried to further their education and have decided that they would stay in the work environment rather than spend the money on a Master's degree. I think it depends on what Master's degree you get and why you got it."

"That degree was all online. It was all via distance learning. That worked out so well for me. I prefer the distance, the online as opposed to a traditional classroom any day of the week. The subject was technical and professional communication. I think there is a little bit of crossover in that. It works really well for my current job. While it was not traditional, we still did discussion and we figured out how to do that and work together as a team and collaborate on some things."

"I think it was great that I got a Master's degree. Without it, I do not think I would know what I know. I do not think I would be able to function without it in the type of job I am in. I think it is very important. My experience is so positive because my program was super hands-on. I got to work with clients right off the bat starting the program. With my program, I think it is great because it is hands-on and you know exactly what you are doing. With more Master's degrees that are theory-based in instructional design, I think they are horrible because you are not actually practicing it. You are just learning about it. Especially for the degree, you would think you'd be actually applying things. That is just my feeling."

"I have a Master's of Education in adult education and distance learning. It is really specific to adult learning and distance learning. It was not necessarily about elearning. My interest in e-learning grew as I started working in the field."

Doctoral Degree

"I would say my experience with doctoral studies was positive primarily because it offered exposure to dealing with human subjects and how to interpret data. I think that was a big missing piece with my Master's work. So, the Doctorate helped kind of bridge that gap and helped me look at target audiences in different ways."

"With the Doctorate degree, there was still a little bit more use of technology but not much. It was mostly geared towards being able to do stuff within the academic environment and cover fully ADDIE-type steps but still having to do it yourself. I got much more into learning theories also. Even beyond that, I got into other forms of design. I know everything about learning and the history of learning and many different things. I know about more than just instructional design. It took me to a learning theory level, way

above and beyond everything. All of those things combined to give me a solid understanding of what training and education are all about."

"To have a Doctorate, somebody must really have the sort of drive to obtain that. If it is not something that is required, if it is somebody who wants to teach at a college level, someone that has gone through and has that much commitment to a profession or to a subject area to go through and get a Doctorate, my hat is off to them."

"I was very glad to see the end of it, absolutely. It was a good experience. I learned a lot. I meet some very smart people. It ended up helpful to me in some job experiences and not helpful in others. One comment that comes to mind is my second instructional design job where the vice president said he loved to hire people with Doctorates because you get them for so cheap. Some businesses just assume if you are an academic you are not worldly-minded and you are naïve and can be taken advantage of. The actual degree experience itself was good."

"Something interesting that I want to bring up because it is based on the elearning field is that I had gone to work at a job. I had a manager who had a Doctorate. All of the sudden, things got switched around and I then had a manager who has a high school diploma. He is a manager of instructional design. I was beyond confused. He was extremely, extremely smart, but that is just something I want to bring up because I feel like if it happened at one place, it is bound to happen other places and I feel like that is very weird."

"I started my Doctorate degree with a well-known online university, but I had to drop out. I got really sick and I have not recovered enough to be able to go back. Doctorate degrees take a tremendous amount of bloody willpower and mindfulness to get through. I have not been able to get back to it."

"I have done quite a bit of work with five different designers with Doctorate degrees and each time was a very positive experience."

Technical / Trade School

"The depth of knowledge and experience of people who completed technical or trade school is amazing to me. I think that someone, for example, who can plumb a house and make it comfortable for somebody to live in or somebody that can make sure that you are not going to burn up from the fact that your electricity is not run correctly, my hat is off to them. They do a phenomenal job and there is a lot of education that you have to have, a lot of knowledge and a lot of experience, and it is much more difficult to obtain than sitting in a classroom with a book in your hand or sitting in front of a computer."

"I have hired people who have come out of trade schools. That is about it. They have been good hires."

Informal Education

Professional Development

"All these little trends and novelty things of the day are old. They are just repackaged new but people get all excited about them. I do not get excited about professional development. I have tried going to conferences, but I tend to find that again, the level of knowledge in anything new is so tiny. They offer small nuggets that, for me, almost does not seem worth it."

"I have had some very positive experiences. I have had the fortune of taking some of the ASTD certificate programs, attending conferences, and I have found those to all be very positive."

"When I have attended professional development opportunities, they have all been good."

"If you are in a conference setting or a meeting and someone is speaking extemporaneously, to see how they handle something off the cuff or something that has come up, the way they use the language, the way they can kind of lead a room and their ability to turn a negative into a positive, I think that there is a lot that you can do professionally that is kind of on an informal level. I also think that you can take advantage of various conferences and meetings and things like that. I think it is something that you can, on a lifelong basis, continue to do."

"A lot of e-learning courses that I took back when I was still a professor were tremendously helpful in understanding distance education and learning different types of software, how to use them effectively and acquiring certain types of content. For example, in understanding learner's cultures. Really great opportunities there."

"When you are a teacher, they have a different type of professional development as opposed to the ones that I have attended working in e-learning as I do now. I have done the sit down, how to teach the best and those types of things as a teacher. Then, on the flip side, switching over to the e-learning world, I have had a couple that are more along the lines of getting national approval for a course and steps and phases we might need to go through for that. On the e-learning side, I could do more professional development."

"I would say for corporations and professional development, there are opportunities for workshops and opportunities to go to conferences and things like that. I have always had good experiences with professional development."

"When I worked with this one firm, it was all about professional development, my professional development, and other people's professional development. I actually went through and got a quality related certification. I actually paid for that. I have paid to go to conferences where I attended different seminars. I actually have spoken at conferences and then attended other sessions and received professional development that way."

"Everywhere I have worked has supported professional development and had funds set aside to send their people to workshops and different things, and so that has been very positive."

Apprenticeship, Mentoring & Coaching

"For me, there is really little to no apprenticeship, mentoring, or coaching, but I do it often. I wish there was someone who can help me achieve the next level of something but I have not been able to find that person yet."

"Apprenticeship is something that has definitely fallen out of favor. I am not saying we should go back to the dark ages where you basically sell yourself into servitude, but apprenticeship, or I think of it more as internship, is something that you can learn a lot from watching somebody doing something and looking over their shoulder. Also, mentoring and coaching is another avenue for continuing to be educated and taking advantage of the possibilities of being a mentor or coach. Anybody who has taught anybody anything knows that you get a lot back from the experience yourself. Your

knowledge is solidified. You are looking at something from a different point of view so that it is a mutually beneficial experience."

"I have had really good mentoring from specific coaches and also from different networks of people."

"I get people asking me questions all the time like, "What should I do for this?" or "Can you help me?" I will sit down with them and we will talk about their product. Or, "What do I do about my instructional design career?" and we will have a conversation about that. Me giving advice, yes. Me receiving it, no."

"I have not seen much apprenticeship, mentoring and coaching in the places I have worked mainly because it has either been a very flat organization or an organization that does not have a mentoring or coaching program."

Self-Directed Learning

"I seem to have been very lucky at finding sources that I needed to accomplish a task or to learn more about something before I started it."

"I do not seek new learning as often as I should. That is why I like formal education. You tell me what to study and I will go study it, but I never spent too much time studying things just off on my own. Self-directed learning, to me, is maybe a negative experience because I like structure. Any learning that I have to do within the job has to be self-directed because there is no one else out there to tell me I am lacking in some area and to go get some new training."

"I think it is reflective of my own learning style. I do not find independent study or self-directed learning to be particularly the way that I like to learn."

"I do a great deal of self-directed learning."

"Self-directed learning requires a significant component of discipline that a lot of people do not have. It is hard to get up and sort of log in and do the things that you have to do without somebody over your shoulder. People that can go through a self-directed program and successfully complete it, my hat is off to them."

"My self-directed learning experiences have been pretty positive. I have done a lot of online tutorials that I have found on the Web that have been absolutely invaluable in helping me learn different types of software."

"When we got the new LMS, a lot of training was on-the-job trial and error. If I have ever wanted to learn about how to do something better or improve the skills that I have, I look at something online or buy a book and read it. A lot of my training in this field has been self-directed or on-the-job."

"I am always doing that type of stuff. I think also, where I work, they really do promote that too."

"I love self-directed learning. I really love to learn, which is probably good for my profession. I love to learn, love to know new things, explore new topics, and do new things. The library is probably one of my favorite places to go. The librarians are probably the smartest people I have ever met in my entire life. I love librarians. I do not know all the different activities and ways that I can get people to engage in content. I am constantly looking for new ideas and ways to reach people with new technology."

"Self-directed learning has been a very positive experience for myself and for others I've worked with. If I were looking to build a team of instructional designers, I would want to hire people interested in self-directed learning for sure."

On-The-Job Training

"No one is teaching me anything on-the-job other than what is necessary for their little culture. If they have this LMS or they do something this way, maybe I need a little on-the-job training for their process or procedures. Again, it does not occur. I do not think instructional design is something that you can learn on-the-job."

"I think on-the-job training is a day-by-day thing where you are faced with something where "Oh, I don't really know how to do this so I guess I'll learn now." I think that is probably, percentage wise, a significant amount of learning that occurs. Even if it is something that you think you know and are pretty sure you are comfortable with, you may have to figure out another avenue. You have to sort of trick something else out where it is never totally linear or the box does not ever quite fit. I think on-the-job training is something that everybody faces on a day-to-day basis."

"On the job training has been hugely instructive and helpful. Every place is a little different and on-the-job training, I think, really makes all the difference. You have to see the way any given employer wants things done."

"The instructional design skills that I do have or storyboarding or how to best chunk text or animation ideas, all of that has been acquired on-the-job or, if I get stuck and need some ideas, Google. It is kind of a blend there."

"The only on-the-job training that I have ever had is like, here is how to submit your timesheet. I do not think that is really actual training. I think that is something everyone has to do."

"On the job training tends to be so boring. What happens is I go to the training and I think to myself, "If I was to tweak this training, how would I make it better?" Never put a designer in a training session. They tend to want to run the show and make things different. I find them rather boring for the most part, particularly with soft skills like how to be a better communicator."

Resources / Materials

- ◆ Computers / Hardware
- ♦ Software
- ◆ Media / Content

- ♦ Multimedia Equipment
- ◆ Office Equipment & Supplies
- ♦ Network

Computers / Hardware

"All of these things pretty much do what we expect them to do and cause very little problems."

"I have always kept my own computers and hardware. They have tried to assign me stuff. I have always been disappointed with whatever computer someone else has tried to assign me. Computers and hardware are critical in business. What I often see are members of my team never quite having the best of what is available. What they might have is adequate when it comes to computers and hardware, but they are always a little bit old. Overall, the industry supplies adequate computers and hardware, but not quite good enough. They will get the job done, but there are always problems."

"When you are trying to get new tools and you are trying to load them onto your computer, it is never easy. I do not know what it is. The same will go with software so we can sort of talk to those in concert. It feels like it should be, like I should load this piece of software and it should work on my computer and I really should not have to think too hard about it. There is always one little thing that is a gotcha. You are always having to call IT support somewhere, be it your internal folks or be it the manufacturer of the software, to just kind of help you resolve all the non-obvious inconsistencies that must be resolved to make this thing work."

"The computer is never fast enough. It is never good enough. It is what it is. It freezes. It does what it wants to do, but I am glad to have it. It certainly makes life a lot easier than chiseling something on a stone."

"You cannot create e-learning without a computer. Certainly, computers are frustrating when they do not work well, when there is not enough memory, when a company does not want to spend as much as they should."

"They are very handy machines when they want to cooperate. I think our biggest complaint right now, and I heard our IT guys say it the other day when we were trying to get something put on my work computer, is that our machines are so old. We need to update all these things. I think that our biggest challenge is making sure that our computers and our hardware and our software are current, that they are the most recent or not so ancient that you cannot get things loaded because they are so old."

"I have had good experiences where I have been given whatever I really wanted and needed. Then I have had bad experiences where I have been given some computers that cannot run."

"I cannot do my job without a computer. As a freelancer, I use my own computer and my own software and my home hardware. When I work for someone as an employee, they usually give me a laptop and a mouse. Usually I supply everything else. The printer is always my own and the monitor is always my own."

"I have never been in a situation where I did not have what I needed, fortunately."

Software

"If we need new software, we put in a request and in most cases I am able to get access to what we need."

"Software changes every few years. Software is greatly improving. It is becoming much more user friendly, much more powerful. The costs have maintained steadiness. It is usually kind of expensive depending on if you buy big suites of stuff. A lot of companies are afraid to invest in anything new because new software has lots of ramifications for training money and all of that other stuff."

"There is always something like needing to be on IE10 when you don't have it, finding out you need Java 7.55, and things like that."

"Most of the time you seldom have exactly what you need and most companies do not upgrade as regularly as you would wish them to. Everybody had to deal with Microsoft Office. There is the good, the bad and the ugly. Nine times out of ten, you are always wishing you had something else either better or different than what you have."

"Software is really essential. Certain types are not as user friendly as they might be. Flash just makes my head hurt. Then I hate Excel with purple passion. There are so many wonderful possibilities that exist with other things. The things that my instructional designers are currently creating with Articulate Storyline are fantastic. Captivate has all kinds of possibilities. Even with PowerPoint, so much can be done; so much can be embedded in it. A lot of software could be more intuitive. I do not understand anybody who thinks Flash is intuitive."

"Some of the software that I use is pretty intuitive while with others, it takes a long time for people to learn or it takes a good chunk of your job to learn on your own. The price of the e-learning software is so high."

"Software has usually been provided by my full-time employer. I own Microsoft Office, which is one of the big ones. Google is always available to anyone. The ones I run into that I have a problem with are Articulate and Captivate. I cannot afford those. Captivate is a little easier to afford because you can rent it by the month. It is expensive, but it is doable. Articulate is almost as much as my mortgage. You cannot do your job without the software."

"I have had a couple of negative experiences with learning management systems in that I encountered limitations and some solutions were not optimal. For example, the inability to effectively assign training to audiences is a problem. Since I have worked with a variety of learning management systems, limitations are very apparent to me."

Media / Content

"We usually get media from our own photographs or sources that our clients provide to us, but really there is no issue there except that sometimes our clients' content is not copyright free, and is often in very poor condition and requires heavy revision."

"Often media and content are nothing. If there is content, which is highly unusual, then it is usually nothing more than just an understanding of what not to produce, what others have done before and what not to do. Often, clients give you some media, some content, and you have to work with it. Having those things as base resources has always been a big problem. Media/content is either very poor quality or does not exist at all."

"We will go and purchase these licenses to online libraries of media or get subscriptions to different research organization where we should be able to have access to whatever content we need, and that is just never easy. I think we have all had this experience with e-learning where we just want a photo and it just feels like it should be really simple. Like, I want someone on a headset and I want him to be of a certain ethnicity and I want one shot where they look like they are engaged and another shot where they look like they are concerned and another shot where they look like they are happy. You think that should just really be simple. You spend hours looking for those three shots. You could maybe find one. I just find that happening over and over again. I have not been able to crack that nut. I have asked others who I feel are smarter about these things than I am. Their response is, "Nope, I spend hours too and I still don't get what I need."

"I have to say that media is getting harder to come by. Photos and things like that are fairly expensive. Usually, clients do not have what you want in the format that you want by the time that you need it. I think media content is getting to be more of an issue, which is kind of interesting given the fact that we have so much media surrounding us. But the media at hand is usually not as specific as you would like it to be."

"There is a lot of good stuff out there. I have had great experiences. We use Shutter Stock for stock photography and that has been really helpful. The challenges come when you need multiple poses of the single character in the same dress; they are harder to find. I do not have a dedicated graphic artist."

"We purchase all of that. We have an online account. We have a central location on our network where all that stuff is uploaded. We can link it back to what courses it is in, in case we ever need to pull an image down. We have tightened up our controls on that a lot, and that has been a good thing."

"I think for a lot of corporations they do not want to spend money on any of that. They do not want to spend money on stock images or audio or anything like that. Thankfully, there is a lot of royalty-free no-cost stuff out there. It is just sometimes hard to find exactly what you are looking for. I would consider it to be a negative experience because it takes so much time to find all that stuff."

"Most sources of media and content are not very good. It is very difficult to find the right thing to align with your instructional scripts. It is just a huge time sink."

Multimedia Equipment

"We have some cameras and video equipment that we use. It is all dated, but it does what we need it to at this point, for now at least."

"It is another one of those budget items that no one wants to spend money on unless they absolutely have to."

"To me, it gives you the opportunity and flexibility of recording events. It also gives you the opportunity to have technical difficulties. I have found, in my experience, that you need to have a backup to the backup that has a backup. You need to have second options always because there is going to be a snafu."

"There is some great stuff out there and it keeps getting cheaper which is phenomenal. There is so much that can be done. I did a video development certificate course, an intense training, at the Training 2014 conference. For some things, the instructor said a smart phone would do just fine. It is great to know where you need to spend money and where you do not."

"Our audio lady has audio equipment in the office and then she has her own personal setup at her house that she uses. I am guessing all of that is good. I know we have it if we need it. Since all of our courses have audio, we are always doing audio. We have played around with the specifications on that a little bit to make sure we are optimizing it and using the best possible specifications and sound and filters and all that stuff."

"I am constantly searching for the perfect microphone. I have yet to find it. I have a really good gaming headset. I do a lot of gaming and one of the things I have to have as part of a skill is to have a headset. For my birthday, I bought myself an excellent gaming headset. It actually has a really good microphone. Now I use that in most of my audio. It is always a search for the perfect microphone that has no white noise. I use a lot of stock photos and I do not shoot my own video; I do edit video, however. I do not really have to worry too much about video cameras but the audio, man, that perfect microphone is out there somewhere. I know it is."

"I actually have had quite a bit of experience with multimedia equipment and it has all been very positive. I captured video, edited video, and spent time in language labs where you have lots of multimedia equipment."

Office Equipment & Supplies

"I do not think you need that much in the way of office equipment and supplies. As long as I have my computer and a few sticky pads, maybe a little bigger note to scribble something on, I do not need much else. If you walk into a team or an organization that does not have any of that stuff, it says something. But overall, my experience has been positive."

"It seems to be less important now than it used to be. It is always useful to have pen and paper but there are certainly ways around the fax machine not working or the copier not working, thanks to office supply places and eFax and things like that. It is there if needed, but it is not catastrophic if something is not there."

"I have not really had any serious problems, but it is never fun when the Xerox machine and the printer break down."

"We have a great supply closet. It either has what we need or we can tell the guy who does the ordering to make sure we get it in on the next truck. We do not need pencils or Post-It notes or anything like that. If your chair breaks, we get you a new chair. We are pretty good about that stuff."

"I have never had any issues getting office equipment, but I really do not use any office equipment anymore for anything at all."

"For the most part when I telecommute, I can find all the office equipment I need. It is usually in the contract saying that I have to provide it and that it has to be up to OSHA standards. The only time I did not have to supply my own paper or printer was when I worked in an office and it was already there. I would say that about 90% of the time, I supply all of that and I do have it. I bill for it. "You want me to buy what? Okay, but you are going to have to pay for it." I just submit the receipts and get compensated."

Network

"I do not think a lot of people are aware of what makes our network operate or how it functions. We backup everything we do everyday to a drive that is not on anyone's external hard drive or internal hard drives, and every few days a third party vendor arrives to swap out disks."

"When I think of my personal network, I have my Wi-Fi and the highest Internet cable speeds I can get, and everything is connected and runs well and I can get anywhere on the Internet and I can move things and store things. I have my own email systems and all of that. Personally, at that point, it is a positive experience. When I think about the larger companies that all have their internal network, usually it is a very negative experience. There are people that have been a part of that organization for a long time that love their thing. The only reason they love it is because it is the only thing that they have had and they are very used to it. But I have seen so many different types of networks and there are usually so many restrictions or barriers or huddles or need for IT folks and other people to just flip a switch or make an approval to let you get something done."

"Generally, we all have to work off of some kind of network when we work for a corporation or company. Either it is a technology issue with being able to maintain connectivity or there are security hurdles around what you can and cannot post, who can access, who cannot access, how you get the access, who you can give the access to who might not be part of your company but maybe on the client's side who needs to get your products but you cannot email them because they are too big, these are all hurdles you have to try to overcome. It is just never as easy as you think it should be."

"I work from home and always have a great experience with my network."

"When it is working it is great and when it is not, you seem to be dead in the water. I think that making sure you have stuff on your desktop when needed and then

backing up to the network is important. I think you need to operate on the thought that the network may not be available when you need it."

"Where I am now, it tends to be pretty good, but that has definitely been problematic and it can put a real dent in the deadline when a network is down and you cannot access certain drives or connectively is crappy. Connections do not go down as frequently as they used to. It is possible to view videos in a much more realistic way and also it is nice to be able to presume that connectivity is fairly decent for learners. When I was running instructional design for one firm, we had to assume that some people were using dial-up. It is nice not to have to assume that anymore because it allows us so many more possibilities."

"Internally, we have IM and email and phone extensions so we are pretty good on that. I think our networking there is good. We are always able to get in touch with each other or say, "Hey, I forgot about this. Can you also look into this?" I think our network overall is pretty good."

"At home, we have a router. We have a wireless router and it is actually a pretty good router. It is brand new. It is pretty quick. The Internet connection where I live most of the time is not too bad, but I do live in kind of an isolated area and we have one provider. If it goes down, everybody is out, which is a bummer. As far as working with a network of computers, yeah, I have done that before. We had a server where everybody checked the stuff into the server. Even working as a telecommuter, we had server space and you had to have the correct software to check into it. You had to have the correct passwords and whatnot. I have worked with all sorts of different networks."

"I have a particular job position that stands out in my mind where the network was actually primitive in getting things accomplished and transferred in a timely manner."

Facilities

- **♦** Location
- ♦ Office Spaces
- **♦** Environmental Conditions
- ♦ Safety & Security
- ♦ Home Offices

Location

"We are in an office building. It runs the length of building itself, so it is almost like a very large bowling alley. People that work together are often very far apart. It has a parking garage, but it is not in a great area. So, I do not think there are a lot of places people can walk to and feel safe."

"This town is not a small place and is not a big place but it is highly cultural. There is a lot to do. It is becoming more expensive but it was very cost efficient. I have culture, intellectual, sports, and many things to do. I do not want to go to Ft. Leavenworth in the middle of nowhere or any of these places and they are always trying to get me to go there and stay. So, location is one of those things. Just because your client is close, does not mean you are going to be able to get the best talent there. I produce virtually. I do not have to live in your place. I can go visit your home office or where your client is on a regular basis if needed, but I can still talk to everybody many, many times during the day either on the phone or by email or internet video conference or millions of different ways."

"Location was never an issue for me."

"My location is home, where I do most of my work. I am not commuting three hours a day to get to a cubicle."

"I think location is important because I think that if people have to go through trauma to get to where they work, it is not a great place to be once they get there because they are so traumatized."

"Where I am currently is very nice. I am two blocks from a Metro station and there are a lot of restaurants all around. I cannot think of anywhere that was absolutely horrible. Traffic definitely sucks."

"I am wonderfully close to the office. It is easy to get to. It has some major thoroughfares right through there. Personally, it is super-close to my house so that is always a plus. It has lots of space and a good-sized parking lot. I do not really care for the neighbor on one side. It is one of those loud, jumping, trampoline park places. That does not make for a very productive work environment when the dodge ball is slamming into the wall that you share. It is a good location. The traffic is not too bad coming from my direction. Anyone who drives up from the south, traffic might be horrible."

"Upon until now, it was negative because my commute was like really, really far. The length of the commute just ruins everything."

"I have been remote, which is nice. I always have very positive experiences working remotely."

Office Spaces

"People either have an office or not. If they have direct reports, they must have an office. If they do not, they have a cube. The entire space is either an office or a cube. It is one or the other. There are some communal areas like a break room and printing space, but other than that it is pretty well segmented."

"It is the ones that are just a cubicle with a meeting space, that generic office space, that is the one that turns me off the most because you just feel like you are part of some crazy machine."

"As long as your area works for you, I think the rest of it is sort of nice if it is decorated and stuff but I do not really pay attention to it."

"For me, it is important to have my own office. It makes a big difference in productivity and general job satisfaction to have a door that I can occasionally close. Even if I do not close it very often, it is nice to know that I can. Office spaces have been less good when I had to share with someone and people around me were not really doing much of anything. At one firm I worked, they thought it was cute, edgy, and startup to give everybody a table rather than a desk and encouraged people to telecommute because hardly anybody had a dedicated space. You pretty much had to get there early and hope there was a space available. That was not good. It is a good thing that I tended toward the early starts. Currently where I work, we moved into what architects are now in love with: a concept of collaborative spaces, which as far as I can tell work great for people who are socializers and really do not want to get a lot done. It is not terrific for people who really need to develop things in a reasonable amount of quiet."

"We are like a giant cube farm. I am not too fond of cubes, but I have lived with them for eight years. It is not my ideal environment. We are in little cubes in little rows. You may or may not have a neighbor. I have been lucky. For the last four or five years the same lady has sat across the aisle from me and she is wonderfully knowledgeable in all things instructional design and technology. Whenever I get stumped, I have a good neighbor to ask. A lot of times, she just volunteers information. When I am talking to someone else, I can see her perk up and start to listen and I bounce the idea off of her to make sure that I am correct. That is what we have going on."

"I have had really good office spaces. The places that were great were pretty open. There were a lot of windows, natural light, and people were not overly crowded, and you could still see people and talk to them. That is what made it good."

"I have a small office space at home. It kind of takes up a corner of the room it is in. When I have to work, the kids are either really quiet or they are in their own room or they are outside playing. When I am on the phone, they are in another room so it can be quiet. Unless I am in a Webinar, most of the time everyone knows that my kids are home with me. I tend to preface it with "You may hear a child in the background or a dog barking and just be aware that is because there are people here at the office with me." When I worked on-site at a firm, I had a cubicle and I hated that thing. I was in the middle of the building and I never saw the sun. I hated that."

"I do not particularly like being in office spaces, especially if they involve sitting in a cubicle. That annoys me."

Environmental Conditions

"I think the air quality is very poor. Even though we are on the fifth floor, in most cases, the air smells like a damp basement. I know there are AC issues that the building management has been trying to fix for a while now. The temperature cannot seem to be maintained within a five-degree range. It is either freezing or incredibly warm."

"I have been in some places that have been a little dirty, that have stink, have been a little rundown or maybe the temperature is not the best. Uncomfortable places make it uncomfortable to work."

"This I think is very important because having it too hot, too cold, having air blasting on you randomly, having no control over your environment, these are all problems."

"I do not work well when the temperature is too hot. That is something that has become a problem recently. It is just hard to get stuff done. Actually, I just read an article on the connection between temperature and productivity. It was interesting for a couple of reasons. What the study determined was there is no single temperature or temperature range that leads to increased productivity, but if people are not in their preferred temperature range they do not produce very well. I can certainly see that."

"We have some conference rooms that are cold and some that are hot. For the most part, the building, I think, is pretty consistent temperature wise. It is not too hot or too cold but then you walk into one of those conference rooms and it is like, "Where is my jacket?" or "My goodness, turn the fan on." You kind of set meetings around who all is going to be there and which room you have available."

"I really hated being in the middle of the building with no sun. From my home office now, I have huge windows. We are up on a hill so we look down on the valley. While it is not the most beautiful valley, it still is just a really panoramic view of the whole area. We have the mountains in the background and the city and the desert. It is just really nice. I love to be able to look out. I also have plants on my desk, which I really like. I am a bit of a homebody, so working from home works for me. I hated working in an office. I really did. I can do it, but it does not make me happy."

Safety & Security

"The building is not in a very safe area. It seems that a disproportional amount of violent crime in town occurs very close to our office, although late at night. We do have security, but in most cases they also double as painters or housekeeping in some way. I see the security person doing a lot of other things rather than focusing on security."

"It is something I guess I never really think about. A number of the facilities have security guards and badges and stuff like that. I do not know if that makes me feel any more safe or secure."

"That has never been an issue for me, fortunately. I can see where it is of concern depending on where you are. I have not really had any issues with safety or security."

"Safety and security have been fine. I cannot think off-hand anywhere I worked within the e-learning field that I had any concerns."

"At our office, we have key cards we have to swipe to get in the door."

"I have never had issues with safety and security. It is not like somewhere were somebody is going to break in and rob you. There is no money, really."

"I never felt unsafe in any location I have ever worked. When I worked for a firm on-site, we had to punch a code to get into the building. That was a security measure."

"I have never been concerned about my safety or security."

Home Offices

"You cannot have a computer stuck in a corner somewhere. I have three huge desks. I have two computers. I have everything I could possibly need. I have all the supplies. I have all the connections, plenty of space to work. I have everything I need. My home office allows me to be able to work around the clock. I take off when I need to and work when I need to. With a home office, I do not have to waste any time going somewhere. Home offices, as part of facilities, as long as you have all the equipment, adequate space, and the privacy, to me, the benefits greatly outweigh anything formal offices have to offer."

"I am thinking of it from two perspectives. I am thinking about it for myself. I am working from a home office today. It is great to be able to do your work from home, from my personal vantage point. I will say that I have had staff who have worked from their home offices and the only real stumbling block that I see there is that not all home offices are created equal. Sometimes people are not in as favorable of a home environment as I have been in, and that can sometimes lead to challenges with getting work done."

"I think that when you are working from home, you have to have a dedicated workspace. I think you need to have very much of an office setup. It cannot be something that is sitting on a kitchen table. I do think it has to be a very business-like environment when you go into work. It needs to be an office."

"My home office is terrific. I love being able to get to work from home. I get so much more done when I can just get in a zone and get through things and not be interrupted."

"I have a home office and it is wonderful. I prefer working from home. If I had my way, I would do this all the time. It is quiet. It is well lit. It is conducive to getting a whole lot done. Usually, my work-from-home days are hugely productive because there are no distractions. It is a good space."

"Right now, I work 100% remotely. I have only had positive experiences because I live in the city and so it feels like I am with people when I am really not."

"It can be a bit of a challenge mostly because you are really dependent upon your technology and your Internet connection. You are responsible for it. You are not just a designer. You are also kind of like your own technician and your own troubleshooter. I think people who work from a home office, if they can do it successfully, tend to be a little handier than maybe people who work in an office. They tend to be a little more experimental as far as being able to handle different types of hardware and software."

"Working from home is a very positive experience. It's great to have my own stuff all around (and my own bathroom)."

Communication

- ◆ Official Messages
- ♦ Written
- ♦ Verbal
- ♦ Collaborative
- ♦ Meetings

- ♦ Feedback
- **♦** Rumor
- ♦ Social Media
- **♦** Miscommunication

Official Messages

"We get them every so often and they seem to always come from the CEO. People read them and then forget about them and keep doing what they were doing. I don't think anyone pays much attention to official messages from anyone other than their immediate supervisors."

"When I think about all the companies I have worked for, hey, they are just routine. You get them. You read them. You kind of try to pay attention to what they are saying. Usually it is some blabber about something. Sometimes it is an occasional piece of policy, it is important, and you tried to remember it and move on."

"I have a very negative experiences with official messages."

"Official messages tend to be marketing oriented. They tend to be very carefully worded to not really say that much. Everyone tries to read meanings into it. So, I do not really hold much with official messages."

"Sometimes, those who write the messages do not have a clue what they are talking about, and then other times they are so carefully worded that they do not say anything at all."

"The powers that be usually put forth a pretty good official message. Every now and then, they do one where it might lead to more questions. If it is coming from HR, usually it is looking pretty good, pretty clear at least. I had one last week actually that came out of a company All-Hands like meeting, like a State of the Union type of a thing. It left me with more questions than answers. I hit my boss up later on that day and said, "Hey, did I miss something here or what?" He said, "No, all of those are really good questions to ask. Why don't you write those down and save those for our big department meeting next week?" I said, "Thanks." Usually our official messages are really clear, but every now and then, we get one that is not."

"Official messages are never good for the most part. I would say that 95% of official messages in regards to e-learning projects are always something like they are killing the project or we lost our one and only technical writer. Those official ones tend to always have a negative impact on whatever it is that we are doing. They are never good."

"I have had issues with official messages coming out and not saying the right thing. I have also had issues with official messages and their timing. They would say a project was ready and it was not ready. Mainly with timing and the content of those messages, the e-learning team rarely has any influence over official messages, what they say, and when they come out."

Written

"Written communication via email occurs a lot. In most cases a lot of people are copied. I would say most people have an excessive amount of written communication to deal with in a given day. I think that is the most important aspect of it. Also, it seems if there are conflicts, they usually stem from some sort of written communication that may have been misinterpreted in some way and then later cleared up in person."

"Written communication in working is extremely important. You must be able communicate in writing and clearly. Early on in my career, I did not like the idea of written communication but you kind of learn that you have to keep it as a record. I have had to use written communications to protect myself on a number of occasions. Sometimes I hate to spend the time for a written communication and I hate when people overdo it and send emails like crazy."

"What I find I struggle with a little bit with written communication is there is just too darn much of it. I drown in email every day."

"I think that actual clear writing is a lost art. I have gotten any number, and I have done it myself, where you look at it after and you think, "What in God's name was I trying to say?" We are too fast with it. We hit the send button too quickly. I think our written communications are sent as fast as we can send them and contain as little information as possible."

"It disappoints me how many people do not know how to punctuate or construct a good sentence."

"All of our communications are probably going to be by written communications or by email. Depending on whom you are getting it from, it can have all of the details you want. We have some people who write emails that absolutely say nothing. I am still like, "Hum, well, I still have all these questions. You did not answer anything." Sometimes you get a good one, and sometimes not so much."

"A lot of people do not like to respond to email. I found that a lot of people just want to talk on the phone."

"Email is really the main type of communication, mostly because people want to be able to track the conversation. My policy is that if it is important enough for me to tell you about it, then there needs to be some kind of paper trail so we can go back and refer to it if necessary."

Verbal

"Verbal communication is positive, but it is very limited. I think our space, the space where e-learning is designed and developed, is very quiet. When verbal communication does occur, it seems to be fairly positive and usually about very benign things."

"It takes too long for me to write the level of detail or to even write as fast as I am thinking, so I prefer verbal communication. I like to pick up the phone. Usually it is fairly quick verbal communication but I can get right to the point. Verbal communication is good. I prefer it, but you can always get in trouble with verbal communication with misunderstanding and people just not remembering it. Overall experience, I think verbal communication has usually been a very positive thing."

"Verbal communication, I think for a lot of circumstances, is the best means of communication. You can glean a lot of information from intimation. There is the truly instant communication of actually having a conversation with somebody. So, I really prefer verbal when possible with a follow-up because you have to make sure that everyone truly understood what was being said and you need to have a record of what was said."

"Verbal communication always has a non-verbal side that goes with it. If you are on the phone, you cannot assess body language."

"We have some really good verbal communicators, and then like most places, we have some not so good verbal communicators. Depending on whom I am talking to, I know which things I also need to ask. I know that there are some people who are going to be able to see where this is going and preemptively answer my next question or give me the right information that I am going to need to carry out the planning or the task at hand. Then there are some people for whom I am going to have to spell it out."

"I try to keep verbal communication to a minimum. I have worked for companies where all they do is verbal communication and it is just a drain on everyone's time. With the telecommuters, it is usually through Skype or the phone."

"Talking with team members where we could bounce ideas off one another, brainstorming sessions with four or five of us on the phone at the same time on a conference call, experiences like that worked really well."

Collaborative

"Occasionally there is collaborative talk. It is hard to define when collaboration is occurring and when it is not. I guess in many ways, all kinds of communication could be collaborative to a degree. I would say if there is significant collaborative communication, it is occurring within the confines of a meeting that was prescheduled. I think that is important to know; it's best to plan and nurture it because it doesn't happen sporadically."

"Part of my job is to try to change the structures to build collaboration. I find it amazing that a number of these groups are not collaborative. They are not sharing information other than routine meetings. They are just not sharing information and working together to get things done. Everybody is down at their own desk and they meet when they need to meet and they work by themselves any other time. Collaboration, in my overall experience, does not exist enough."

"Collaborative communication, if people are getting together to agree on something, if it is committee-driven, it is a bad thing because the result tends to be so watered down and so un-offensive that it probably ends up not accomplishing anything."

"Collaborative communication has been good when the intent is genuinely to collaborate and not just to exchange as little information as possible, as sometimes happens in sessions that are supposed to be collaborative."

"Things like using WebEx to work on a project together if there are two or three of us or four of us working on a project and we are all brainstorming or coming to an agreement on what needs to be done on the project or we are troubleshooting something, using some kind of screen share has always been really helpful for that."

"What come to mind for me are things like Google Docs. The team and I spend a lot of time working in Google Docs and that is a very collaborative communication environment."

Meetings

"A lot of meetings seem to be just checking off something on a list. We have weekly training meetings. There are all-hands meetings and company meetings with the CEO where everybody is on a video call like in a Brady Bunch format where you look at the screen and you see all these offices that look very similar, but you really cannot see anyone's faces or anything. A lot of meetings are online, using WebEx, and those are challenging because you do not get to see people and communication is strained because of the technology involved."

"Meetings, to me, in most of the cases, are a waste of time unless it is a collaborative type meeting. Why do I need to pull everybody together in one place so that I can communicate some information to them or some information can be communicated to us as a group? There is where your written and official messages come in. Let one person design that and zap it out to everyone else and it gets done. Meetings for meeting sake are frustrating."

"I am not completely anti-meeting because I am a collaborative person and how else can you be collaborative really if you are not meeting either face-to-face or over the phone? I do find that it is just, what everybody struggles with, what I struggle with, is that there is just too darn many of them."

"Meetings in today's language, a bunch of people in a room all of whom are tapping away on something else and not paying attention and generally speaking there is somebody on the other end of a phone who may or may not be able to hear because people have a tendency to mumble. I think that a lot of time is wasted, and I do not think that all parties hear the same thing in the same way."

"Most meetings are at least one-third longer than they need to be. Too many of them lack structure and too often there is a desire to be inclusive which leads to massive amounts of time being wasted." "We have tried to make sure all meetings have agendas so that we do not stray off topic and chase all the wild rabbits. That improves the focus of the meeting. A lot of meetings are collaborative when we are trying to resolve something or make sure something has been solved. They are orderly, and it is not like a free-for-all or anything like that. The meeting organizer is your moderator and he or she keeps the meeting moving and keeps it as close to being on time and on track as possible. We have had some meetings in the last couple of weeks that have run over and resulted in additional meetings."

"It varies. I had really good experiences with meetings and really bad experiences with meetings. I feel like people have way too many meetings. In my new job, I feel like it is perfect. It would be good if at the end of the meeting, people had objectives and they went and they just solved the objectives and it was done and over with instead of people having these meetings between other meetings and then starting the process all over again."

"Meetings are necessary, but they need to be focused and they need to be over in a half of an hour because you have work to do. I do not want to spend my whole day in a meeting. As far as communication is concerned, if it is not something that can be said in an official email, then yes, have the meeting. I like the weekly meetings if they are short and sweet. Especially online, everybody knows when to meet. I have never had good experiences with face-to-face meetings because people are late, they run over, or nobody has anything to say. Having a meeting just to have a meeting is a time sucker for everybody."

Feedback

"For us feedback, in large part, is controlled through the quality and editing process. I would have to say it is a negative experience because quality and editing are not e-learning professionals or instructional designers. They are purely looking at the mechanics of what we do and they are not looking at the overall solution. So, I would have to say feedback is negative."

"I believe if you are going to put a problem out you should not just say fix it but make an effort to fix it yourself or build a structure so that someone else can fix it. That is my idea of what feedback and communication should be. It should be open and routine. I have had positive and negative feedback about me. I have given positive and negative feedback."

"I think feedback, whether it feels positive or it feels negative, is valuable."

"Feedback tends to be sort of an after-the-fact sort of thing. There is feedback you should not have. For me, feedback has a very negative connotation to it."

"Feedback from learners is really helpful when there is sufficient information to contextualize it. For example, it helps to know whether people are required to take a course or not. In a blended learning situation, it helps to know something about the trainer. Feedback on things such as performance and evaluations is sometimes heavily influenced by company policies, structure, and requirements."

"I give feedback when you are doing a great job or you need to be flatly rerouted or we might have missed the whole point. I provide feedback in those situations. We give feedback to each other whether verbal or written. It can be done in a manner that is eventually sent out company-wide. We are getting better about giving feedback, good or bad."

"What people could do a little bit better is illustrate their feedback versus just verbalizing it because it makes it clearer when designing things. Say I am working on an e-learning project and they say, "This could be a little different." I am like, "Well it would be a lot better if you could show me what you mean by that." I think that would make the feedback more effective. I have been the middleman between a vendor and a trainer where I know what the trainer wants but the vendor has no idea what the trainer is saying. I have worked with the trainer so much that I can basically read their mind and I am like, "Let me handle this." I went ahead, illustrated it, and told the vendor exactly what they wanted. I think the more you can actually show versus say, the better."

"When I facilitated webinars, usually the feedback comes in at the end of the course survey that learners fill out, or else a customer said something to my boss and then my boss has said something to me. Feedback is usually written. When we talk about feedback for me, feedback has always been on the course design or if you are doing a facilitation, it usually comes in the form of written feedback."

"I may be jaded here, but I immediately think about feedback from leadership and feedback from the target learners. In my experience, that has been lacking. Like I said before, either there is a problem in which case you hear a lot of feedback, or there is no problem and you hear nothing. It is not evaluated. The trainees do not really do any surveys unless you force them to, which is difficult with e-learning projects."

Rumor

"Rumor is very negative because I think it is destructive. It happens a lot. I think it changes people's attitudes of one another. I have likened our space to a middle school

environment in some cases. It is not everybody. It is not systemic, but we do have rumors float around. I would say it is a very negative experience."

"I hate rumor. I hate politics, bureaucracy, and all of those little small office things. Most of the time it is just problems. That is why I like my home office. I do not have to sit through that, that small talk and rumor and all of that stuff. When it has happened, it is usually a negative experience."

"In any office situation, rumor is going to run amuck. There frequently is some truth to it. I say some truth to it, but it seldom is the complete story and I think in many instances it is very detrimental."

"Rumors can sometimes be helpful, since there is generally some degree of truth in them. When there is not, it at least elucidates some aspect of character of the person who is carrying the rumor. So overall, rumor can be useful sometimes in a negative way because someone who is routinely a bearer of rumors is someone you do not want to trust with any privileged information."

"Yes, every now and then there are rumors. I have heard them. I have probably participated in a few of them. More often than not, our rumors are probably pretty close to fact or true and that is so sad. Yeah, they do exist. They are there."

"Rumor really smacks of gossip and I try to stay away from gossip as much as possible. It does no one any good. But there are times when you have to share jokes and stuff. We do that in the meeting room. One firm where I worked had a group chat dedicated to that. People would share videos and talk about local news because nobody lived in the same area so local news was relative. A bunch of guys who are in IT had a lot of comic hero kinds of things, which was fine. Grandmas worked there too, so they

shared pictures of their grandkids and that kind of thing. But when it started to go toward gossip like, "Did you hear XYZ happened?" or "She said, he said," I did not participate in that kind of thing. I try not to."

"Rumors always have to be controlled. They are almost always negative."

Social Media

"In an environment where most people who do the work are billable and they have to keep track of their time, they are not going to spend any significant amount of time or any meaningful amount of time in a social media platform while they are at work."

"If you are looking at social media as Facebook and Twitter and stuff like that, then I do not think any of that is important or even appropriate to the design. Now I will use LinkedIn as something and look at online blogs, chats, discussion groups, and the use of social media there, but it tends to frustrate me. The only positive things I see about it are collaborative capabilities."

"Try as I may, I just cannot personally embrace social media. I know it has to be part of my life professionally and to some extent personally because there is a target audience I am going after, my team is going after, that expects to be communicated with via social media like Twitter. I just do not get it."

"I do not think I have had the experience of working with social media in the instructional design field."

"A lot of attention is being paid to social media. In the positive sense, it is a quick way to get information out. In a negative way, it is an easy way for fairly anonymous people to make a lot of noise and for people to take something as fact that is posted and it turns into something that has validity by the very repetitive nature of it. It has been retweeted X number of times, therefore it has some intrinsic value. There are only so many dancing cats I can look at."

"There is a lot of emphasis on social media right now. I find that the percentage of useful information is generally so tiny as to make it not worthwhile to go through. I think that may be changing as people become a little bit better. I think social media can be somewhat useful. I also do not quite trust it. For example, at my current company, a number of us are recruited to be social media ambassadors. We are supposed to "friend" the company on Facebook, add it to our LinkedIn contacts, and so forth. We have to like everything that the institution says and post good things about it. And I think social media gets a lot more hype than is deserved in the e-learning context."

"We have a Yammer account and I have logged into it, I think, twice. I do not use it. We have Facebook. The company has a Facebook page and maybe a Twitter account. Those things are handled on our marketing side. We do not necessarily use those for project development."

"I would say most people view the use of social media for e-learning in general as very negative and they do not want to do it. My experience with trying to push for it has been a negative experience. I would like for it to be a positive experience because I do not think it is a negative thing in general. A lot of people do not think it is a valid way to present or a tractable way, or the efficacy of it does not work. I have had a hard time trying to get social learning pushed through."

"Everyone I have worked for is always asking me to blog for their company unless it is a freelance position. Those folks tend not to ask me to do that. But with a full-time position, it is almost like part of the job requirement these days. You have to be able to blog. You have to be able to tell people what it is that you do. That kind of social media, as far as e-learning or learning is concerned, has always gone hand-in-hand for me. With one employer, it was really important because once we developed something we always blogged about it. It was almost part of the design. I also use Twitter. I like it. I do not use it as much as I used to but I am on there. I use Google Plus, but that is really for very specific gaming communities. Facebook I only use for personal communication and it is always very private. I do not use Facebook for anything related to e-learning."

"I had several e-learning projects where social media was integrated into the project and we actually did get pretty good feedback from target learners. Those were positive experiences."

Miscommunication

"Miscommunication seems to stem or originate from outside of our group and it usually has to do with project requirements at the early phases of the e-learning effort. Those can really cause problems that, unfortunately, are not identified until much later."

"For people who do not know what they are doing, do not know how to communicate, do not know how to collaborate, it becomes a problem. Miscommunication, in my experience, occurs every now and then and it can be a problem. It can derail things for a short while. You have to get through stuff. You hurt people's feelings."

"To me, miscommunication is an inherent part of any communication that goes on these days. It is so easy, with the speed of information, to misread, mishear, or misinterpret something and because it has gone by so quickly, your ability to sort of retrieve it and look at it thoughtfully and try and provide a thoughtful response in the given sort of split second that you have, is an issue."

"My current boss does not listen or remember very well, and that does not lead to good situations where she thinks something was promised that was not. That involves a lot of back-pedaling and explaining, essentially doing a dance so I can address what she wants without communicating that she had no clue what I said in the first place. Her background is not e-learning. She is one of many who assumes e-learning is not such a big deal, that anybody can read a chapter or two and know all about it."

"This company is probably not like all the other companies in the world. What might work in a different environment is not going to work in this one. I have been here for several years and I have seen a lot of stuff come and go and fail and I have seen what works and what does not work. We have had quite a bit of miscommunication, and I am usually the one who rains on somebody's parade. They are like, "Well, darn." I am like, "Well, here is how you fix it. Here is how you get around it. We are going to do it right." That is how it works."

"Miscommunication happens whether you intended it or not. Sometimes it is not really that the content was wrong, but the tone may have been misconstrued. With reading some things, I have misconstrued the tone."

"In my experience, there has been a fair amount of miscommunication throughout the lifecycle of an e-learning project. Most projects are like that, though."

Client Relationship

- ♦ Adversarial
- ♦ Transactional
- ◆ Consulting / Informational
- ♦ Sharing
- ◆ Collaborative Partnership

Adversarial

"If the relationship is adversarial, there is not a whole lot we can do about it because they are the client and we often have to do what we are told. It is adversarial because they have chosen to be adversarial and we just have to deal with it the best way that we can. It is a very negative experience."

"I have had some adversarial clients. Ones that hire you and then all of the sudden they are the experts and you must do it their way and you cannot do anything right and we do not know what we are doing. Then, of course, they do not get you the things you need. It just becomes difficult. Adversarial relationships are so hard and stressful and they are really not worth it in the end. Regardless of the money you are making on that project, you really do not want to work for them again. You do not want to lose great people on your team working with that kind of group. I have been with a number of companies that are just happy to keep clients no matter how hard they are to work with. An adversarial client creates a very negative experience."

"It is probably the worst kind of client relationship and one that I devoutly hope I do not have to deal with often. There is nothing really positive that can come from it. It is difficult to deal with. One of the things that is very useful in an adversarial relationship is to try and figure out why the situation has developed and what the background is for it so you can figure out how to deal with it because you have to deal with it. Trying to figure out the underlying reasons for that relationship is something that is very important."

"It can be a big problem when the client assumes he knows better and wants things that are not appropriate or just makes judgments that are not accurate. I am thinking of one incident with a client. We did a wonderful blended learning piece. PowerPoint was the shell but we had a lot of video built in there and we had a wonderful story, but the client would say things like, "I do not know where you got that sound effect. It is not jet noise." I would say, "It was purchased from the Air Force and it is sound from an actual jet." Then the client would say, "The voice talent you hired to be the pilot? There is no way such a person could be a pilot." I would say, "He is a retired Air Force Colonel who flew fighter jets; would you like to tell the Colonel he does not have a warrior voice?" It just makes things last longer and you spend energies defending or accepting arguments that do not make any sense rather than being able to be creative. It makes it frustrating, I think, for both sides. It is pretty negative."

"I have spent a lot of time in organizations where I have been a consultant for various departments. I consider my client to be that sort of department that I am working with. I have had experiences where my client questions the value of me helping them to deliver better training solutions. That is a negative experience for sure."

Transactional

"Everything that we do is transactional. We have clients that pay us to do work that we deliver. We might have long-term service agreements, but in most cases all of it is transactional. We are paid to deliver e-learning. For a client, we may deliver dozens of e-learning courses in a quarter over the course of two years or more as part of a long-term agreement, but it is all transactional."

"It is routine. There is nothing to it. Everybody is happy. You bought what you bought. You fulfilled that purchase real quick and we can all go about our business. Maybe we do it again. Maybe we do not. Maybe it was a one-time thing and it worked fine but we are not going to do it again. You get something done. Maybe there is something rewarding about it, but it just is. You just do something and there is no excitement or no real reward in it."

"I find that working with clients who are really focused on being just transactional is tiresome. It is very tiresome. That alludes back to my desire to have things be very collaborative. I feel like they lose the opportunity or keep me from having the opportunity to be more strategic and help them think about efficiencies, help them think about more innovative ways of doing things. So, if the relationship is purely transactional, you really lose some value there."

"I think if you can sort of provide what is needed and move on, then that is fine. I would think that it is a much better thing to develop a relationship that is going to be more of a repeat relationship rather than something where you just check off the box and move on."

"Transactional relationships have been tremendously positive when the client trusts enough to just say "Go do it." It certainly could be problematic if at the end of it they say that was not what they wanted at all, but fortunately I have not been in that position. Sometimes people are just plain too busy and they are very happy to trust the expertise of someone else and that works well sometimes."

"I think we are going to have more transactional relationships because usually in my line of work I am paying a subject matter expert for their expertise, their input, their knowledge, and that is more of a transaction. Those relationships have always been good. They are always really clear-cut. We have a good solid contract in place with a good scope. We make sure all parties understand what they are getting into before we all get into it. That type of relationship is probably the one that we use the most. It probably ties closely to consulting and informational. We have contracted with our subject matter experts for their information, for them to write a course from scratch, for them to revise one of our existing courses or to update and improve or respond to some content bugs and issues. It is more of a transaction."

"I don't like transactional relationships with clients. I have been mainly a consultant for certain departments in different positions and I do not want to be in a transactional relationship. I want the relationship to be collaborative and engaging."

Consulting / Informational

"In most cases, they come to us wanting something specific. They want a product. They want a course. They do not come to us and say, "What do you think we need?" They come to us and say, "We want this for our course and it should have these pictures and this text and stuff." So, the consulting side of the relationship is very weak."

"They want information from us. They want us to give them some advice. It is great to work hard. You give them the advice but the reward on something like that is again not much. Sometimes it is even negative because you give them all this great stuff and you know it is what they need and what works and they just take it and say thank you or they take it and do not implement it or do not do any of it. That type of client relationship is very one-way. You give to them, but you often do not get the gratification of knowing that your efforts accomplished something."

"I think that for having to consult or trying to get information or provide information to a client, that is one of the things where you really have to be very secure in the relationship and secure with the client. I think you have to provide sort of the necessary bona fides and I think that there has to be a respect on both sides for it to be a successful relationship."

"A consulting relationship can work very well when the client actually respects the expertise. That has not always been the case. I am thinking of a contract in which I was supposed to be the senior scientist guiding on the validity of the research that they were doing in determining what type of support helps people to be more accurate. Because the client wanted to keep redefining things; it did not work out very well because you cannot keep changing the situation and still put all of the data together. Your data has been corrupted if trials are being conducted in a different way each time. I think

it can be good, but it presumes, I guess, some of what is assumed in the previous, the transactional relationship. You have to trust the expertise of the person who is the consultant."

"I have had consulting/informational client relationships. They are probably one of my favorites. I like to brainstorm with clients about exactly what it is that they want to do and help steer them on a potential path that would be beneficial for them."

Sharing

"I think sharing is one-sided. We seem to be sharing a lot of stuff with our client. They share very little with us. In most cases, we get just enough to get the work done in an acceptable format. I feel like there is a lot more they could be sharing that would benefit the final outcome of what we deliver. In most cases, I do not feel sharing is what you would call reciprocal. If we have not asked for it three times to three different people, we do not typically get it."

"This is a kind of client where we agree on what it is and the task. They want something and we as the team are able to do some assessment, give them some feedback from a consulting thing, and they listen and they give it back. They give us all the information we need. We help, we change, and it is just an okay exchange of information. We just quickly figure out what it takes for each of us to be successful. Those types of relationships are positive."

"The level of trust has to pretty high so that there is kind of an equivalency there. No one wants to feel like they are being taken advantage of. I think you really kind of have to mind your P's and Q's and make sure that you are providing enough value in the relationship."

"My experiences with sharing relationships have been highly positive. It is something that you do not always get. Thinking of the sharing, on a contract with a government agency, they were unable to share certain parts of the data that I would have liked to have had. I believed they shared everything with me that they could legally share in the interest of creating a good blended learning end product. That was terrific, that kind of trusting. They were as open as they could be, and it made a huge difference."

"I think we have had some sharing relationships in the past. We probably still do. I am not involved in those, where we have someone else who is building the content. It is their content. They have provided it to us to run on our LMS. We share the work and both probably get a percentage of the fee."

"I have actually had some negative experiences around sharing with clients that do not really share all of the information that would be critically needed to design an effective program."

Collaborative Partnership

"Sadly, I do not believe there is any collaboration. We are basically a silent partner of most of our clients—an extension of their own internal training teams."

"Now these, of course, are the best ones. These are the ones where they hire you because you are the experts and you absolutely know what to do but they have a vision. They want something specific and they are willing to put members of their team in and work with you on a regular basis. They do not see you so much as the vendor; you become a partner. It is that back and forth, where they have an instinct and they are completely willing to work with the entire instructional design process to get through it.

There are gives and takes. You do not win everything all the time. In the end, everybody feels good."

"These are the best client relationships possible. They are always very positive."

"Most of my work has been a collaborative partnership. And overall, they are very positive experiences."

"A true collaborative partnership is where you are both bringing something to the table, you know where you are going with it, and you both sort of equivalently desire success and that success is very meaningful for both you and the client."

"There have been some cases where the client did some of the work, or participated. I am thinking about some software process captures the client performed. That worked really well for some highly technical things where you really needed to have the SME right there. Also, if the SME happens to be the client, that makes a huge difference in getting things done and improving quality and speed."

"I have a couple collaborative partnerships with clients. They were not the smoothest client relationships. They hit several big hiccups and part of that is because the people we were working with did not necessarily understand e-learning and the process and why things have to be done a certain way. We got crossways for a little bit on that because it was three or four different people and we were all trying to get this course built. I think at the end, it settled down, we got what we needed, everybody played a role and played a part, and we turned out a good product. It had a few extra hiccups and I think that was just due to a generational gap, I think, when it comes to education when you are looking at traditional versus e-learning. I think the collaboration that I was on

several years ago really brought that to light for me. It was not as clear as I thought. It needed to be explained a little bit better or differently to a different generation."

"I work with one client where the work is really collaborative and it is a true partnership. That relationship is rewarding but probably the toughest because it is ongoing."

Product

- ◆ Proposals / Contracts
- ♦ Project Plans
- **♦** Reports
- ♦ Analysis / Design Documents
- ♦ Storyboards
- **♦** Courses
- ♦ Source Files
- **♦** Evaluations

Proposals / Contracts

"There is never enough time to complete proposals and contracts. They usually do not cover all the information that they need to and, in most cases, there is not enough input from the e-learning professionals to make them as strong as they need to be. If practitioners aren't involved, the results can be very negative."

"Proposal writing is really about describing the team, our capabilities, and our process and in a systematic way approaching all of the tasks required of it and generating that. Proposal writing is actually a bit of an art and science. If you do not know instructional design in great detail and the entire process, it really makes it difficult to do one and do one well. I enjoy doing that part of it. I know most instructional designers do not get much opportunity to do that. Part of the excitement there is I am laying out the project in advance and I am thinking about it and have some control over how we are going to approach it prior to winning the proposal."

"I just hate them. When it comes to proposals, it is not my wheelhouse. So, it is trying to, in a way, influence or sell to a client what I am going to be doing. I just have a very hard time with that writing style. To me it is more of a, here is what I am going to do, boom, boom, boom."

"Usually it is something that is poorly written and lacking in clarity for someone on the providing end of things. What works in a legal document does not necessarily work for the person whose is on the ground trying to provide the deliverable described in the proposal or contract."

"For something where the proposal was about 100 pages or something obscene like that, that was not fun. When a proposal is a little bit more manageable, where they are essentially asking you just to think out what you might create and how long it might take, that can be a positive experience because there is an element of creativity involved."

"I have written a good number of contracts in my career. In fact, I think I get to write another one next week. We have a fairly simple contract writing process. We have this nice little form contract and you rip out the pieces you do not need and add the ones that you do. Our contracts are really clear. They have been run through our legal department. I think they simplified the process for us a time or two. Usually, a couple of people look at it before it is sent out to make sure that we dotted our I's and crossed our T's. We cover scope, a payment schedule, and delivery date. They are pretty encompassing. We make sure it is clear and that everybody is protected and covered."

"In getting proposals from vendors, I feel like they were very thorough and I feel like their presentations were very good. I do not think I have ever had a negative experience with a proposal. I have never experienced a crazy ballpark range that did not match what it should match."

"A proposal is "This is what I think we should do" and the contract considers the time, the budget, and what we are going to. I see them as two different things. Not necessarily bad things. If you do not know where you are starting from, then the contract is really the agreement. It is important because it gives you your timeframe and defines

how much money you are going to get paid and who is going to work with you and what is being provided. These tend to be pretty important documents."

"I have had quite a bit of experience developing and submitting proposals and contracts. Most experiences have been negative. This goes back to what I mentioned earlier; clients often do not know what it is they want. They have in their mind something that they think is good, a good solution, but it may not be the right solution. The proposals or statements of work that you are provided, in my experience, never match what it is you actually have to do."

Project Plans

"Project plans, I would say, are a positive experience mainly because we currently have a person who is very familiar with what we do and how we do it so the plans always cover the different pieces of the puzzle."

"It is important upfront. It is something that is important to me because it is my first real documentation of what I plan on doing for the entire project. It is one of those things that I keep pretty much to myself, share with the client, but I tend to be the master keeper of the plans. That has always been a very positive experience, usually a little negotiation with the client, in some cases, when they get it."

"Project plans can be difficult just because that is sort of where you have that first potentially negative conversation with the client."

"Project plans tend to never be complete enough. They tend to never be clear enough. The amount of time provided is seldom sufficient and the dragons that show up are always unexpected."

"Project plans have been all over the place with the degree of detail required. I do not find them a lot of fun but they can be very useful. It is something that has to be done as part of the planning. It's good if detail does not get too granular, because the more granular a project plan is, the higher the probability that you are going to stray from it. There are problems because you just cannot anticipate when somebody is going to take off, somebody is going to leave, or somebody is going to get sick. When somebody wants detail down to the day, it is not going to happen, particularly when clients are often bad at not doing product reviews when they are supposed to and that throws everything off track. If you have a ponderous project plan, particularly if you were not able to build it in something like Microsoft Project and you have to manually adjust all of the dates and resend, that is just a pain in the butt. I like figuring out how something can be executed. It is when the format of the plan is determined by the client and it is not one that is useful or helpful that it can be a very negative thing."

"We have only been using project plans steadily for the last seven months. It is nice little form that we get to fill out. It is pretty all encompassing. There is talk of expanding it to include some extra fields. Right now it covers the project development life cycle from beginning to end, from the very first inkling of an idea that our product line manager has and their business case and how much money this is going to be, why we need it, when we need it by, to the details of what they actually want the course to encompass and how many lessons need activities. It includes budgeting and scheduling information, if we need any new features or enhancements from technology, and if there are any regulatory requirements. It can be shortened down. I have a project that has been ongoing since April. That very first project doc was the full length. For every subsequent batch that I have received from the vendor, it deals with that specific batch of courses. I am not saying the same thing over and over again. I am just capturing the relevant bits and pieces for that batch. It is a modifiable project plan."

"I try to do project plans, but no one wants project plans because they take too much time."

"Project plans go along with the design and with being a project manager. The contract might state that this is how much time you have, but the project plan really breaks down the milestones and what the deliverables are within each milestone."

"You never really get to do enough planning. It tends to get scrapped a lot depending on your models. The most successful project plans that I have participated in were smaller, incremental plans. Rather than a grand overall plan, maybe a scrum-type 21-day plan is better. Those worked well for me."

Reports

"We generate what we call scorecards for different deliverables once they go through quality review. They are very detailed and they are tracked in every which way. I think reports are positive."

"It is a great way of at least keeping everyone accountable and putting things there. There is always a little politics in there when the client is not doing what you need them to do. You make sure you document things in the report and cover yourself. You just have to do those things. Reports are a very necessary part of the process. I am not super interested in doing it. It seems to be a waste of time. I am not generating anything, but I know it is necessary. The reports are the necessary evil of the process. It is just a part of management."

"They are a necessary part of the process. They are not my favorite things to put together, but I do not think I have had negative experiences with it."

"A report is as good as the data that is in it. I think that a lot of times reports are there for the sake of checking the box that, yea, I provided a status report. I think that they should be something that is much more meaningful than they usually are and can certainly provide good documentation for reviewing a project and its progress and the aftermath of a project to see how along the way the reports successfully communicated what was actually going on versus something that is there to placate the client."

"I have had pretty good experiences with reports. Again, it is something you need to do in the planning process. When we have control over the format of the report, it is not some ponderous thing that some government bureaucrat thought was a good idea but is actually just a "hey, this is what we accomplished this week, these are some red flags, this is what we have accomplished to date, this is what we are doing next week." That is the kind of stuff that is really helpful. It saves problems later on when you are able to tell the client that yes, you did something, and yes, they indeed were made aware of it or signed off on it."

"Our development team usually does a weekly report of where everything is in development and if they have hit any snags or need anything from us. I have a standing phone call with one of my custom clients every week for his status update on his course. That is beneficial because he is still delivering content to me and he wants to know what we are doing with it. It is a symbiotic thing. For everything else, we do a meeting. We have one-on-ones where we can do updates. I have these old school, giant, 3'x4' Post-It note sheets. I have two of them stuck together with columns drawn on each for different phases of all the courses that I am working on. I have every course written down and that is how I am currently keeping track. I have this so totally, non-technical system that my

boss is like, "Can you not put this in an email?" I am like, "This is just so much easier for me to move around." He is like, "Take a picture and send it to me." I am like, "You walk by this desk how many times a day? Take your own picture." Seriously, he can come by and look at this giant piece of paper with lines on it, find his Post-It note piece, and see where it leads to."

"In my experience, I think reports have mostly been comprised of very informal stuff. I think reports should be more formalized."

"A lot of clients like weekly reports so they know where you are. Some prefer them in email form. Some prefer to touch base by Skype or by phone once a week for like half an hour just to see what is going on. A project manager I once worked with liked to touch base on Mondays just to see what I was going to do that week."

"I dislike reports. I would rather be focused on the effort than providing a writeup of what it is I am doing."

Analysis / Design Documents

"We are often excluded from that phase of the process. We allow our client to do a significant amount of analysis and design in order to save them money, however, the outcomes rarely meet expectations."

"These are the documents that are most important to me. This is where I do the vast amount of my work, my thinking, my planning, getting everything done, capturing all of the data, including all of the information that I possibly can, and then wrap it all up into what is necessary. I find when I work with other instructional designers, they do not have protocols. They may know what is required of analysis and part of design. To them,

a design document is a PowerPoint storyboard or something with a few blanks that says you are supposed to put this content in here and that picture there and stuff like that. That is about the extent of their design documents. I will go through this step even if it is not required and never share it with anyone because it is going to make my product better in the end."

"I put such stock in, you know, this is the first conversation you have with a client about where you are going with things. It is also that place you can come back to when the development starts to go astray from what you originally proposed and you are looking at having to add resources, time, whatever. It is sort of your line of defense to say, "This is what we talked about that we were going to do and what it was going to look like." You tell the client that if they want to go this different direction, then we need to go back to the project plan and do whatever we need to do around resources and time."

"Analysis and design documents are something that should be used as a tool to greater benefit than they usually are. I think that having the level of analysis you need and having a very well scrutinized design document can essentially provide the foundation or the roadmap for what you need to be doing and can certainly provide some clarity as to ways that you should not be going."

"I do not think a design document should be something that is seen as set in stone. I think there should be a good reason to vary from it, but it is going to happen because development is an iterative process. I think these documents can be very helpful to put together to be sure everybody is on the same page. If all of these are laid out, yes, this is the audience profile that we are trying to reach. These are the objectives. This is the end we are going for. This is a description. That is tremendously helpful. If you are not on the same page in the beginning, clients are never going to be happy with the end results."

"I have had a very negative experience with analysis. No one wants to go through analysis and no one wants to go through design so you never even get there."

"Analysis materials are kind of like the core of where your information sits, basically. I worked with Word, PowerPoint, and more. I worked with Wikis and I have had one person who just liked to design right in the LMS. That was super fun."

"I like actually developing objectives for training where none existed and where the client just said, you know, "We need a sexual harassment prevention training course." That is all they know at that point."

Storyboards

"In the times that we are able to have input in the storyboards and what they look like, I think we do a great job."

"Storyboarding to me is get it down in a Word document and have it so that you can use some of features of Word such as a table of contents. That is something most folks do not use in their storyboards. They are just page after page after page and no one knows what they are until you scroll down. I use simple Word documents to build the storyboards, a little bit of formatting, but you keep the formatting simple because all of this stuff is going to need to be copied and pasted into its final authoring tool anyway. There is a lot of work in storyboards. I treat them as full working documents and I will not just slap some text and images on the page and throw them in a power point and tell a developer to go convert it all."

"Having a very well put together, very clear storyboard for review is essential. I think that frequently it is used as something that provides enough to go by but is not developed well enough... and should probably have a few more iterations and possibly choices where we can go this direction or that direction. It tends to be more like "This is what we are doing" rather than something that is evolutionary."

"I really like storyboards as a deliverable before things are actually developed, ideally in a sort of a staggered approach so you can learn from one to the other. Going straight to development does not always work. It can mean a lot of reworking afterwards, although there are times when a storyboard should be just for an instructional designer. I am thinking of a learning game that we just developed where there was just so much branching that there is no way on God's green earth that any of the reviewers could have understood the storyboards. That was a case where we storyboarded but they saw only the end product."

"Our external client that I have now is not getting a storyboard because he delivered one to me on a PowerPoint file. That was essentially his storyboard, and when we take that and drop it in our LMS, he is seeing the finished result. We might adjust how the text fits on the screen, but he is seeing the finished product. We are not re-scripting it for him. He provided all of the content. We are just dropping it in."

"No one ever wants to see storyboards, sadly."

"Storyboards tell the developers exactly what it is that you want them to do in a visual format. You could write it out. You could script it out in a Word document but especially if there are a lot of buttons on the tree and there is a lot of animation or there are images or you have specific text to put in there, you have to tell them where to put all that. They are developing it. They are not designing any of it. The onus is on you to make sure they understand what it is going to look like. Their job is just to put it into the machine and to make sure it works correctly. It is your job, as a designer, to make sure

that you have addressed all the learning objectives and met the learning needs of the end users. The storyboard is the medium in which you communicate that to your developer."

Courses

"Overall, I think they are acceptable. I do not know if they will ever be something I would consider to be great, just because of all the limitations involved with the project."

"That is the exciting part because all of that work and what was simple in a Word document at one time now becomes animated in color and in functionality and that is where the fun and excitement is."

"Regardless of how the client feels about it, that is where you are like, I have done something. I have the thing I can touch and feel and navigate through and it just feels good regardless of how the client ends up reacting to it."

"I think that deciding how something is going to look and feel and what the learners' experience is going to be, seeing the finished product of a course and kind of looking at it and evaluating it and it is a done deal, it is kind of almost like an obituary because it is over and done with. There is always sort of things left undone and things you wish you could have covered."

"I am really happy with most of the courses I have been involved in except for one batch because the prime contractor did not understand 508 compliance and took out anything that would have been vaguely interesting or engaging. Overall, it makes me happy to go back and look at some of the courses that we have done and I love looking at other people's courses that are good."

"I send the client a preview link so he can see it as we are developing it. Clients are getting to see the course and click though it and make sure that it is doing what they need it to do and that it is exactly what they ordered. Then we go ahead and close out the ticket."

"By the time an e-learning course gets handed over, I really have not had any problems because the teams that I have worked with incorporated iterative turn-ins and all drafts have been reviewed. By the time the course is handed over, everybody usually agrees that it is good."

Source Files

"In most cases they are old, inaccurate, or out-of-date. They were written by engineers or subject matter experts in a very disjointed way where it is difficult to piece things together and in many ways they contain assets that are unusable without more background data and significant revision."

"Maintaining, collecting, archiving, and just categorizing the stuff is always difficult. I work with a graphic artist and it is like I do not want the flat image. I want your Photoshop image or your Fireworks image or whatever application you use to create it in. I want your wire frame, not just the final 3D piece. Source files are tough to manage. It is tough to get your folks to cleanly label, name all of their working files, and organize them in a way that it makes sense, especially when you find there may be thousands of things to get. A lot of them tend to also resist giving up that work."

"Source files are a necessary evil. You have to have them. You most oftentimes have to deliver them over to the client which can be tedious. I do not know that I have

necessarily had a negative experience, but at the same time it is not positive for me either."

"Source files are just frequently not there."

"I do not encourage delivering source files because that means, in a consulting environment, they want to make their own changes instead of coming back to you. Delivering source files can be a big pain in the butt. I have certainly requested source files for things done in the past. We outsourced some work to a training vendor and they were very helpful in giving us them. They were pretty decent in giving us most source files. In my experience, usually when a vendor says they are giving you source files, you do not get them all."

"One of our clients decided to not continue using us and we had built a course or two for them. They requested all of the source files. We checked the contract to make sure that that was all part of the arrangement, and we sent them all to them. It can be done, if necessary."

"No one wants to give you their source files because they want to charge you more to fix them in terms of a vendor's perspective. Working with vendors, it is really hard to get source files from vendors unless you put it in the contract up front."

"Technically, that stuff belongs to the customers anyway. They paid for it. The source files are theirs. Usually, when I think of source files, I think of all the raw material. It is not just the end files. It is all the raw stuff too, so all the raw images, the raw audio, and the raw video. That is all in there."

"During times when I was the client working with a programmer and I required source files, they were not adequately provided. When I was doing programming and development, I provided them if necessary. If the contract requires it, you just do it."

Evaluations

"We really do not have a robust evaluation system to measure different levels of success of our e-learning efforts."

"Evaluations sometimes become their own contract. So, something is already produced and then it is up to me to get in there and see what level it is worked at. Is it through observation? Do we need change? Can we measure change in some way over time after the course? Can we see an organization has had some change in accomplishment? Evaluation is always fun. I like to do it. You hardly ever get much more than producing the evaluation forms for most of the courses, produced at the level 1, level 2 areas. It tends to just be one of those phases and one of those products that tend to be shortcutted at the end."

"I think whatever evaluation we are allowed to associate with an e-learning product is a good thing."

"That is something I still think is never utilized well enough. I think it is the last thing somebody thinks of. I think it is something shoved in at the last minute. I do not think they are well thought out and I do not think the information that is gleamed from them is put to good use. I do not think anything is ever really done with it other than to say, "Yeah, we have a course evaluation" and then check the box."

"Evaluations are important deliverables. It is always helpful to know what could have been done better and what learners really like. Also, if follow on work is possible with the client, you want to know what the client liked and did not like. That is tremendously helpful. It has to be a well-structured evaluation with questions that accurately, reasonably, and comprehensively give you some feedback on the work that was done."

"For us, evaluations are on the sales end. There is usually a sales associate that is one of our partners, especially if the work is custom for a client. That sales person more than likely gets the feedback and passes it along. If it's an ongoing thing while we are working on the course, then I am getting the feedback and the evaluation and hearing "Oh, can we fix this?" and "Hey, this is wrong" or "This looks really great" and so on and so forth. It depends on who is doing it and how we are doing it."

"I do not think evaluations are done thoroughly enough. I think they are done all the time, but I do not think they are done thoroughly enough. I feel like they should be done less frequently but more thoroughly, if that makes sense."

"I am not often asked to do the evaluation portion, typically. I am asked to design and develop. I would love to do the evaluations, just because they help in the long run, but typically that is not what I am asked to do. I know, however, that feedback is always going to be really important."

"With many of the projects I have worked on, I could not even do evaluations if I wanted to because they just want you finish a course and then deliver it into a black hole and then it is gone."

Emotions

- **♦** Contentment
- **♦** Excitement
- ♦ Fun
- ♦ Happiness / Joy
- **♦** Inspiration
- **♦** Pride
- **♦** Satisfaction
- ♦ Surprise
- **♦** Trust
- ♦ Anger / Rage

- **♦** Anxiety
- **♦** Boredom
- **♦** Depression
- **♦** Disappointment
- ◆ Exhaustion / Tired
- ♦ Fear
- **♦** Frustration
- ♦ Isolation / Loneliness
- **♦** Overwhelmed
- ♦ Stress

Contentment

"I do not think I am ever content. I am always pushing for more."

"It is an emotion that you have while you are on the journey. It depends on where you are in the journey of developing that product and getting it out there, but you do have those feelings of pride, satisfaction, contentment."

"I am probably contented more often than not. There are aspects of the job such as budgeting that are just plan painful and sometimes interactions with people are not good. I am contented a lot more often than any of the negative emotions, I would say."

"I think I have worked in it long enough that I am fairly happy with my profession."

"I really am not content a lot of times. I want to challenge myself and my client to agree on something better."

Excitement

"I do not allow myself to get excited about things even if initially they might seem exciting as an opportunity. For example, moving to a different office is something that my supervisor has brought up numerous times. I have come to not allow myself to get excited because things like that rarely happen even when they are discussed."

"I love doing it when I see it come together, when I see that final product produced, when I get folks to perform better, when I get the client to understand what the vision is and do that, that is when excitement occurs. It does not occur as often as I would like"

"Sometimes, I am definitely excited about the work product that we are putting out and feel like we are doing a great job. I would not say it happens often."

"For me, excitement depends on the project. There are some that I am so excited about that I just cannot stand it and there are others where I just want to bang my head against the wall."

"I have had quite a few projects where I was very, very excited, even to the point of staying up at night thinking about them."

Fun

"Efforts are made to try to infuse fun. Every week, we try to do one thing different for an hour and a half. Sometimes on Friday they have beer Friday, so everybody can have one or two beers between the hours of noon and one-thirty, which is nice, or they bring in pizza. Last week we had a board game event where everyone

brought in their favorite board game and people just sat around and played for an hour and a half. That was a lot fun."

"My sense of fun, when it comes to work, is doing something that I enjoy. Looking back at my career, I have had a decent amount of fun. Stress is part of the fun also. All of these emotions that are there and the highs and lows of them are also what make it fun."

"Storyboarding is fun, dog and pony shows, showing the good stuff that we have been able to create, getting good feedback, anything that is associated with the creative process I think can be fun."

"I think it definitely depends on what department you are in and your location and everything like that. When I was in sales, sales was so much fun. But also like at the old-school corporation where I was, that was not fun. Where I am at right now I am by myself so how much fun am I going to have by myself?"

"I have fun with e-learning projects, a lot of fun."

Happiness / Joy

"I am always wanting better and I expect others to perform higher. When we cannot, it dampens those things. Again, moments of happiness and joy exist, but they tend not to be as strong."

"Happiness and joy at work, hmmm, not so much."

"There are definitely days I experience happiness and joy, particularly when we have got a course out the door or I can think of situations, for example, when I finally convinced upper management that learning games would actually be played by people. I would not say that happens all the time. Interactions with people definitely can involve a lot of happiness and joy."

Inspiration

"I often, definitely early on in projects, am inspired. I am excited. The topic may be really cool or the importance of the training. Knowing how this product is going to be used in the end is very inspiring."

"I think I do have a lot of good ideas. I have more of a challenge in holding back than anything because I do not want to step on the creativity of those on the team who are actually going to storyboard. That is something that I really enjoy and I am glad I have enough trust to be able to make some limited suggestions and to help people a little bit more on the way and to guide them more toward courses that involve higher order thinking rather than just knowledge."

"Our team is very open to being creative. I am always inspired because I have nothing blocking my way at all, really."

"I feel inspiration while I am working, not because I am a designer, but because I came up with a really brilliant idea."

Pride

"I would love to submit some of our products for awards, but I do not feel they are award worthy because of the turn in material and the condition of the stuff we get from the client to start with. Also, the constraints do not allow us to produce stuff that I think I can be really proud or things I would want to show other people as examples of our work. We get it done, the client accepts it and the bills are paid, but I would not consider the outcomes to elicit pride."

"I find on a number of occasions that it is tough to maintain pride in some projects that just end up slipping out of my control for the quality that they are."

"I think pride is very important. I always want to have pride in what I do."

"I really have been proud of most of the products that have been produced by my teams. I stand by most of what I have created, not all of it. Sometimes, clients force us to do things that we would not otherwise do."

"I think I have felt pride in projects I've completed quite a bit, actually."

Satisfaction

"I do not get a high enough level of satisfaction because products do that. It occurs sometimes, but not enough."

"I think satisfaction is something that is almost a requirement. I think if you cannot get satisfaction from what you are doing, you are not going to last long doing it."

Surprise

"I have been around far too long to be surprised at anything. Nothing surprises me anymore."

"I guess I do not get too many surprises. I expect what is coming up."

"I am seldom that surprised by stuff."

"Surprise certainly happens more in management choices than anything else."

"I do not think I have been surprised."

Trust

"We have a fairly tightknit management team, meaning we all meet together and we are aware of what each other is doing. A group of us are all at the same level. We all report to one gentleman, the VP of our group. Recently, the VP of our group took me on a walk and said that he had noticed I had been upset lately about certain things. He wanted to know what was going on and what was in my head. He enouragee me to tell him all the things that I am concerned about, from quality to employee satisfaction and turnover and whatever. But then the very next day, he sent an email and said, "I would like to know what your plan is to turn this around." I trusted him with my feelings and he used them against me. Needless to say, trust is quickly eroding."

"In most cases, it is that I trust, verify, maintain, and watch. My level of trust over my career is greatly diminished with experience." "I am always pleased when I am in a situation where I can trust either the situation or the persons involved."

"I am a realist enough not to always trust, but I prefer to go forward in the spirit of trust. I think that generally works better."

"Sometimes when you work on teams with people, you trust certain people but other people you do not necessarily trust them to do the job the way that they were going to do the job, or you do not trust them to give you the right information. It just depends."

"I have been lucky. I do feel trust with the teams that I have worked with over my career."

Anger / Rage

"I do experience mild anger at times, predominantly due to different management styles between me and my colleagues. I consider myself more of a servant leader whereas they are task masters."

"I do experience anger often when I am ignored, when people are incompetent, when they do not have the skills, and when they do not listen."

"People do not necessarily understand what you are doing; you have to explain it to them, they still do not get it, and then you just get angry about it. Sometimes, when working with other people, they get very angry with you because they want something done a certain way and you try to explain to them why it should not be done that way and then you get angry yourself. I think it is like self-contained anger. It is not anger at people, if that makes sense."

"There have been times when I felt like I was thrown under the bus by a coworker but in general I am not an angry person."

Anxiety

"I do not really experience much in the way of anxiety other than when projects are starting to come to an end or it is time to find new projects. The e-learning design process does not make me anxious in any way."

"Anxiety, yeah in any work environment I think when a couple of desks are empty you sort of have anxiety and look around and think, oh, not being born rich, one has to have a job."

"There have been situations where there was a lot of anxiety particularly in terms of who is keeping his or her job. I do not think it is really a dominant emotion in any way."

"Sometimes you do not know where projects are going to go necessarily so I feel like you can get anxious about that."

"You are always anxious about whether your work is good enough, if the client is going to like it, or where my next project is coming from. That is just part of working for a living."

Boredom

"It seems we do the same things over and over again and there are not many opportunities to explore and try new things."

"If it were boring, I would leave right away. I cannot tolerate much in the way of boredom."

"I really do not like being bored at all and will do anything I can to not be bored."

"Boredom, yeah, a little bit, especially on some projects that were more transactional and I was not very fired up about them."

Depression

"It would be easy to get depressed given our work environment, but I try to balance myself and have other things going on in my life that might mitigate things that are going on at work."

"When I find myself between projects for long periods of time, there is a depression there of not being able to find the new work. Looking at it during the whole elearning process and all of that, I would say it does not exist at all."

"Depression is having to lay somebody off who was very good because a contract fell through. Something like that can be really sad. Also, not being approved to develop something that would have been absolutely wonderful. Those can definitely lead to depression. Somebody decided, no, we are not shooting video after all. Just use still pictures."

Disappointment

"I am mainly disappointment in my fellow colleagues or my direct supervisor, disappointment in their behavior and their ability to follow through on things."

"I do find myself disappointed often. It goes back to those earlier discussions of not being able to do things at the level that I want to do them, at the levels that I believe that they need to be done."

"I think that you have to have expectations to be disappointed, and I think that depending on your work environment, it is not really disappointment; it is just not what you expected."

"When a lot of people are not participating in an e-learning course we did because we do not require training and then you try to market it, no one is taking it, then it is very disappointing. It is also disappointing when people say that training is not valuable."

Exhaustion / Tired

"I have been exhausted and tired in previous jobs and I have liked it. It was a good exhaustion, because I was so involved in something that I lost track of time or I just kind of went crazy with it. With this job, it is very different. I am not exhausted or tired because I do not feel like I am being utilized as much as I could be."

"I have actually had some projects where I have stamped 24-hour days. I literally submitted 24 hours on a single day on a timecard at some points. Exhaustion and tiredness occurs but I have always been able to see it coming and prepare for it."

"Exhaustion, yeah. Tiredness, yeah. When there is a deadline and you are just trying to get something done and things keep changing on you, those emotions can come into it."

"I experience it a lot. I feel like I do a lot of work and my brain just like dies at the end of the day. Like I am basically done this week."

Fear

"While I am an instructional designer and working, I do not fear anything."

"I do not know fear."

Frustration

"It ties back to colleagues at my level and above, not so much the people that I support on the team, but the people that I have to work with as other managers or my direct supervisor."

"I am constantly frustrated. Again, it all boils down to the same things that we talked about earlier; people, their skills, the clients, not understanding, all of that frustrates me greatly."

"I experience frustration when things cannot be executed because somebody decided it was no longer a priority or did not want to spend the money or was worried about something. The most frustrating was a mandatory course, which was written to be shot as video, and then we had to use stills instead the video. It was just a shadow of what

it might have been. If it had been executed the way it had been scripted, I would have submitted it for e-learning awards. As it is, I am not that thrilled with it and it is very frustrating because the product would have been better, it would have cost less, and we would have had so much more learner engagement if I could have done it the way I wrote it in the first place."

"It is frustrating working with subject matter experts and just trying to voice your opinion and what you know about instructional design and adult learning theories and people not understanding or not getting the concept."

Isolation / Loneliness

"When I joined the company, there was a small group of four people that worked together for many years. I feel as though it is a clique and no matter what I do or say or no matter what projects I help bring in, I feel like I will always be outside that clique. I think because a lot of them have had personal issues that they shared together over the years, they are at a level of closeness that I will never be a part of. And I do not know that I want to be part of it. They make it very clear that they consider me an outsider."

"By working at home so much, I do not have as much interaction with people so that even degrades it quite a bit. I isolate myself in many cases."

"I work from home with just myself but I do not feel isolated because I live in an urban area."

"I work by myself most of the time and usually it is just by myself as the only designer."

Overwhelmed

"I would love to be overwhelmed with a pipeline of opportunities that our sales team is finding, but they are not really finding much."

Stress

"I think in the past if I experienced stress, it was stress about my job and the stability of my job. I am at a point where I really do not care much about that so there is no stress."

"There is a decent amount of stress in the job, the position, and with the career."

"There is stress. Some of it I think is kind of self-induced from wanting to do a good job with something."

"I wear a lot of hats. I do everything. I am generally the only person on a team who knows how to do a lot of editing, like voice editing, image editing, anything technical. I guess it is overwhelming to balance what other people want with my regular job."

System Relationships

Composite Theoretical Descriptions

In addition to the ten open-ended axial interviews from which the narratives of the previous section originated, the researcher also conducted theoretical interviews that involved 36 participants deciding upon the influencing relationship of each possible affinity pair. For example, with the pair Leadership and Organization, participants had to decide if Leadership influenced Organization, if Organization influenced Leadership, or if there was no relationship between the two affinities. In addition to deciding upon the nature of the relationship, participants were also afforded an opportunity to share opinions or stories related to their decisions. Participants shared qualitative feedback about their decisions verbally during the ten phone interviews, and in writing through text entries embedded in the online survey. As was the case with axial interviews, theoretical interviews were recorded and transcribed verbatim, and the researcher performed grammar edits. Dominant participant experiences were determined and opinions were then organized by pair-wise relationship on a Theoretical Code Table (TCT).

The twelve affinities are arranged visually (using Inspiration diagraming software) from left to right according to their level of influence. For example, Leadership is placed on the far left side of the image because according to participant responses, it influences all other affinities. Conversely, Emotions is placed at the far right side of the image because it influences no affinities. Left to right, the image displays primary drivers, drivers, outcomes, and primary outcomes. This section reveals influences for each affinity visually through the diagrams, and textually through the statements and stories recorded and organized in the TCT.

Visually, relationships are denoted by lines with arrows leading from a driver to an outcome. Lines within each affinity appear thicker and bold, while lines associated with relationships that have already been discussed appear thinner and shaded. The completed system is dense with lines, and is referred to as a cluttered System Influence Diagram, or cluttered SID. The sections that follow illustrate the creation of the cluttered SID while reinforcing each relationship with relevant participant feelings and experiences.

Leadership Influences

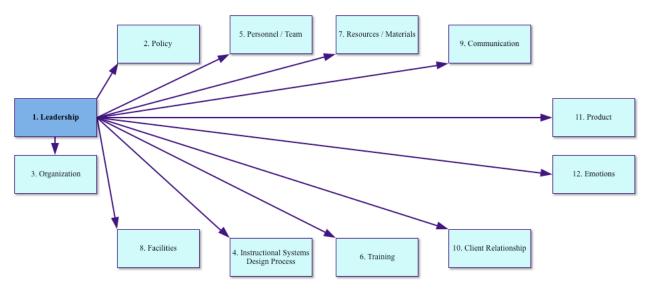


Figure 4.1: Leadership Influences

Organization

"The company is unified yet divided into different geographical regions led by different senior leadership. Each region has its own culture and desires. All of these need to be accounted for in creating courses for e-learning and other training initiatives. Sometimes training needs to be revised on a regional basis."

"Leaders choose an organizational structure that they believe helps execute strategy. Leaders reinforce behaviors within the culture."

"In many ways, leadership are the architects of the organization. So they would dictate the way the different groups are structured and how they report to one another. It would very seldom be a bottom-up relationship."

"It is those who are at the top who decide how things are organized. Do you do those stove pipe structures? Are you divisional are you flat? The types of cultures are all produced and established by leadership."

Policy

"In my company, policy is somewhat fluid and whenever things get put to paper, it always makes the rounds of executive leadership and what the author believed was policy is often modified by what the leaders felt should be policy when they were reviewing the documents regarding policy. The business is family-owned and the leaders have high influence of decisions."

"New leadership brings about changes, new ideas and possibly new direction for an organization. If this new direction conflicts with current policy, then from my experiences, policy would change to reflect this new direction. This will only happen if this new direction is perceived as adding benefit to the organization."

"In most cases, policy is something that needs to be in place before the producers or the people in operations are hired and assembled and organized in a way that makes them productive. So, almost always, leadership need to be authors of policy before any work can actually be completed."

"I think leadership influences policy. It's the vision; it is the management that those people have, that they create the policy. It's them, whether they choose to allow more flexible hours or work from home, all those different policies and the schedules all affected by the leadership. They're the ones that create that policy."

"I would say they absolutely do affect each other and I would say leadership is stronger because leadership affects policy in the beginning. However it started, leadership was the one who put policy in place, and I think most companies have the same policies or similar policies."

Facilities

"This can be related to the chicken and the egg; once great processes and materials are used, the support of the leadership has great influence, but there first needs to be a recognition of the benefits to the materials for the organization. For example, investing in software and training to create materials that benefit the masses."

"Same thing with leadership influencing facilities and that is basically just cost. The rent is paid by the leadership, and the leadership has to generate the income necessary for the facilities. So, in some cases, if work diminishes, leadership might need to find more affordable locations or scale back on the square footage or whatever."

"It is leadership who chooses where to be. They pick the office, the type of office, where it is located, and what it looks like. So yes, leadership has directed most of our facilities."

"Leadership influences facilities because leadership determines where the facilities are located."

Personnel / Team

"The senior leadership determines personnel based on their priorities. While it is possible to suggest personnel resources that are needed, if they do not achieve leadership's priorities, you have to do without."

"Leadership influences personnel and team in terms of hiring and either promoting from within or assembling people in different departments."

"It is the leadership that hires the people, who brings those people on. It is the leadership that should be mentoring, teaching and training all those people. So yes, its leadership that has the correct affect over the personnel and the team."

Instructional Systems Design Process

"Leadership is at the forefront of the ISD process. Leadership decides how the ISD process is to be implemented and the direction it should take."

"Ideally, leadership should not influence the ISD process. However, based on my experience, leadership often influences the quality and investment in each of the ISD process phases."

"The process should remain the same no matter what, however, when leadership does lay down the iron fist, things do shift and it often makes everything more complicated."

"The ISD process is what it is. It doesn't change. Addie is Addie; you can't change it. What you can do, however, are not do parts of it or not do parts of it well. In that

respect, leadership directly influences the ISD process. They force you to take shortcuts, they force the wrong people into it, and they make agreements with clients that modify the way you go through the ISD process. So leadership doesn't understand the ISD process, therefore they can affect it. Leadership has a lot of power over it."

"I would also say that that is extremely related and I would say that leadership does control how we go about doing our job as instructional designers and the ISD process that we use."

Resources / Materials

"The most recent example I have is our IT leadership trying to control the ways that we purchase software licenses that we would like to have based upon previous, what would you call them, reseller agreements that they have had with other vendors or other organizations. In my opinion, it is more costly and incredibly inefficient and we are missing out on a lot of other, I guess, benefits of doing it in different ways. But for some reason, this is how they want to do it and it has to do with relationships they have established and maybe agreements that they have in place. But it has been leadership influencing the resources and materials that we get. Not just what we get, but how we get it. So I would say that is a strong relationship."

"Leadership is the one who buys those materials, provides those resources, and give them to you or not gives them to you. It's up to them to decide what you get and what you don't. And they must understand why you need it or else not give it to you."

"That is a really tough one only because I do not think they influence the resources and materials so much as they influence the people who are purchasing it or who are using it."

"Effective leaders will ensure subordinates will have the tools and equipment needed in order to get the job done."

Training

"Leaders determine the weight they give to the amount and type of training a new hire should have. Leaders sponsor associates' participation in training. A leader should reinforce training on the job in order to transfer the knowledge and skills to work."

"The leaders know what type of training is best for the organization based on the vision and goals of the organization."

"I feel that in most cases, training offered to people involves a very costly vendor relationship. Those funds need to be approved or tracked by leadership of the company in some way whether it is HR or executive leadership, which would be rare. I still think leadership strongly influences training."

"It is leadership who decides if any training occurs or not. Do they spend the money on it? Do they want to invest in their employees? It is leadership who has a significant effect on training, absolutely."

"I would also say that that is extremely related and that leadership is once again in control. Leadership controls everything."

Communication

"Leadership does influence communication. I think that stems from leadership controlling the vehicles for communication, online tools, email, and so on."

"I think part of the definition of leadership has to have the word communication in there somewhere. It is something that leaders are supposed to do. They are the ones that should be doing it. They should be communicating well, but they should also be able to fill in those structures and allow others to communicate with one another. Leadership can stifle communication between those below them. So leadership has a lot of power over communication."

"Leadership also does influence communication in the way that people talk and who they can talk to."

Client Relationship

"Leadership makes the promise to the clients. They're the ones working with them on a regular basis. It becomes personal in business, and all of those things wrapped together. The leadership can build relationships with the clients. They can also mess those relationships up. Personalities can get in the way from leadership. Leadership can talk about the vision and all of that is going to go and help influence that client relationship, or they cannot do it, which I've seen in a number of cases."

"In many cases, sales professionals dictate specific clients that an organization will pursue. Leadership must agree to the time and resources invested in obtaining a new client and so, in that respect, all client relationships are directly impacted by leadership."

Product

"Leadership has specific goals and while the process is not important to leaders, the product is and if one senior leader does not like the product, it is either revised or not used in their region."

"The product is produced by a group that is influenced by leadership. So it is sort of a top-down thing."

"Leadership definitely affects the product in many cases. Leadership says they want a product a certain way or they do not give you the resources or materials you need to produce a product or the people necessary to do it. While leadership may not actually directly produce the product themselves, it is all the things that they do to choose what product becomes the end product for the final deliverables."

"I definitely think, like especially like at older-school corporations, from leadership, you have to have design documents. You have to have the legal print and everything. I think that is a big thing. I think that comes down from leadership."

Emotions

"We have talked about the anger and rage and frustration and all of that, and so yes, leadership has high affect on my emotions."

"Leadership could influence emotions, if you let it."

"I think they are tied in together, but I think that would have to deal with how you feel about leadership or leadership at your company. That might affect your emotions.

Yeah, I would say it influences emotions negatively or positively or neutrally just depending on the culture of the company and what its leadership is all about."

Organization Influences

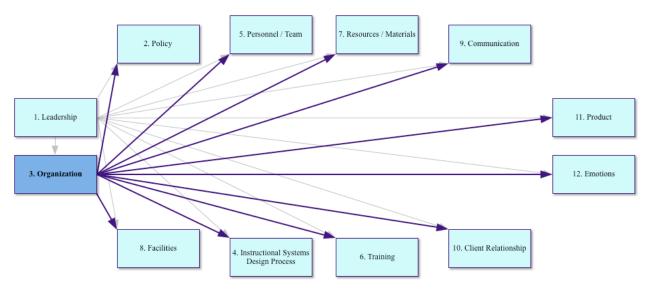


Figure 4.2: Organization Influences

Policy

"I guess they are kind of tied together just from the fact that maybe certain types of businesses have to have policies in place that sets about the organization to be a specific way."

"Policies, in my experience, are derived from the structure and culture of the organization. For example, in a divisional organization, policies might reinforce the independent and perhaps competitive relationships among various departments."

Facilities

"It is how you are structured and the types of cultures you have that is going to dictate the types of facilities you need and the way you laid out your offices or whether you get to work from home. So it is an organization that dictates how you use those facilities."

"Definitely organization influences facilities. I will elaborate on that a little bit. Depending on the type of organization that you have, if you are dealing with more of a siloed organization, a divisional organization, then I found companies will physically set themselves up for that."

"I would say organization influences facilities. I am thinking, for example, a flat relationship might do away with offices."

Personnel / Team

"Yes it is the organization that decides what people and teams are needed to make up that organization. So organization influences personnel and team. Are you so piped with that hierarchal divisional type structure that you believe I only need a certain type of personnel?"

"In my experience, needs for personnel are often dictated by abilities, or limitations, of sharing resources among organizational departments. If sharing is restricted, duplication may be in order and so hiring is definitely impacted by that. In this respect, personnel are very much influenced by the structure and culture of the company."

Instructional Systems Design Process

"I have been in many different types of organizations. It is that so-tight divisional type structure that affects it. If you have got one person happy to do this higher ISD process, it affects the overall quality and all of that. When things are broken up into different divisions and areas it affects the process as well. It is the way the team is put together that affects your ability to effectively use the ISD process."

"Organization affects the ISD process since certain types of organizations might require more steps in the process."

Resources / Materials

"In my experience over 20 years, everywhere I have ever worked, resources and materials were owned by department. It was either IT's or HR's or the training group's. People own things. The organization dictates how the people work together (or do not) and so structure and culture certainly influences materials."

"The organization definitely affects the resources, whether you have got multiple divisions that are fighting over different resources and who can get the lion share and the things they need, all of that can affect your resources and materials. Often, the training development organization of a larger company is a little stepchild and does not get the resources because it is not as important. It is not generating money if it is an in-house training organization and it is building all this stuff for internal use. So yes, organization can influence resources and materials."

"I was just thinking about how in a siloed organization, it can be really hard to get resources that you need because of the kinds of bureaucracy that might be in the way. Likewise, for a bureaucratic organization, whereas in a flat organization you can sort of go over to whoever it is and say "I need this" and they give it to you."

"If you had more of a controlling organization, they might limit you to specific resources or materials."

Training

"The organization of a firm definitely impacts training that employees experience after they are hired. It may also impact the training people have completed before they were hired in that some structures and cultures will only embrace new hires with formal, brick-and-mortar degrees."

"It is how things are, and that affects your ability to train. Does the organization offer training? Are you part of the group? Do you get that peer learning with a certain type of organization? So yes, the way a company is organized can affect the availability and type of training."

"From a company training standpoint, the number of locations across the United States that the company has guides types of training available to employees."

Communication

"Communication is poor among different employees because company structure is regional and there is underlying competitiveness."

"Definitely organization influences communication. When you are in that divisional structure, of course that is when communication is difficult. Talking to people

in other areas becomes more difficult. The flat structure organization allows more people to communicate because they are all on similar levels. Hierarchical structures allow you to communicate, but only up and down and rarely horizontally."

"Organization affects communication since collaborative relationships are going to have better communications. Collaborative and creative organizations will have better communication than others."

Client Relationship

"The organization influences the client relationship, for sure. A recent example of that for me would be because of the way we are set up, we have a training services group and we have a technology group that produces the software. We have a client who has been a long-term software customer of ours. They are now interested in training. That need was not communicated to us for more than a year after it was identified and we probably missed out on a lot of potential revenue that could have been obtained from expanding that relationship. So our organization and the fact that we were outside the loop spawned the loss of that opportunity. So I would say, in almost all cases, organization of a company will influence client relationships."

"The way you are grouped and organized affects how you work with the client."

"I will say organization definitely influences the client relationship. Depending on the type of organization that you have, that can determine who has that direct interface with the client and/or about what topics you discuss."

"Organization affects the client relationship since structure and culture will affect who interacts with the client."

Product

"Yes, organization affects the product. A divisional structure where everybody is in their own organization, their own division, where I got this project and you got that project and we could both be working on the same exact product separately and the same exact specifications for the same products and still come out with two completely different ones."

"Organization affects the product because if creativity and collaboration are not encouraged, that will have an effect on the product."

"Specifically with companies that produce e-learning products, the structure and the culture of those firms directly influence the products themselves. If people are not allowed to work together and if innovation is not encouraged by the structure and culture, then products will be farther from their potential."

Emotions

"Employees would like more connection across the company, but the current organizational structure and culture do not make this easy. The company had an all managers meeting for the first time this fall and most of these managers had never met or been aware of one another if they were outside their region."

"I am going to say the organization influences emotions. Again, I think it is depending on how the organization is structured. I am not going to say that one organizational type is necessarily better or worse at this, but I think some organizational structures can lead to an increased sense of fear and anxiety."

"Organization affects emotion particularly in certain types of organizations that encourage adversarial or separate relationships, which have an emotional fallout."

Policy Influences

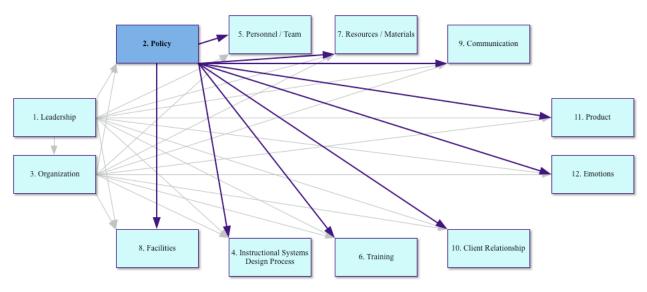


Figure 4.3: Policy Influences

Facilities

"Safety policies dictate location resources, and spaces."

"I see policy as rules that dictate the facilities and how things are used. Certain people must be in these offices. Only leadership can have a door that was closed and people are not supposed to have certain things. I definitely see the policy affecting the facilities, but it is okay to see the facilities affecting the policy. You are not allowed to park here maybe because it is dangerous or something. I guess maybe that doesn't occur as often. Policy affects the facilities. It is those rules that affect how safe you are, whether you can work at home, or you have to work at an office. The policies say what facilities you may use and where you need to go."

Personnel / Team

"In many ways, the personnel and team, for the most part, unless you are at a very high level, cannot influence policy. Policy is what it is. If they come in and challenge it, then they will find themselves out of a job. So I would say policy influences the team."

"Policy affects the personnel or team. Do you hire people based on certain rules or certain requirements, or you don't hire people on that. You don't want to hire someone because they live out of state. Well hey, that is probably the best person and you do not want to do telecommuting, therefore you are not going to hire the talent pool. I see it often in the military, things where I have got to go to those military installations. I even see it in my job search all the time. I am not going to go live in some little town to be a butt in a seat."

Instructional Systems Design Process

"Rules that are part of the company affect the way you are able to do the process. You are not allowed to work a certain way, or you have to work on certain systems because that is the policy. Policy can easily get in the way of the ISD process. It can force you to do parts of it or not do parts of it. So it is those rules that can interfere or even help the overall ISD process."

"I would say that policy definitely plays a big role in the ISD process. I would say that policy is bigger than the ISD process."

"There could be a relationship where policy influences the ISD process if the policy is specific to instructional systems design."

Resources / Materials

"It's like having to go through some of those crazy bureaucracies just to get a piece of software or get approval with some companies; it is just unbelievable. Hey you are at this level; you are not allowed to modify your software and you are not allowed to put this piece of software on your computer without all of our permission. And you cannot get the right people to do it forever. Policy says we are not using that type of computer because we are protesting something and that is what you need. All of that has an effect on the resources and materials you have at your hands."

"The policy will cause budgets to be made which will affect resources. So, it is all part of that same big package, if that makes sense."

"Policy could influence resources and materials, yes, depending on how you have to go about getting them."

"I would say they are tied together in some ways, like you cannot use open source software and things like that, but I do not think it is a huge issue. I would say policy influences resources just because it is something that has more validity."

Training

"The way I see it again is it is those rules of schedules, all of that affects training. If policy says hey, we are going to pay for your education, then people will get it. If policy says oh, it is all on your dime and no you cannot have time off to do it, all of that affects the ability to get training."

"It depends on what type of training, but I would say the policy is pretty strong in correlation with training. There are a lot of things that we are told we cannot do versus what we can do."

"You may have a policy in place for training, like what types of training you have available, and that would possibly influence the type of training you ultimately complete."

Communication

"The rules set out to describe how and what type of communications are allowed. If you are not allowed to do certain things, then policies can stifle communication greatly. Not allow people to talk in certain ways or share information in different ways. Policies can greatly affect the way you communicate. Then, the right policies really help with the way you communicate."

"I think policy affects communication because policy kind of determines the level of communication that is allowed ultimately. It can be a controlling thing."

"Policy influences communication, especially with clients or anyone outside of the firm that you are working with. Policy shapes communication, too."

"I would say policy influences communication. I think it also influences the client relationship because it will be a factor in how you communicate out to the client. You know, what are the acceptable forms of communication? What are some of the limitations of what you can communicate out to the client?

Client Relationship

"In many ways, the nature of the relationship will have been dictated by the type of company it is and the goals and the mission, vision and objectives of the company overall. To me, all of that is policy. The policy would dictate not just the client relationship, but also whether or not the relationship is boring at all. I can think of opportunities that we bypassed because of policy that we did not feel was aligned with the opportunity. Even though I did not agree with that, it was an influencing relationship that I think is pretty strong."

"It is those rules that allow you or do not allow you to work in different ways with the client. The rules of my company affects what I can do and produce and how I can meet with the client and things that I can say or cannot say when working with them. So yes, policy affects the client relationship."

"Policy influences the client relationship, particularly if it involves something like you cannot take somebody out to lunch."

"Policy is stronger because people have to act a certain way with clients and be a different way with clients."

Product

"Policy affects the product. I think on most of these it is going to go to the right as well. When you look at the rules and people and all of that stuff, it directly influences the product. It allows you to either do it well, or else it stifles you."

"Policy influences the actual end product. Here is an example. If there is a policy around your e-learning having to be 508 conformant, then that definitely has an influence on how you design the product and how you go about testing the product before you implement it."

"Policy definitely affect not only the product look and feel, but also the types of products offered or created. For example, some companies may have a policy about never contracting with freelance subject matter experts. The policy then limits the company to producing e-learning topics aligned with its in-house expertise. There are numerous examples, but policy greatly influences the product."

Emotions

"The rules affect how I feel all the time. Some of them are just fine, they are no problem, while other policies just aggravate me, irritate me, and frustrate me, for sure."

"Policy affects emotions since personnel policies may prevent someone from emoting."

"I would say a lot of people have negative feelings about policy because it does not allow them to do their job the way that they feel they should do their job."

"I would say policy affects emotions. You either hate it, or you love it."

Facilities Influences

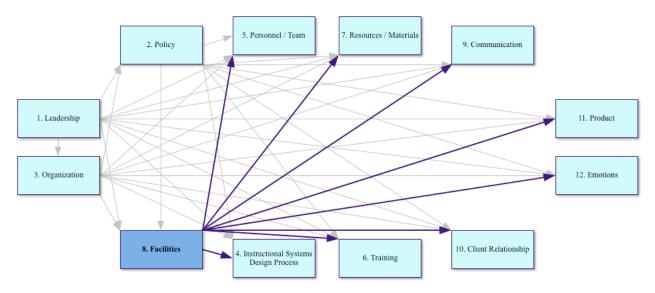


Figure 4.4: Facilities Influences

Personnel / Team

"When I think about location and I think about home offices, that flexibility of facility allows me to get a different set of personnel and build a larger team. If my office is stuck in BFE, then I can only get the people that live in BFE and maybe a few people that you could sucker into moving out there. So facilities can really affect the people that you have on your team. Facilities influence personnel for sure."

"At times, hiring does not go on because while there may be a need for the person, we lack the space to house them and so we do not hire, in spite of the need."

"The facilities, be they home offices, cubes, or collaborative spaces, all impact the personnel and team a great deal. There is a bare minimum condition for facilities, I

believe, for people to be productive and happy and to be willing to join an organization. If the condition is not met, the team will be dramatically impacted."

Instructional Systems Design Process

"I think facilities can affect the process. Where you are at and how close you are all affect your ability to do it. When I think of an ISD process I am thinking of the whole ADDIE thing that we talked about earlier and not being able to do parts of ADDIE. Or how you do parts of ADDIE affected by the facility. If you get people that are positioned near one another and they are collaborative, it has an effect on the ISD process. If you have people distributed, it has an effect on the ISD process. So yes, where your people are located and the offices and spaces they have to work in affect your ability to do design."

"Facilities do impact the ISD process, every time. The phases of most processes and methodologies are conducted in physical spaces, and those spaces need to support the individuals in them as opposed to introducing obstacles, which many facilities often do. Noise, excessive temperatures, confined spaces, safety concerns and more will make ISD harder to implement."

Resources / Materials

"These are the ones I have been going crazy with. I think facilities are going to have to affect recourses and materials. The type of place you are in dictates what type of things you can use, what type of equipment you can have in your office. I have been in offices with terrible networks and networking and very little equipment in it or the opposite that are small and you could not get a certain type of computer. In my home office, I do not have heavy multimedia equipment or a sound room because space is not

there. Elsewhere, because they had room, we were able to put in special media rooms, special audio, sound rooms, and all of that. So I think the facilities affect resources and materials."

"Facilities affect resources because facilities are sort of there and resources and materials come and go. I would say the thing that is bigger affects the things that are smaller."

"If you are going to need audio, then you are going to need an audio booth in your facility, which means your materials would influence your facility. But, usually, your facility influences what materials you are going to need. How many computers? How many desks? How many chairs?"

"Facilities affect resources because room size, for example, determines how the resources are distributed and used."

Training

"Currently half of our building is designated as an export control area where we can produce training that only a certain client uses in a certain part of the world, and everybody needs training on that, on export control. The recent changes in the Ukraine have required us all to learn more about export control and to make sure that we are following the new guidelines. I would say facilities influence training, for sure."

"I look at more of the informal part of the education. The facilities affect that. So I think home office versus a butt on a seat or a traditional office kind of thing. When you are face-to-face, you have a better chance for some mentoring, some coaching, and professional development; OJT thing. So I think facilities can have some affect on parts

of your training. Often, when I go to a new office, there is some kind of OJT that requires something of the facility, that it is a place that requires you to learn something."

"Facilities can influence training. If you do not have a good meeting room and it is not equipped with interactive facilities, that impacts how in-house and on-the-job training can be delivered."

Communication

"Given communication can occur in a variety of different formats, I think the facilities dictate what formats are utilized the most and how that occurs."

"Facilities affect communications for sure. When I am in an office setting, there is certain type of communication. When I am in my home office, there is another type of communication. So facilities definitely affect my communication."

"Facilities affect communication. If there are no team rooms or it is not easy to set up conference calls and so forth, that would have an effect."

"Yes, facilities could influence communication, if we are talking about meetings and meeting spaces."

Client Relationship

"The facilities impact the client relationship. My company has many locations with the express purpose of being convenient for partnering with clients."

"Facilities affect the client relationship. That is easy. I have been in places where the facilities were near the clients so you can be seen and see the client on a daily basis, a regular basis. Other times, when I am here at my home office, you do not see the client as often. So, proximity does that, and the quality and the type of your facilities, if the client sees you there, also make a difference."

"I think a facility affects the client relationship because if the client comes to your facility and is not impressed, then that is not going to be a good thing."

"Your client might not like your facilities. I would say you should probably have good facilities for your client so I would say the client would probably sort of structure that."

Product

"Facilities do have an effect on the product. Not having the right spaces for people to work will affect what the overall product is. Space does not have to be perfect, but if it is a highly collaborative thing and the facilities offer that, you have got a better chance at a better product."

"If that is where you are developing and designing, (within your facility), that will have, in general, an affect on the product."

"Even with e-learning being increasingly designed and developed by virtual teams working in many different locations, facilities will always influence the product because facilities must be conducive to all of the methods and best practices that are followed to turn concepts into reality."

Emotions

"Of course facilities impact our emotions. Facilities are not chosen or designed based on employee's desires or needs—at least not in my experience."

"I love my home office. I hate when I have got to go to someone else's office. They may be nice and it may not be that bad, but I don't like spending a lot of time in other offices. I actually enjoy some of the locations, however. So the facilities can have a great affect on your emotions, especially when they are run-down."

"Facilities affect emotions. Thinking of places that have been really poorly setup, places that encourage frustration such as so-called collaborative spaces. When there is no personal space and where you are forced to hear conversations that get in the way of making your deadlines."

"Facilities affect my emotions. For example, I did not like working in a cubicle."

Personnel / Team Influences

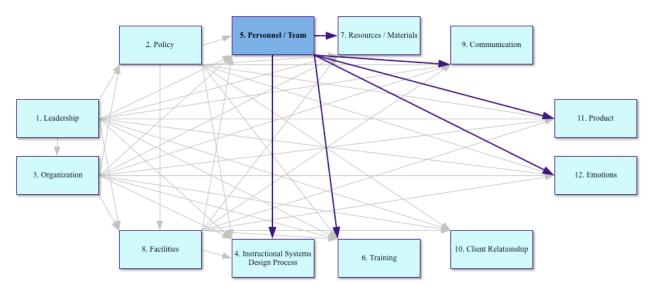


Figure 4.5: Personnel / Team Influences

Instructional Systems Design Process

"Ideally, the ISD process should influence the personnel or team. However, lots of time, I see the opposite occur."

"The team always wins over the ISD process because the team makes decisions and they may not be in favor of that."

"The very nature of the instructional systems design process demands people to execute all of the phases and steps of whatever process is being used. In this respect, the personnel or team definitely influences the instructional systems design process by either implementing it in whole, in part, or not at all."

Resources / Materials

"I think the personnel or team influences the resources and materials, because certain people have to have certain resources and materials. A 3D animator needs math, a game programmer needs game engines. So people that you have on staff will dictate what resources and materials you need."

"I think the team ultimately affects resources and materials because I think the team would find a way around it if they do not have resources or materials or find a way to get resources and materials."

"I think for the most part, in my experience, the team influences their resources because you go with what types of software people are comfortable using, for example."

"The team would request materials and resources, yes, the team drives that."

Training

"I want to say personnel influences training because, for me, it is typically the requests I get, repeated requests, for certain things that would prompt support of or access to opportunities for people to train."

"Ultimately I think the team affects training because if you have a team that is truly committed, I think that they will figure out the training part of it."

"Team affects training because the team makeup determines how much training might be needed."

Communication

"Communication is hit or miss and very dependent on a person valuing it to start with."

"I want to say personnel effects communication. The people you have know how to communicate themselves. They know how to use the different types of communication, the different technologies. So the people on the team affect the way communication occurs."

"The team influences communication because the different emotional makeups and communication styles within the team will affect how the team communicates."

"I would say that the team influences communication depending on how they want to work with people."

Product

"People on your team affect the product. How good and experienced team members are and what they do in the end affects the product."

"The team definitely influences the product. The talents within the team determine how good the product is."

Emotions

"In this case, I think the team affects the emotions because if it is an effective team, then they should be able to sort of generate positive emotions. If it is an effective team, they can deal with negative emotions."

"I think the individuals on the team influence your emotions because you get frustrated with people and feel emotions, or you could be happy about it too, I guess."

Instructional Systems Design Process Influences

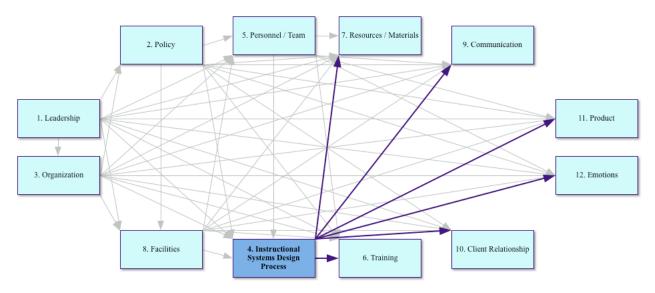


Figure 4.6: Instructional Systems Design Process Influences

Resources / Materials

"If you do not have the resources and materials you need, it makes the process very difficult to do. What the process dictates is what materials and all you should have. So I would see it goes in the other direction. I am more in the camp of the ISD process influences the resources and materials. I think in the end, the process helps however you use it and will affect the types of resources and materials you need. So if I choose to dumb down the process, then I do not need the complex software and I do not need heavy computers."

"I would say the process influences resources and materials. Again, the multifunctional could potentially require more resources. If you are requiring a lot of cross training and how the development particularly is staged, it is going to affect what resources are needed. For example, something that is highly multimedia, you know."

"I would say the ISD process influences materials, but that is only if you actually use the ISD process."

Training

"The process affects training because if you want people to be multifunctional, that increases training needs."

"Often in my career as both a designer and a manager, I have had to help newly hired folks to learn about the ISD process. It is shocking to me how many people are hired to create e-learning and have no understanding about the methodologies. Additionally, a company that is dedicated to an ISD process will take efforts to hire those folks who have the training. No matter how you look at it, the ISD process impacts the training folks on the team have had and will experience."

Communication

"I think the process influences communication depending on how the team interacts and whether the process is sequential or to some degree concurrent affects communication."

"Yes, the ISD process is going to influence the communication, what type you need to give, what is needed, what is expected, and so on."

"On a high level, the ISD process is, in many ways, a set of protocols for communication. It involves communication with clients, subject matter experts, learners,

key project stakeholders, and more. In this respect, the ISD process certainly impacts communication."

Client Relationship

"I can tell you just in the last just month how many sales opportunities I have had to support, and I am not a salesperson. I am not commissioned. But the sales team will drag me to these meetings and ask me to do the dog and pony shows where I talk about our ISD methodology and what we are capable of doing. If I am successful, then my illustration of our ISD process helps to attract and retain clients and nurtures our relationships with them. For me, I think the ISD process influences almost everything across the board because to me it is this thing. It is what it is. It is typically not changed. It is there for a reason, and it influences and impacts everything around it in hopefully positive ways."

"I think the ISD process makes working with a client easier because there are clear deliverables at each step of the way so the client can stay apprised of what is going on with the project. Although some clients do not pay much attention, at least it is a help so it can improve the client relationship by following the process."

"Ultimately, the process would affect the client relationship because I think that the process for most companies is so entrenched that you might lose the client, but the process is what it is."

Product

"The process affects the product. If you do not go through the process rigorously from end-to-end, your product will suck."

"Oh, the ISD process definitely improves the product so that is a case where the process influences the final product."

"The ISD process influences the product because you are going to be answering all of those questions along the way."

"Insofar as the ISD process has outcomes that are in essence products, the process very much influences the product, whether it is a proposal, a design document, a series of digital files that comprise and e-learning event, or anything delivered as a result of the contract."

Emotions

"I am not one of those people who have emotions affect my work. It is the process that affects the emotions. There are phases and steps in there that can create the anxiety, that can make things exciting, and it happens, so the ISD process influences emotions, for sure."

"The process is a rigid thing, whereas emotions are fluid and change from time to time. I may have a fantastic meeting with a subject matter expert or have a creative breakthrough with a team of multimedia experts and both of those experiences would bring me great joy. Conversely, I may lose a ton of progress to a network collapse or obtain terrible results during an evaluation effort and both of those experiences would be either frustrating or sad. The ISD process definitely influences emotions."

Resources / Materials Influences

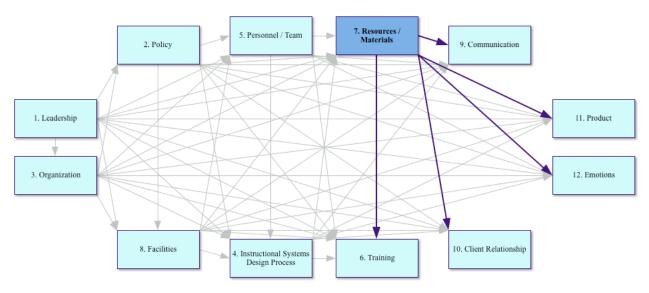


Figure 4.7: Resources / Materials Influences

Training

"I guess in some ways resources and materials influence training because if you have upgraded to new version of Windows and nobody knows how to use it, you are going to need training on it. So will say the materials you use influence the training you need, participate in, and complete."

"If I need a new piece of software different from what I had, I need to go get new training. If I work with a company that wants Captivate and Articulate and that kind of crap, well, they are not going to get me because I do not do that. The resources they have were forcing you to go get new training if I wanted to do that, if I wanted to work for them. But then, my knowledge, experience, and all the training that I have, I guess would affect my ability to use it. I'm thinking that resources influence training."

Communication

"Resources and materials influence communication because it seems to me like 90% of our internal communication is about resources and materials in some way."

"Resources and materials affect communication, definitely. Having software, the things that you have, and the right networks all will be able to affect not having the ability to print up a paper newsletter or hang a little note on the refrigerator or something, all that affects your ability to communicate."

"Yeah, definitely, because you need computers to communicate with email so I would say, yeah; the materials impact communication."

Client Relationship

"I think resources and materials are what affect your client relationship. You have got to have the right computers, the right software, the right equipment to be able to do what you need to perform for any client."

"Yes, materials can influence the client relationship. You have to send everything by snail mail or by Dropbox or something like that."

"I would also say they are interrelated and materials would be stronger because you need materials to talk to your clients. The resources and materials influence relationships with clients."

Product

"Resources and materials affect the product. I can see it the other way around if a certain type of product would require certain types of materials. I think resources affect the product because more often I had a choice of what to build rather than somebody saying you have to use Lectora. More often, it has been the client telling me that they need an e-learning course and telling me to go figure it out."

"The resources and materials influence the product because you need materials to deliver your product."

"We had a web-based course about to be published and, at the last minute, a developer with a keen eye realized that a new release of this development software enabled tablet delivery. With just a few extra hours we were able to deliver, as a value-add, a tablet version of the course. The resource impacted the product in a way that greatly pleased the client and no doubt led to future work."

Emotions

"The lack of resources sometimes is a frustration."

"Resources influence my emotions. I am not quite sure how, but I know that emotions would never influence resources unless, you know, the team is in a really bad mood and you want to buy a cappuccino machine to cheer everyone up."

"Not having the right resources or materials really makes you upset and frustrated."

"We are dependent on resources and materials to produce e-learning and when they are missing, lacking, or when they fail us, our emotions will be effected, even if just for a short while until we solve those problems."

Training Influences

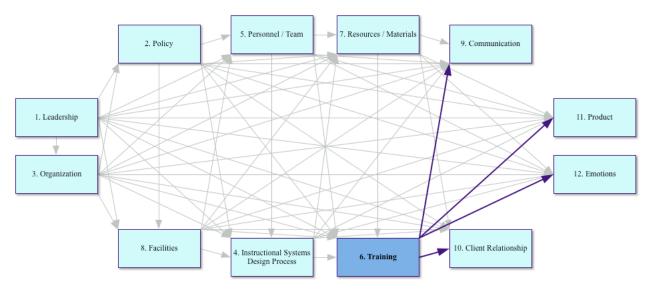


Figure 4.8: Training Influences

Communication

"I think training affects the communication. For me, the advanced degree allows me to communicate in many different ways and much more effectively than those with lesser education."

"Training definitely influences communication. You education and experiences, both formal and informal, impact how smooth, polished, and successful your written and verbal messages are."

Client Relationship

"I think training affects the client relationship and I think that what you know, and at what degree, your different skills, the higher up you get the more it is going to be able to influence that client relationship and the more the client respects you."

"I think training affects the client relationship because if you are not up to speed with what is going on and you are not effectively trained and your client mentions something and you are sitting there with a dumb expression on your face, I think that is a big problem. So, I think training does affect the client relationship."

"I have found that my client relationships are greatly influenced by my training, both in progress and completed. That influence results in both positive and negative experiences. During a kick-off meeting with one client and her key stakeholders, everyone seemed to perk up when, during my introduction, they realized I actually had a Master's degree in instructional design and training in e-learning. Similarly, when one client realized that I was not a lawyer and had not studied the law, he grew very concerned since the topic of our training was trial procedures. He could not grasp that I could create strong training through collaboration with subject matter experts. So yes, training greatly influences the client relationship."

Product

"Training affects product absolutely. If you do not have the knowledge and skills necessary, then you are not going to produce a quality product."

"Training definitely affects the product because without maintaining a level of training and expertise, the product is not going to be up to snuff."

"If people are well trained, they create better products and so training affects product."

Emotions

"I have noticed that as company training has increased, so has retention."

"I would say training affects my emotions. Hopefully, I learned that with an advanced degree, I have to contain the emotions."

"Your training influences your emotions. If you have received all of your training and you are happy with where you are in life and you see your growth, then yes, your training is worth it for your happiness, your joy, your sense of accomplishment and those sorts of feelings if you are using your training in that way. Training could influence your emotions. But no one has ever asked me, you know, you have a Bachelor's and a Master's degree and all this other stuff, use that to talk to a client. You talk to clients like they are people."

Communication Influences

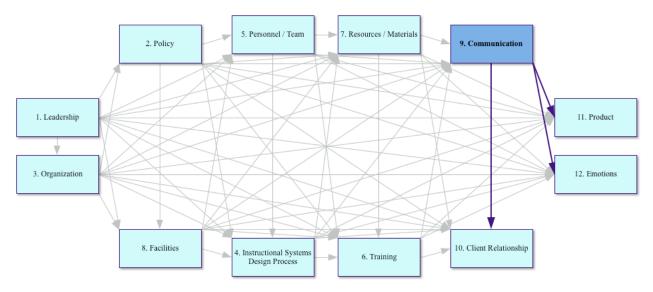


Figure 4.9: Communication Influences

Client Relationship

"Communication affects the client relationships; if you are not communicating well with the client, then that relationship can dissolve very rapidly."

"How and what you communicate to the client, as well as how frequently, all impacts the client relationship. That's a no-brainer; communication impacts the client relationship."

Product

"Communication affects the product, for sure. Everybody talking and doing what they need to do and making sure everybody is where they need to be affects the individual product."

"I think communication definitely affects the product. I think if information is poorly communicated, then you could have a very, very wonderful product that everybody who created it is happy with and pleased with and then you come to find out that there is one thing that the client needed that was not communicated to you and the product is a bust for the client. That has been a problem in the past. I think having effective communication is critical to the successful product just to make sure that the product answers client needs."

"Communication affects the product because if collaboration is not happening, that will affect the quality on most products."

Emotions

"The CEO can be very inspiring when talking to groups of employees. Unfortunately this is maybe annually and is not well filtered down to front-line employees."

"I know there are times that emotions might influence our communication, either the tone or the fact that a communication occurs at all, but I think in most cases a communication event influences a person's emotions or my emotions. So I would say that communication influences emotions."

"Communications affect emotions. Poorly crafted or planned communications can definitely spark very negative emotions. Well-communicated, even negative things, can keep everybody happy."

Client Relationship Influences

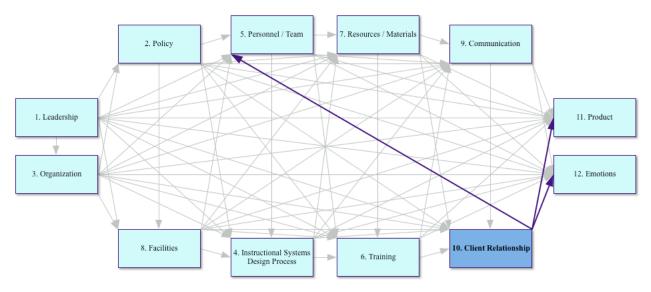


Figure 4.10: Client Relationship Influences

Personnel / Team

"I think the client relationship influences the personnel and team because if our largest client decides they want to hand over all of their training operations out of this site, they want to move it all to us, well my team just doubled. Additionally, if the client wants an e-learning solution using a new strategy only available on specialized software, then I may need to modify my team by hiring new folks or training folks on the new software."

"I think the client relationship affects the team because the client kind of rules and good client, bad client, the team has to deal with it. I do not think that the team has that much influence ultimately on the client relationship because there are so many other things that come in to it."

"That is hard. Again, that one goes both ways. I am going to say the client relationship influences the team because the client may or may not want to interact with different team members. Some clients really prefer just to interact with the project lead."

"Client relationship affects the team because they are your client and what they say goes."

Product

"Client relationship can affect the product if the client is not as involved as he ought to be. That will affect the quality of the product. The other way around too. If the client is too involved in trying to make pronouncements on things he does not understand, that will have a negative effect on the product. I think the client affects the product positively or negatively."

"In this case, the client would affect the product more because that is who you are building it for."

"The product is built for a specific purpose. In most cases, that purpose stems from the needs of a client and so in almost every circumstance, I see the client relationship impacting the product."

Emotions

"The client relationship affects emotions for sure. It also goes in the other direction. If I get upset with the client I am going to sever that relationship with them. But in most cases I think it is the client affecting my emotions."

"The client relationship affects emotions because if you have a crappy relationship, that definitely moves the negative emotions. When things are happy, even if deadlines are incredible and miserable, things are happy."

"There are few things more satisfying as an e-learning professional than a client that respects your efforts, appreciates your work, and values the investment they have made. So yes, the client relationship greatly influences emotions."

Product Influences

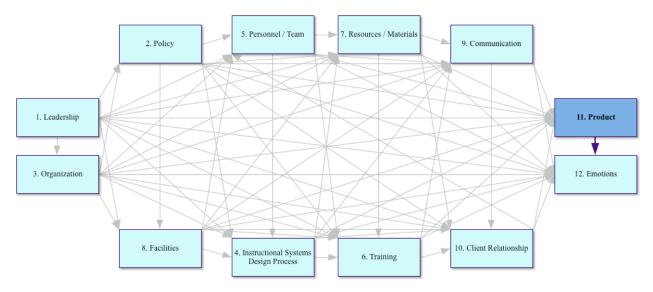


Figure 4.11: Product Influences

Emotions

"Product absolutely affects emotions. When you have got a good one, it is great, and when you do not, all the negative emotions stir up when the product is not as good as it should be."

"Product affects emotions because if people are happy with what they are producing that is tremendously positive. If people are forced to do something they do not take pride in, that goes the other way."

"The product could influence your emotions when you are taking in the success and enjoying what you do."

"I feel like the product could create specific emotions, like maybe the client is unhappy or you are unhappy with something about the product. So, sure, the product would influence how you feel."

The Composite Interview Uncluttered SID

The last diagram in the previous section highlights only the relationship in which Product influences Emotions. Notice all of the other hidden relationship lines. If they were all fully visible, the ability to make sense of the system and derive meaning from it would be greatly hampered. The clutter interferes with interpretation. The cluttered SID is comprehensive, (a goal of IQA), but it is also entirely too complex. Uncluttering the SID is a means by which the researcher preserves comprehensiveness of the data while simplifying the details. Uncluttering is a manual process whereby redundant links are removed, one-by-one, until the system is free of redundancy and influence lines are clear and non-intersecting. The uncluttered e-learning creation experience SID is shown below.

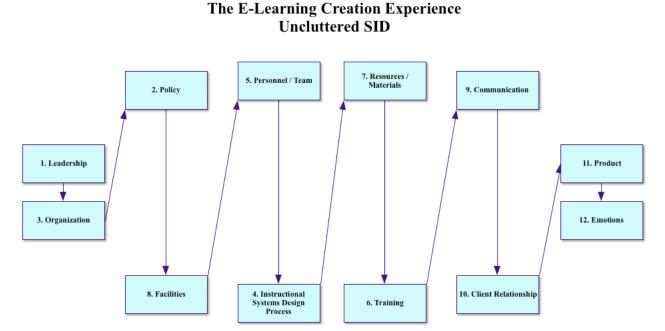


Figure 4.12: The E-Learning Creation Experience Uncluttered SID

Pareto Reconciled SID

After uncluttering the SID, the researcher reviews the Pareto Protocol, described in detail in Appendix A. Occasionally, the Pareto Protocol will reveal conflicting relationships during which an affinity pair embodies relationships in both directions. If the volume of relationships warrants it, a link may need to be added back to the system following the uncluttering process. Such was the case with the e-learning creation experience system. The researcher added a link to the SID; the link was not fully described in the previous theoretical descriptions. The link originates at Emotions and leads to Leadership. The new link reconciles the only conflict found during Pareto Protocol review.

The E-Learning Creation Experience Pareto Reconciled Uncluttered SID

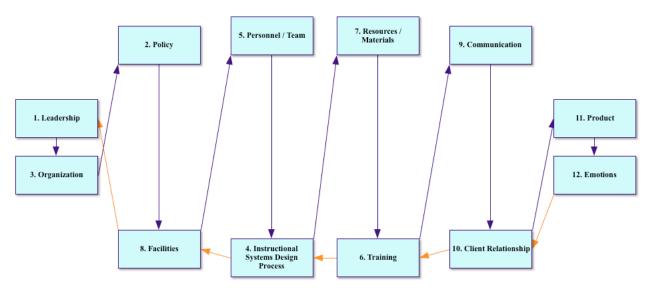


Figure 4.13: The E-Learning Creation Experience Pareto Reconciled Uncluttered SID

Emotions Influences... Client Relationship

"Emotions, whether from the client or its stakeholders or from the people doing the work, very much influence the client relationship. Positive and negative emotions, if made known to others involved in the project lifecycle, can influence expediency of reviews, cooperation from SMEs and others, and even contract extensions or the award of new work."

Client Relationship Influences... Training

"I think the client relationship influences training. An example might be if suddenly we won a large aerospace contract, I would be purchasing overview training on aerospace topics for my team so they could, even though they will not be SMEs, know more about it than they currently do. So I think the client relationship greatly influences training."

Training Influences... Instructional Systems Design Process

"I think the more training I have, the better I know and understand the ISD process and can use that process. If people on my team are not trained as well, they do not have the right education and it affects their use of the ISD process. So yes, I do. I think one's education and then skill levels effect how they would use the ISD process."

Instructional Systems Design Process Influences... Facilities

"Companies and organizations implement the ISD process to varying degrees; they may not implement it at all, they may follow and conduct every phase and task, or they may fall somewhere in between. This impacts the facilities in which people work. For example, if you support development efforts and do not farm that all out to other firms, you will likely need a space for high-end, multimedia machines, a green screen and possibly a video space, an audio lab with good acoustics and equipment, high quality printers and print space if development involves creation of accompanying print materials, and more."

Facilities Influences... Leadership

"In my leadership, I have not had a lot of say in facilities but they determine, for example, how many people you can have in a meeting and things like that."

"Leadership is all about how others perceive you, how visible you are, how clear and focused your goals and plans are to the rest of the firm. If your office resembles the set on the old television series Taxi, then no matter how nice of a person you are, others will perceive you as a grumpy old taskmaster, looking down on all the worker bees. The facilities really do influence leadership, and the effectiveness of leadership efforts specifically."

The E-Learning Creation Experience System

Below is the System Influence Diagram (SID) that will be used throughout the study.

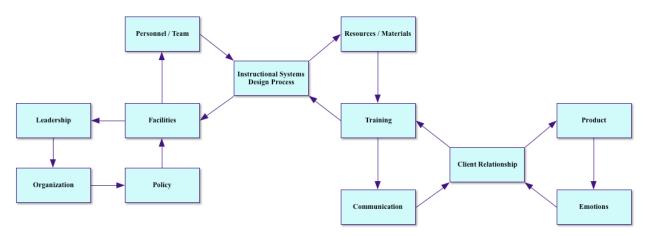


Figure 4.14: The E-Learning Creation Experience System

CHAPTER 5: INTERPRETATION OF THE E-LEARNING CREATION EXPERIENCE SYSTEM

Introduction

The purpose of this IQA study is to identify the affinities of the e-learning creation experience system using the shared experiences, feelings, and opinions of e-learning practitioners. The study also seeks to uncover how each affinity relates to others in the system. During Chapter Four efforts, the researcher analyzed participant contributions and assembled them in meaningful ways to answer both of the study's research questions:

- 1. What affinities do instructional design practitioners attribute to the e-learning creation experience?
- 2. How, if at all, do those affinities influence one another?

Participants' Affinity Production Interviews led to identification of the affinities. Axial interview experiences revealed what each affinity and sub-affinity means to participants. Theoretical interview experiences gave shape to the system by assigning and validating influencing relationships. Chapter Four may be viewed as a practitioner chorus with the researcher serving merely as conductor. In Chapter Five, however, the meaning of the music is interpreted as the researcher examines the twelve affinities through the holistic lens of a complete system.

Following a detailed description of each of the twelve affinities of the e-learning creation experience system, Chapter Five presents a system tour, introduces and explains several loops, and shares predictions given specific scenarios, interventions to issues common among participants, and implications for exercising the system and for further study.

The E-Learning Creation Experience

The following section describes each affinity of the e-learning creation experience system. The table below orders the affinities according to their level of system influence from highest (starting with the primary driver) and lowest (ending with the primary outcome).

Table 5.1: The E-Learning Creation Experience System Sub-Affinities			
Affinity	Sub-Affinities		
Leadership	 ♦ Vision ♦ Project Management ♦ Management Style ♦ Guidance / Direction ♦ Communication ♦ Knowledge & Experience ♦ Coach / Mentor ♦ Character ♦ Accessibility 		
Organization	♦ Structure Culture ○ Hierarchical Structure ○ Collaborative Culture ○ Flat Structure ○ Competitive Culture ○ Divisional Structure ○ Control Culture ○ Bureaucracy ○ Creative Culture		
Policy	 ♦ Standards of Conduct ♦ Recruitment & Hiring ♦ Compensation & Benefits ♦ Performance Reviews & Promotions 		
Facilities	 Location Safety & Security Home Offices Environmental Conditions 		
Personnel / Team	 ◆ Program / Project Managers ◆ Instructional Designers ◆ Developers / Authors ◆ Multimedia Experts ◆ Graphic Artists & Trainers ◆ Programmers ◆ Subject Matter Experts ◆ Editors ◆ Quality Control & Testers ◆ Office Staff ◆ IT Support ◆ Trainers 		

Table 5.1, cont.

Instructional Systems Design Process Resources / Materials	 Learning Theory Planning Analysis Design Computers / Hardware Software Media / Content 	 Development Implementation Evaluation Multimedia Equipment Office Equipment & Supplies
Training	 ◆ Formal Education ○ Bachelors Degree ○ Masters Degree ○ Doctoral Degree ○ Technical / Trade School 	 Network Informal Education Professional Development Apprenticeship, Mentoring, & Coaching Self-Directed Learning On-The-Job Training
Communication	 Official Messages Written Verbal Collaborative Meetings 	 Feedback Rumor Social Media Miscommunication
Client Relationship	 Adversarial Transactional Consulting / Informational 	♦ Sharing♦ Collaborative Partnership
Product	 Proposals / Contracts Project Plans Reports Analysis / Design Documents 	♦ Storyboards♦ Courses♦ Source Files♦ Evaluations
Emotions	 Contentment Excitement Fun Happiness / Joy Inspiration Pride Satisfaction Surprise Trust Anger / Rage 	 ♦ Anxiety ♦ Boredom ♦ Depression ♦ Disappointment ♦ Exhaustion / Tired ♦ Fear ♦ Frustration ♦ Isolation / Loneliness ♦ Overwhelmed ♦ Stress

The E-Learning Creation Experience Affinity Descriptions

Leadership

Leadership, as explained to participants during axial interviews, controls the affairs of a business. Leaders define the mission, vision, and goals or an organization, author strategy, and often oversee its execution. Leadership comprises the individuals and teams of individuals with either direct or indirect authority and decision-making power over e-learning practitioners. They may be part of the same team or functional department, often serving as project or program managers, supervisors, and coaches or mentors. They may also be distanced from the e-learning practitioner or team, serving in executive leadership roles such as Chief Executive Officer or Chief Learning Officer. Leaders differ from practitioners in that they have strong influence over the experience but are farther removed from day-to-day e-learning efforts.

Leadership is a primary driver of the e-learning creation experience system. It influences every other affinity. The vision, leadership/management style, and communication practices of leadership strongly influence e-learning creation, and the level of knowledge and experience leaders have about e-learning industry best practices also impacts creation. Additionally, practitioners form opinions about leadership accessibility and character.

Organization

Organization refers to a company's structure and culture. A company's structure may be described as being hierarchical in nature, with multiple levels of leadership and authority from executive leadership down to low-level staff members. A structure free of

hierarchy in which all individuals are at the same level is often referred to as being flat.

Divisional structures are defined as pronounced and separated departments that may function almost as distinct, smaller companies within the larger company. Bureaucracies reflect on main leader or small group of leaders controlling all other aspects of the entity.

All company structures have a culture, described as a set of relationship standards and protocols that are encouraged and perpetuated. Collaborative cultures promote and reinforce employees and/or project stakeholders working together to achieve a common goal. More than a divide-and-conquer approach, collaborative cultures synthesize talents and ideas to shape desired outcomes. Competitive cultures encourage colleagues to work independently to stand out as superior. Rather than working together on a common goal, competitive cultures may involve multiple individuals working on the same goals separately and concurrently. Control cultures exist when one individual or group makes decisions for the majority. For example, an e-learning practitioner may be told to use a specific learning strategy or media asset rather than being allowed to prescribe according to analysis of needs. A creative culture places a premium on thinking about, sharing and implementing new ideas.

Policy

Axial interview participants were told that policy describes the set of documented guidelines that establish standards in areas such as employee behavior. Policy guides and/or governs the way a company conducts business. Components of policy include standards of conduct, which in most cases are universal across an entire company as opposed to being unique to a smaller group such as an e-learning team. Recruitment and hiring policies establish the standards and procedures for advertising job openings, interviewing and selecting candidates, and may also outline the onboarding experience

for newly hired talent. Compensation and benefit policies may prescribe minimum and maximum pay, healthcare options, bonuses, and more. Employment policies may define conditions that must be consistently met to remain in good standing, while work schedule defines mandatory hours of availability, location, and the degree of flexibility allowed. Policies pertaining to performance reviews and promotions establish paths for upward mobility and protocols for measuring the degree to which an employee has succeeded in a specific role.

Facilities

Facilities refer to the buildings and work spaces in which e-learning creation occurs. In this study, the facilities affinity also encompasses characteristics such as environmental conditions and safety. This study explored the geographical location where work was conducted as well as the specific spaces themselves, (often either an office or a cubicle), including and differentiating home offices.

Personnel / Team

The people with the knowledge, skills, abilities, and competencies needed to perform a position are referred to collectively as personnel or team. The e-learning creation experience involves numerous types of personnel, from program or project managers, (who may also be considered leaders), to instructional designers, multimedia experts, and editors. Subject Matter Experts, (SMEs), are also considered part of personnel / team for purposes of this study, though they may not always be part of the same functional team and may also be part of an entirely different company.

Instructional Systems Design Process

Axial interview participants were told that the instructional systems design process describes the systematic process and established procedure by which instructional materials are designed, developed, and delivered. The instructional systems design process, as an affinity, encompasses learning theory, or widely accepted beliefs about how learning transfer and retention are best encouraged and reinforced. The affinity also encompasses planning, which includes all of the activities a practitioner may perform to prepare for an e-learning creation effort. Each phase of the ADDIE process is included in the list of sub-affinities of the instructional systems design process.

Resources / Materials

This IQA study uses the term resources / materials. It is used to denote all of the things that e-learning practitioners use to perform work as resources and materials. As an affinity, resources / materials includes the hardware that practitioners use during the e-learning creation experience as well as all of the design, development, creative, and administrative software involved. Resources / materials also includes media and content, such as stock images and audio files that may be obtained and used as training assets. The affinity even includes ubiquitous materials such as office equipment and supplies and the networks used during the e-learning creation experience.

Training

The term training, as used in this IQA study and as an affinity of the e-learning creation experience system, refers to learning efforts in which practitioners participate. Two main types of training exist: formal and informal. Formal experiences include

possible degrees, such as a Bachelor's degree, while informal experiences include professional development, mentoring, efforts initiated and driven entirely by the practitioner, and training provided on-the-job by colleagues, leadership, and others.

Communication

Communication, as noted during axial interview experiences, is the exchange of information between groups and individuals. Communication may be written or verbal, and may take the form of official messages and meetings. Communication may support collaboration and the delivery of feedback as well as the sharing of rumors. It may be supported through social media and, at times, may involve sharing of incorrect information, or miscommunication.

Client Relationship

The connection between the client and the e-learning team and their involvement with one another constitutes the client relationship. Client relationships may be adversarial if practitioners are in opposition with client stakeholders. The relationship may also be transactional, whereby the focus is on the purchase or acquisition of a product or service. A consulting / informational client relationship involves analysis or advice either early on in an engagement or throughout the lifecycle of a project. A sharing client relationship focuses on the free exchange of ideas, old and new content and materials, and access to tools or systems with potential to ultimately support the e-learning creation experience. Finally, the collaborative partnership is a client relationship in which the e-learning experience is shaped by the combined experience and expertise of practitioners and client stakeholders.

Product

Any outcome from the e-learning creation experience is considered a product. A product, as an affinity, need not be the final deliverable or complete course. Products encompass proposals and contracts that define the nature of a client relationship and e-learning effort, the project plans and reports that serve to define responsibilities, deliverables and communication progress and issues on an ongoing basis, and analysis / design documents providing the data used to prescribe a unique e-learning solution or set of solutions. It also includes the storyboards, final course materials, source files (which by themselves do not enable course functionality but offer native formats for future course updating and revision), and evaluation materials either from learner performance or from practitioner observation and research following course release.

Emotions

Emotions is the affinity comprised of the many positive and negative feelings one experiences about supporting e-learning initiatives. The emotions affinity consists of twenty sub-affinities ranging from negative emotions such as depression, fear, and anger to positive emotions such as contentment, pride, and trust.

A Walk Through the E-Learning Creation System

The affinities derived from participant data during the second phase of this IQA study and the relationships among the affinities derived from theoretical interviews are the two main parts of the e-learning creation experience system. Interpreting the system requires examination of how the affinities are positioned as well as how they influence one another. In some cases, recursions exist whereby following the arrows of a system enable looping, referred to as feedback loops, that each include three or more affinities. Feedback loops of a system may be named and analyzed individually and in relation to the rest of the system.

IQA systems are assembled with the most influential affinity to the far left and positioned on top and with the least influential affinity to the far right and positioned on the bottom. All other affinities are positioned in order of influence. For example, leadership, as the primary driver, influences all other affinities and so it appears to the far left and above organization. Emotions, in contrast, is the primary outcome and it is positioned on the bottom right of the system, below product. This section describes how the affinities relate to one another in the e-learning creation experience system and how several intersecting feedback loops offer further insight into the e-learning creation experience.

The E-Learning Creation Experience System

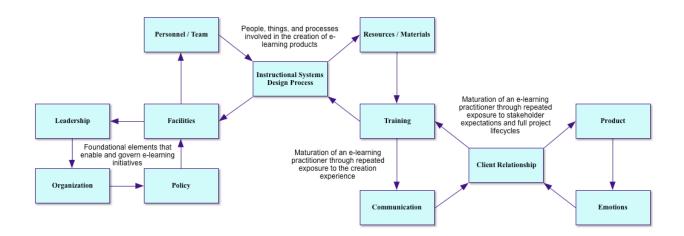


Figure 5.1: The E-Learning Creation Experience System

The system originates with leadership. Leadership of a company, as noted previously, may take several forms. Leadership shapes other highly influential affinities of the system, including the structure and culture, (or organization), policy, and the facilities in which work is performed. These four affinities together form the Get Ready feedback loop. Exiting the loop leads to personnel, comprised of the people working toward the common goal of e-learning creation. These individuals influence all aspects of the instructional systems design process, which in turn influences the resources and materials that are available during the effort. Team members may require various training based upon the nature of those resources and materials, and that training may in turn influence the instructional system design process and how it is implemented. Changes to how the instructional systems design process is implemented may impact the facilities, and thus another feedback loop is established. The Get Done feedback loop encapsulates all of the people, things, and activities involved during the creation of e-learning products.

The training that practitioners have completed or are participating in also influences communication. Training affects how people communicate, the methods they employ, and how successful various communication efforts are. Communication influences the team's relationship with the client, which in turn influences the training that practitioners may need to have completed or may need to complete in the near future. As noted earlier, practitioner training experiences feed back into the instructional systems design process, which in turn influences the resources and materials. And as noted earlier, resources and materials influence training. This five-affinity feedback loop represents a practitioner maturity cycle during which interactions with both the client and the instructional systems design process sets the stage for continuing education and instructional design fluency. A similar feedback loop occurs when a practitioner's relationship with the client influences the various e-learning products, from proposals and contracts to storyboards and final course materials. The degree to which those products are utilized, the levels of client satisfaction with the products, and the level of practitioner satisfaction with the products all impact emotions—the system's primary outcome. Emotions, however, are able to influence the client relationship, thus allowing the cycle to repeat. This intersecting five-affinity loop represents a practitioner maturity cycle during which repeated balancing and negotiating with clients in an effort to produce what the practitioner interprets as an instructionally-sound product enables the acquisition of business acumen and fosters professional growth. These two feedback loops are referred to as Get Better (Build) and Get Better (Balance), respectively.

The sections that follow expound upon the four e-learning creation experience system feedback loops.

The Get Ready Feedback Loop

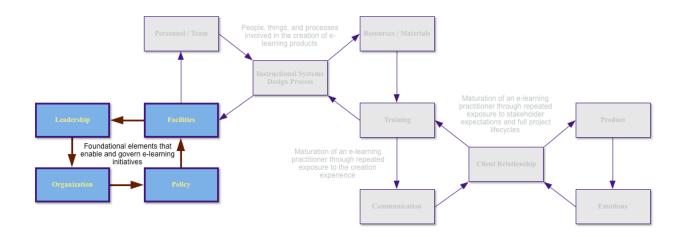


Figure 5.2: The Get Ready Feedback Loop

The Get Ready feedback loop involves affinities that may be beyond the control of an e-learning practitioner, but that greatly influence the e-learning creation experience. Practitioners are either employees (full or part-time) of an entity, or they are freelance talent hired contractually. Regardless of the nature of their work, practitioner encounters with leadership are common. Leaders of a company at various levels shape the organization, policy, and facilities associated with sponsoring the work. Completing the loop, facilities influence leadership by either supporting or restricting a leader's communication and visibility. The loop generates readiness for acceptance of an elearning engagement, involvement of a team, and performance of the tasks required by elearning creation.

This feedback loop influences and exists prior to personnel / team involvement and well before the instructional systems design process. The nature of this loop may reinforce positive system outcomes, or hinder them. Study participants preferred that leadership understands and respects instructional design as a methodology and that

leadership views e-learning as a promising delivery format. Participants also appreciated leadership availability. Participants found divisional and bureaucratic structures to hinder project success, and noted that collaborative and creative cultures often bolstered teamwork and yielded quality products. Performance reviews and promotions interfered with success when they were either unfairly conducted or overly complex, and poorly written job descriptions sometimes led to team members who were either unaware of true job requirements or unqualified for the work. Finally, with facilities, participants were overwhelmingly positive about home offices. If they were not at a home office, practitioners preferred the absence of cubicles. They also favored collaborative spaces except when, in extreme cases, collaboration was unstructured and impeded practitioner concentration and progress.

The Get Done Feedback Loop

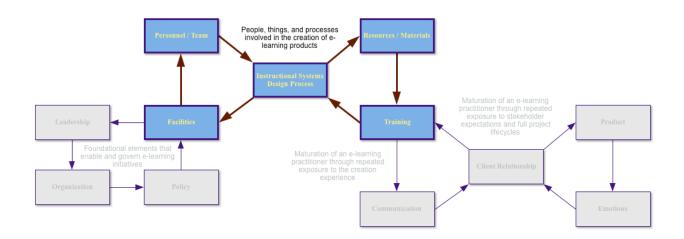


Figure 5.3: The Get Done Feedback Loop

The Get Done feedback loop involves five affinities related to completing elearning creation tasks. It begins with the facilities in which work takes place, including traditional office environments (with and without doors) and home offices. Facilities directly influence the team assigned to an e-learning effort, and the team influences the various phases and efforts associated with the instructional systems design process. The manner in which the instructional system design process is followed influences the resources and materials that will be necessary and available to the team. Some resources and materials require specialized training, which establishes another influential relationship. And, similarly, practitioner training experiences directly influence execution of the instructional systems design process. As noted earlier, the manner in which the instructional systems design process is carried out influences facilities necessary for completion of work, thus completing the Get Done feedback loop.

The Get Done feedback loop begins with the last affinity of the Get Ready feedback loop: Facilities. The nature of facilities directly influences the people contributing to an e-learning effort. Conditions such as extreme temperatures, absence of natural light, presence of cubicles, and noise and disruptions that impede concentration all present challenges to the personnel / team. Conversely, the ability to work in home offices and the availability of private spaces positively impacts the e-learning creation experience.

The team influences the instructional systems design process. Participants noted that some individuals in instructional design roles might more aptly be defined as programmers or developers because they lack understanding of learning theory and instructional best practices. Similarly, some project managers leading e-learning creation experiences are assigned to a project because of overall management expertise and they may have had no previous exposure to e-learning as a delivery method. While other team roles present challenges, none present a greater challenge than subject matter experts. Subject matter experts may either want more control over an e-learning solution than is feasible or they may be reluctant to share necessary information with e-learning teams. In extreme cases, they may simply be unavailable to provide critical support.

The instructional systems design process is in many ways at the mercy of the team assigned to implement it. Learning theory is widely respected and yet seldom explored to the degree most practitioners deem acceptable. Practitioners are often excluded from project planning phases and not debriefed on background information about the project. Similarly, analysis efforts are often expedited or skipped altogether. Practitioners also shared overwhelming support for evaluation efforts, though few had ever been given an opportunity to conduct any level of e-learning course evaluation.

Practitioners noted that with resources and materials, computers were readily available but often slow and outdated, especially if provided by an employer. Practitioners view authoring and design software typically required during e-learning creation as expensive and policy often hinders installation. Additionally, media posed a significant challenge; stock or off-the-shelf digital assets do not easily meet image needs. New and new versions of resources and materials influence training. Practitioners noted great success and enjoyment from self-directed learning activities, but were less satisfied with on-the-job training experiences.

The Get Better (Build) Feedback Loop

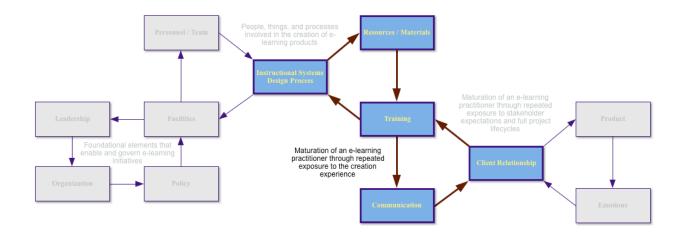


Figure 5.4: The Get Better (Build) Feedback Loop

The Get Better (Build) feedback loop involves five affinities related to improving or expanding experience with e-learning creation. The loop represents the process in which practitioners take on the role of learners by acquiring new knowledge, skills, and abilities that enhance their e-learning creation competence. The Get Better (Build) loop intersects the Get Done loop, although the Get Better (Build) loop begins with the instructional systems design process and the central affinity is training.

As previously noted, the instructional systems design process influences resources / materials. Depending upon how the process is implemented, specific resources and materials may be required. If those resources and materials are unfamiliar or new to practitioners, then training is impacted; practitioners may need to learn how to use authoring and development software or evaluation materials and methods. Past and present practitioner training experiences and accomplishments influence communication. Communicating with colleagues, project stakeholders, subject matter experts and others requires knowledge, skills, and abilities often acquired during training.

Practitioners frequently communicate with client stakeholders, and so the communication affinity directly influences the client relationship. Content, tone, cadence, timing, and many other communication characteristics influence relationships that are necessary throughout the e-learning creation experience. Client relationships influence training, thus completing the Get Better (Build) loop; as project needs are determined and stakeholder requirements emerge, e-learning practitioners may need to interact with unfamiliar instructional subject matter or incorporate new strategies based upon targeted audiences and program goals. The repetition of this loop, especially from one project and/or client to the next, facilitates a professional maturation experienced focused on skill acquisition and expansion related to how the work is performed and how client demands are met.

The Get Better (Balance) Feedback Loop

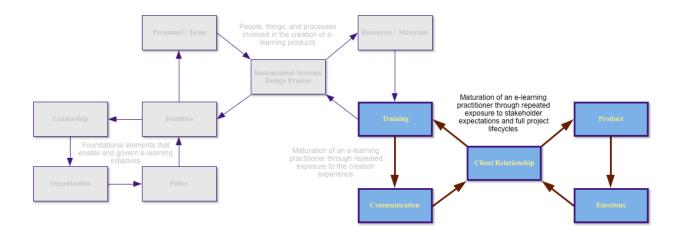


Figure 5.5: The Get Better (Balance) Feedback Loop

The Get Better (Balance) feedback loop involves five affinities related to improving or expanding a practitioner's ability to negotiate with client stakeholders and balance product quality with project requirements, conditions, and constraints. The loop represents the process in which practitioners take on the role of consultant by lobbying clients for time, materials, resources, and information necessary to achieve instructional integrity and success. The Get Better (Balance) loop intersects with the Get Better (Build) loop; it begins with training—the central affinity of the Get Better (Build) loop.

As noted previously, practitioner training influences communication, which, in turn, influences the client relationship. An e-learning practitioner's relationship with the client and with client stakeholders influences all of the various products associated with an engagement. Proposals and contracts, design documents, programmed files, and more are all impacted by the interactions between individuals supporting e-learning efforts and the stakeholders who have initiated and funded the work. Products, as tangible outcomes of an e-learning engagement, influence practitioner emotions. A product that is perceived

as stellar and effective may lead to feelings of pride and satisfaction among those who participated in its creation. And conversely, when products fall short of expectations, negative feelings such as frustration and anxiety are likely. Emotions are often visible to others, despite a practitioner's efforts to conceal them. Emotions influence the client relationship, which in turn influences practitioner training and thus completing the Get Better (Balance) feedback loop.

The Ultimate Outcome: E-Learning Success

The e-learning creation experience system is comprised of primary and secondary drivers as well as primary and secondary outcomes. The ultimate and most ideal outcome of the system, however, is e-learning success. E-Learning success, as described in Chapter One of this document, is the achievement of learning transfer and retention (of knowledge, skills, and abilities acquired during participation) among target audiences. The chapter also suggested that improving e-learning success begins not with inventing a better methodology or releasing a more robust authoring tool, but with improving our understanding of the modern-day e-learning creation experience. This study yielded a complete system of twelve affinities, detailed qualitative information about each affinity (and sub-affinity), and identification of the influential relationships occurring throughout the system. While none of the twelve affinities is titled e-learning success, each plays an integral role in achieving e-learning success as an outcome of exercising the system.

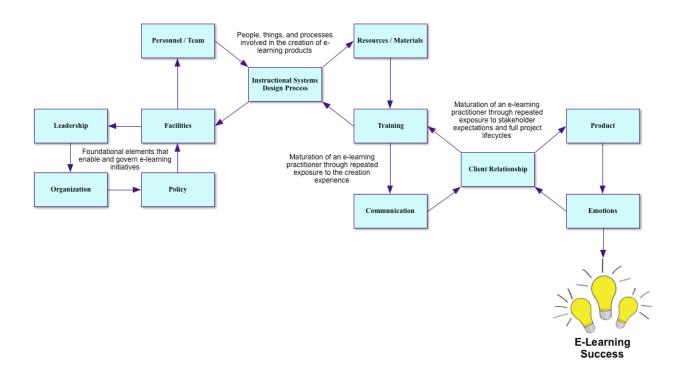


Figure 5.6: The Ultimate Outcome: E-Learning Success

The practitioner's experience with each of the twelve affinities and a practitioner's ability to navigate the system and emerge from the four feedback loops either contribute to or diminish e-learning success. The next section of this chapter will exercise the system by looking at five scenarios focused on different areas of e-learning creation and based on stories that participants shared during interviews.

Exercising the Model

This section exercises the e-learning creation experience system and explores how five different scenarios, based on actual stories shared by study participants, impact the ultimate outcome of e-learning success. The five scenarios are summarized below and then explained in detail.

- 1. Leadership, unfamiliar with e-learning best practices, establishes a corporate structure, culture, and policies incongruent with how e-learning practitioners prefer to work.
- 2. The e-learning team is comprised of practitioners who are knowledgeable of industry best practices and fluent with the instructional systems design process.
- 3. When implementing the instructional systems design process, analysis and evaluation efforts are skipped to save money and shrink the project lifecycle.
- Practitioners required to utilize a new authoring application complete self-directed learning experiences to establish competence and to capitalize on the application's capabilities.
- 5. An adversarial client relationship exists in which client stakeholders interfere with proposed and previously agreed upon solutions.

Scenario 1: Leadership is Unfamiliar with E-Learning

In this scenario, leadership, unfamiliar with e-learning best practices, establishes a corporate structure, culture, and policies incongruent with how e-learning practitioners prefer to work.

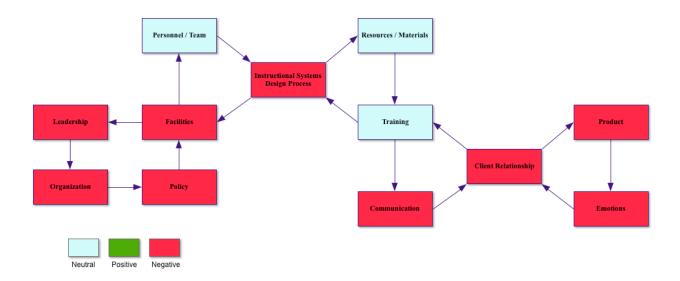


Figure 5.7: Leadership is Unfamiliar with E-Learning

This scenario represents a failure during the Get Ready feedback loop. During IQA interviews, practitioners voiced a strong preference for structures that established clear relationships and open dialogue and for cultures that fostered collaboration and creativity. Without an understanding of how a company's organization influences the elearning creation experience, leadership may establish a structure and culture that impedes the instructional systems design process. Communication among team members, project or program management, clients, and subject matter experts may break down and negatively impact the client relationship. A less-than-satisfactory client relationship sets the stage for products that fail to meet project goals and objectives—a condition that would no doubt take an emotional toll on practitioners.

This scenario is particularly troublesome in that in an effort to produce better products in the future, leadership may focus on upgrading resources and materials, increasing access to training, or replacing team members involved in the failed projects. In this system, however, all of those affinities are neutral, and improvement will remain

elusive without addressing causes rooted in the Get Ready feedback loop at the beginning of the system.

Scenario 2: Practitioners are Fluent in Instructional Design

In this scenario, the e-learning team is comprised of practitioners who are knowledgeable of industry best practices and fluent with the instructional systems design process.

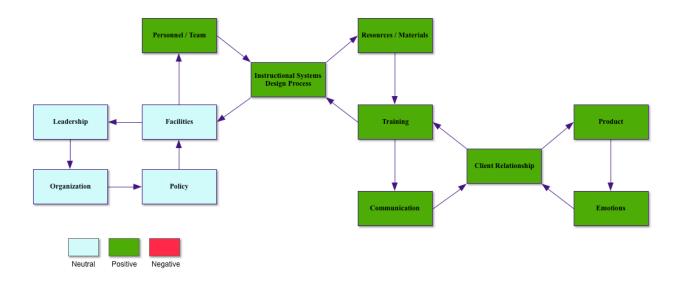


Figure 5.8: Practitioners are Fluent in Instructional Design

A knowledgeable team will understand the importance of all phases of the instructional systems design process. They will implement the process. As a result, they will select and utilize resources and materials most appropriate to project goals, to the instructional content, and to the target audience. Any training they complete will likely be driven by an accurate self-assessment of their own weaknesses, and by addressing them, they will mature through the two improvement loops: Build and Balance.

Study participants voiced concerns about instructional design professionals who lacked formal training or who may have been assigned instructional design or e-learning titles and roles because they knew about the subject matter or simply because nobody else was available at the time of need. The e-learning creation experience system illustrates not only the benefits of a strong team, but also the potential risks of assigning team members unable to confidently navigate the Get Done feedback loop.

Scenario 3: Analysis and Evaluation Efforts are Avoided

In this scenario, when implementing the instructional systems design process, analysis and evaluation efforts are skipped to save money and shrink the project lifecycle.

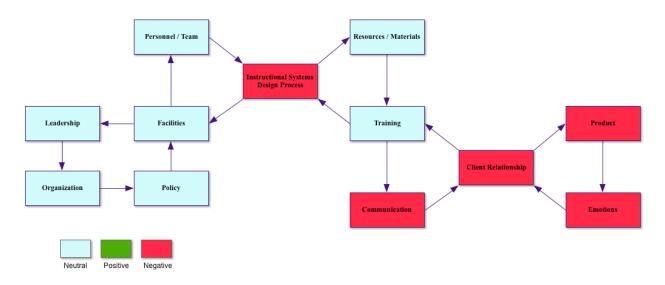


Figure 5.9: Analysis and Evaluation Efforts are Avoided

Participants were concerned about how infrequently analysis and evaluation efforts, (the preliminary and final phases of most instructional design methodologies), were undertaken. They acknowledged the importance of the up-front analysis of needs as well as the evaluation of programs after they have been implemented. Using the system, we can see that when analysis is skipped, communication may be tinged with

inaccuracies and incomplete data. Learner characteristics may have been ignored during the Get Done feedback loop that enabled hidden, serious flaws throughout the learning experience. This may strain the client relationship, decrease product effectiveness, and immerse practitioners in emotional turmoil. Similarly, the lack of evaluation activities may forever shield potential far-reaching benefits of an e-learning program or enable repetition of less than ideal strategies and instructional treatments during future efforts.

The e-learning creation experience system illustrates how skipping seemingly minor activities could derail a loop that is completely outside of the instructional systems design process and thwart any chance of e-learning success. The risks of avoiding analysis and evaluation should be weighed heavily against the potential breakdown of client relationships and of the Get Better (Balance) feedback loop.

Scenario 4: Self-Directed Learning Supports Resource Utilization

In this scenario, practitioners required to utilize a new authoring application complete self-directed learning experiences to establish competence and to capitalize on the application's capabilities.

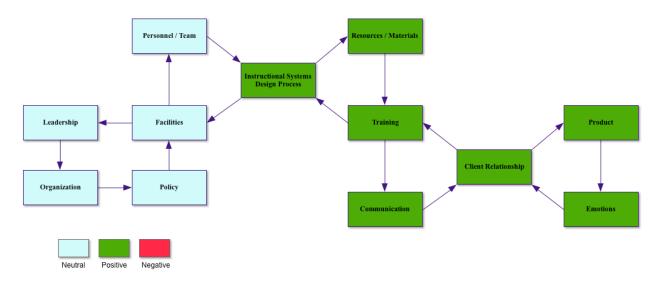


Figure 5.10: Self-Directed Learning Supports Resource Utilization

Study participants value self-directed learning and credit it for helping them to keep up with numerous and frequent changes and advancements related to technology and to software tools. Successful self-directed learning experiences positively impact three feedback loops contained within the e-learning creation experience system: Get Done, Get Better (Build), and Get Better (Balance). The successful training experience enhances implementation of the instructional systems design process. It also enhances communication through expanded knowledge shared with other team members and with clients. The client relationship may also be strengthened as a result, leading to a higher quality product and the positive emotions associated with successful outcomes.

The potential for self-directed learning (and similarly for on-the-job learning) to reinforce positive experiences throughout a wide swath of the e-learning creation experience should give leaders and project stakeholders a reason to demonstrate commitment to the time and resources necessary for practitioner-driven events.

Scenario 5: A Client Relationship is Adversarial

In this scenario, an adversarial client relationship exists in which client stakeholders interfere with proposed and previously agreed upon solutions.

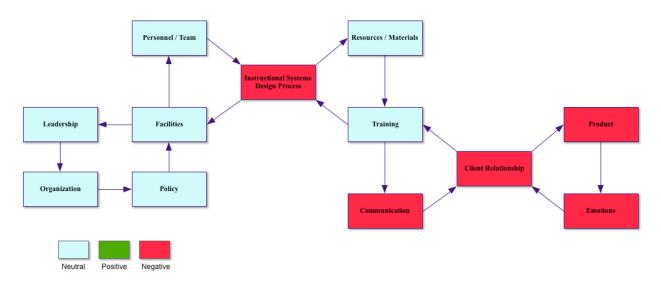


Figure 5.11: A Client Relationship is Adversarial

A participant provided an example of an adversarial relationship in which a client repeatedly questioned the e-learning practitioner's choice of audio talent, video assets, and more. The participant linked that adversarial relationship to the delivery of an e-learning product that was far less engaging and effective than it might otherwise have been. An adversarial client relationship negatively impacts the product, which in turn stirs negative emotions for those involved in the creation experience. Communication with the client is likely to also be negative, and the ability to implement the instructional systems design process may be hampered.

Similar to the previous scenario, client relationship status may impact affinities from three different feedback loops of the e-learning creation experience system. The potential widespread damage from adversarial client relationships warrants the

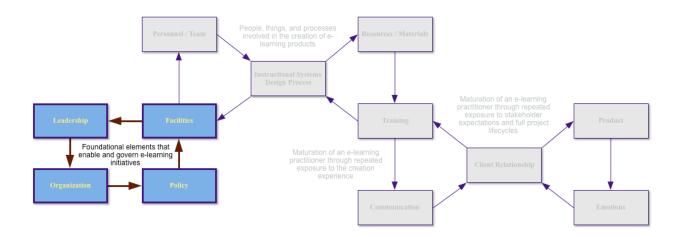
observation, care, and intervention necessary to nurture and strengthen the client relationship throughout the e-learning creation experience.

Problems and Solutions

The e-learning creation experience system contains affinities that are both within and beyond practitioners' control. The system's intersecting feedback loops and the manner in which affinities influence one another impact e-learning success. Problems occurring in one or more affinities lead to problems in others. The system, then, serves as a model for predicting outcomes and establishing solutions that may increase the chances that an e-learning experience ends in learning transfer and retention throughout target audiences.

The potential problems associated with a company's structure and culture discussed in Scenario One illustrate how less than ideal conditions in one affinity or throughout one feedback loop may impact all other feedback loops. Scenario One also demonstrates how sincere efforts to fix a problem may exclude root causes. Using practitioner experiences shared during the interview process, the researcher defines problems and solutions throughout the e-learning creation experience system. Problems and solutions are organized by feedback loop and presented in a table format. Again, some solutions may be beyond the control of practitioners and, at times, leadership. In such cases, the system may be used to facilitate discussion with leadership and communication about how solutions may mitigate risk and reinforce e-learning success.

Get Ready Problems and Solutions



The Get Ready feedback loop sets the stage for the e-learning creation experience and is largely beyond the control of practitioners. It contains the primary driver of the system, (leadership), as well as three secondary drivers heavily influenced by leadership. Problems occurring within the Get Ready loop threaten to negatively impact all other elements of the system.

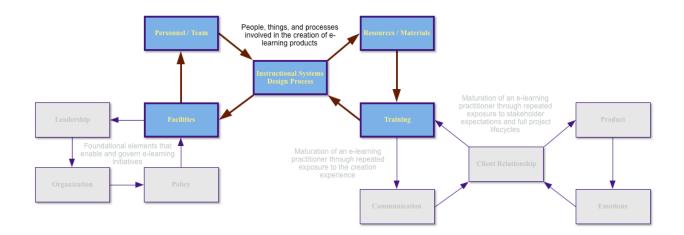
Table 5.2: Get Ready Problems and Solutions		
Problems	Solutions	
Team leadership, while fluent in project management best practices, have no experience or foundational understanding of e-learning.	 Design abridged e-learning primers suitable for non-tactical leaders. Involve leaders in regular team meetings and include them in progress reviews. Author portfolio-style case studies of successfully completed programs including drivers and outcomes. 	
A flat structure causes confusion and a lack of direction among the e-learning team.	 Assign one decision-maker within each practice area such as design and programming. Establish levels of authority throughout the e-learning team and communicate to all during project kick-off events. Provide the client with one source with whom to communicate needs, changes, feedback, and project issues. 	
Policies related to work location and time restrict e-learning team flexibility.	 Poll team members to identify ideal work arrangements (including location and time). Draft clear and concise telecommuting privileges that balance personal preferences with corporate requirements. Establish secure team networking capabilities that include synchronous and asynchronous methods. 	
Performance review procedures are overly complex and implementation is time intensive.	 Divide performance review efforts into smaller, more manageable time periods. Revise policies to ensure that logistics and execution do not impede recognition and remediation. Research performance review best practices available through human resource journals, texts, and events. 	

Table 5.2, cont.

The facilities inhibit quiet reflection and concentration often necessary throughout the design phase of e-learning creation.

- Establish quiet rooms that practitioners may reserve as needed.
- ◆ Enable telecommuting for team members assigned instructional design or scripting efforts.
- ◆ Position collaborative meeting spaces away from the desks of instructional designers and project managers.

Get Done Problems and Solutions



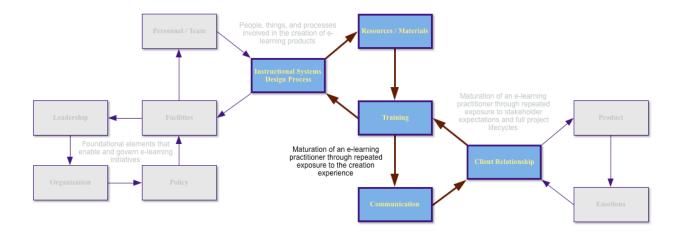
The Get Done feedback loop centers around the instructional systems design process and includes all affinities associated with the creation of e-learning products. It contains two secondary drivers. Problems occurring anywhere in this loop will ultimately impact the client relationship and the final products.

Table 5.3: Get Done Pr	roblems and Solutions
Problems	Solutions
Team members are located in areas that are not conducive to collaboration.	 Implement team-wide use of online tools such as Google-Docs and Inspiration to enable practitioner interaction across multiple locations. Consider desk and office placement according to product team as opposed to functional role. Schedule regular meetings that bring the e-learning team together and follow a structure that supports collaboration.
Instructional designers lack training and background in implementing the instructional systems design process.	 Pair novice designers with seasoned mentors to reinforce on-the-job learning. Schedule regular, informal peer-to-peer training events on various instructional systems design topics, strategies, and best practices. Work with human resources professionals to modify the recruitment and interview process and to ensure onboarding of qualified instructional design personnel.
Leadership and/or client stakeholders are reluctant to accept the direct and indirect costs associated with analysis and evaluation efforts.	 Prepare a cost benefit analysis (in non-academic language familiar to stakeholders) that communicates the value of analysis and evaluation activities. Consider wrapping minimal analysis and evaluation efforts into overhead costs, establishing them as non-negotiable, essential features of every e-learning creation experience. Collaborate with legal professionals to ensure contract language protects practitioners and the development firm against negative outcomes associated with absence of analysis and evaluation efforts.

Table 5.3, cont.

Hardware and software are out-of-date and routinely cause design and development delays.	 Start and maintain an audit of hardware and software (complete with license data and system details) and assign the most modern systems to those with assignments that require power and speed. Ensure adequate budgetary allocations for reasonable system upgrades and software acquisition. Consider cloud-based license programs (such as the Adobe Creative Cloud) that facilitate implementation of bug fixes and download of upgrades.
Training opportunities are either not encouraged or not allowed due to aggressive project schedules, goals related to billable hours, or both.	 Allocate a percentage of time each week for each team member to complete a self-directed learning activity. Work with human resource professionals to explore company-wide learning programs (such as Lynda.com) that may not impact the financial status of the department or team. Utilize flexible training time as a practitioner reward for positive client feedback about a product, the early completion of deliverables, or the solving of complex e-learning problems.

Get Better (Build) Problems and Solutions



The Get Better (Build) feedback loop is comprised entirely of affinities classified as secondary outcomes. It is unusual in that while it contains no drivers, problems occurring within this loop may very likely impact the final product.

Table 5.4: Get Better (Build	d) Problems and Solutions
Problems	Solutions
Learning theory, as a sub-affinity of instructional systems design, is ignored during e-learning creation.	 Seek to be involved in the project proposal phase and attempt to include the application of learning theory as a hallmark of the final e-learning product. During either external or internal kick-off meetings, brainstorm with team members about how strategies, metaphors, case studies, scenarios and other applications of learning theory may align with instructional objectives. Spend time reviewing award-winning e-learning solutions available online and at conference proceedings for ideas and inspiration.

Table 5.4, cont.

Media and content is not readily available and no strategy exists for the creation of	 Explore free and fee-based online image and media databases.
custom e-learning assets.	♦ Maintain a bench of contract or freelance media professionals who may address custom needs in less time than it may take to search for the ideal image or video solution.
	♦ Consider launching an ongoing internal project whereby the team creates its own digital repository of images based on the industries or verticals you serve, and explore low-cost digital asset management systems to tag and retrieve assets as needed.
The network used by the team is unreliable,	◆ Work closely with IT professionals to
slow, and inconsistently accommodates	identify ways to improve network
telecommuting practitioners.	functionality and reduce the risk to both work in progress and work previously saved.
	 Consider alternative back-up solutions above and beyond those considered standard according to company policy.
	◆ Ensure that all team members— especially instructional designers— have full Internet search capabilities when course creation is underway.

Table 5.4, cont.

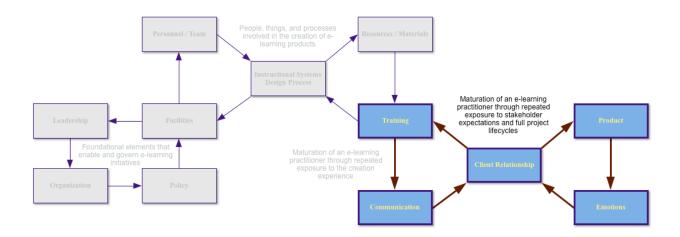
The volume of e-mail messages received by the e-learning team on a daily basis is large enough to be overwhelming and to continually interrupt the e-learning creation experience.

- ◆ Train the e-learning team on how to establish priority levels based on sender identification; for example, client messages would always be set as urgent or high priority.
- ◆ Conduct workshops or provide guidance about combining and consolidating general and low-priority messages into one daily or weekly message as opposed to many shorter messages throughout the day.
- ◆ Consider conducting, managing, organizing, and archiving project-related messages using online applications (such as Sharepoint) instead of using corporate e-mail applications.

The client-assigned subject matter expert fails to return phone calls, refuses to provide necessary documents, and is habitually late when providing feedback on e-learning deliverables.

- ◆ Clearly communicate subject matter expert expectations (and the consequences for failure to meet those expectations) in writing prior to project kick-off.
- ◆ Facilitate subject matter expert interaction by accommodating limited schedules, consolidating messages and requests, and performing your own research before immediately asking questions to which readily available answers exist.
- ♦ As a last resort and when project success is clearly at risk, escalate by informing client stakeholders about the situation and asking for intervention or subject matter expert replacement.

Get Better (Balance) Problems and Solutions



The Get Better (Balance) feedback loop consists entirely of affinities designated as outcomes. It also contains the primary outcome for the system, emotions. The Get Better (Build) loop involves a potentially repetitive cycle whereby practitioners become familiar with (and possibly improve their skills with) balancing product quality with project limitations and constraints. Problems with this loop will likely impact e-learning success and foster negative emotions.

Table 5.5: Get Better (Balan	ce) Problems and Solutions
Problems	Solutions
The e-learning practitioner does not have access to client stakeholders and the project manager neglects to share pertinent and relevant information.	 Establish a central repository in which all project-related documentation is located and easily accessible to assigned team members. Include design and develop leads/resources in client meetings and reviews to reduce or eliminate the need to repeat what was shared. Hold program and project management professionals accountable for ensuring assigned team members are given access to all items and information likely to impact e-learning products.
The final e-learning course is uploaded to a client-owned learning management system and on the day it is made available to target audiences, major functionality issues are reported.	 Build an e-learning testing phase into the project schedule that includes testing access through designated learning management systems and complete testing before making the course experience available to target audiences. Maintain ongoing communication with client information technology professionals and keep apprised of learning management system and network changes that may impact the elearning course in progress. Start and maintain an online issues log beginning at testing and carrying through to course launch; include issue status and priority levels.

Table 5.5, cont.

The client insists on course content changes that are incongruent with the instructional objectives on which the subject matter expert signed off weeks ago.	 Engage the client in discussions about the origin of the need for each change and, if required to conduct them, document your recommendations in writing. Changes to previously agreed upon content may involve changes in schedule and cost; carefully calculate and communicate these to the client before implementation. Organize a meeting with the client and assigned subject matter experts to discuss the changes and to add additional perspectives and potential support from within the client's organization.
Both the subject matter expert and client stakeholder for a healthcare related course express serious concern over the lack of healthcare-related degrees among practitioners assigned to the project.	 ◆ Communicate the need for both instructional systems design talent and subject matter expertise and reassure the client that subject matter expert reviews and approvals are built into the project lifecycle. ◆ As experts amass new knowledge and experience in their fields, they may also experience increased difficulty recalling learning experiences and challenges they overcame during their path to proficiency; communicate this to your client and consider sharing relevant research and journal articles as evidence.

contracts.

♦ If you (and not the client) will be securing part-time or freelance subject matter expert support, consider adding

resumes or curriculum vitae for those individuals to relevant proposals or

Table 5.5, cont.

After a series of negative experiences with e-learning creation, practitioners feel frustration, disappointment, anxiety, fear, and isolation.

- Propose and organize off-site social gatherings that include out-of-office and remote personnel. Encourage team members to discuss their experiences and share frustrations as well as accomplishments.
- ♦ Consider obtaining team access to formal Webinars or workshops addressing the topic of negative emotions related to work experiences; many online and face-to-face affordable options exist.
- ◆ End regular project meetings with brief messages of reassurance and support, and consider asking each team member to share a negative experience with which the team and/or project management may help.

Suggestions for Further Research

The literature review of this study presented a background of instructional design and e-learning research. Practitioners are fortunate to have at their disposal today a wealth of empirical data about adult learning methods, instructional strategies, online implementation, case studies, and more. This IQA study offers a practitioner-driven snapshot of the e-learning creation experience, and that snapshot includes previously excluded elements such as leadership, policies, and emotions. Moreover, this study reveals the relationships among the elements of the e-learning creation experience system. Additional research to further validate the structure of the system is recommended. Access to larger populations may also seek to identify system characteristics that are unique to specific practitioner types, such as corporate trainers, federal employees, higher education designers, and more.

The power of a system is the ability to explore how conditions originating from one element may likely impact one or more other elements of the system. While this study's interpretation chapter presented twenty problems and sixty potential solutions based on participant stories, there are many more stories waiting to be heard. Additional qualitative research should seek to capture these stories and identify areas of critical need across the e-learning creation experience system.

While IQA includes quantitative efforts pertaining to the measure of affinity influences, additional quantitative studies related to the system may prove helpful. For example, this study suggests that collaborative environments promote a positive elearning creation experience. A fully quantitative effort may help quantify the strength of that relationship, as well as the strength of other relationships occurring throughout the elearning creation experience system.

This study involved the generation of one broad system inclusive of the e-learning creation experience. It is possible, using IQA, to create two separate systems in one study and to perform comparisons of those systems. For example, additional Affinity Production Interviews may be conducted with leaders of organizations that offer e-learning as a product or a service. A separate system representing the experience of leading e-learning organizations may be compared and contrasted with the practitioner experience system. Furthermore, the learner or target audience experience would add yet another incredibly useful set of affinities and relationships.

The researcher's strongest suggestion, however, is unrelated to a specific methodology, affinity, or unique constituency. It is related to frequency. Adult and workplace training demands have rarely been as strong or as fluid as they are today. Continued growth and improvement throughout the discipline depends upon the ability of researchers to keep up with the pace of industry change. As new subject matter, networking breakthroughs, and delivery technologies emerge, practitioners and scholars alike must be diligent in their research and inclusive of all who contribute to the creation of successful e-learning experiences.

Theoretical Implications

The e-learning creation experience system, with its twelve affinities and influencing relationships, offers a holistic view that is broad and directly linked to practitioner thoughts, feelings, and opinions. Methodologies and existing models historically affiliated with the e-learning creation experience focus on tasks, such as needs analysis, storyboarding, or programming. The outcome of this study places existing methodologies and models as part of the instructional system design process and as but one affinity connected to many other affinities (including drivers and outcomes) not previously associated with e-learning. Theoretical implications of this study involve exercising the e-learning creation experience system to reveal conditions and circumstances that promote positive practitioner environments and e-learning success (defined as learning transfer and retention among target audiences).

The e-learning creation experience system consists of affinities and feedback loops that encompass the process of getting ready for the work, completing the work, and maturing as a practitioner who both builds solutions and balances needs and constraints. The interrelated nature of the elements of the system enables generation of theories about what supports and hinders success. For example, an e-learning solution that fails to achieve widespread learning transfer and retention may prompt many individuals to initially look at design strategies and storyboards as probably causes. Exercising the system, however, reveals probably causes outside of the instructional systems design process itself. Leadership, organization of a company, and documented policies may have negatively influenced the assigned team and their ability to implement processes. Similarly, a highly successful e-learning creation experience may be hastily (though in many instances appropriately) attributed to the assigned team and to the products it delivered. Exercising the system and venturing beyond the "Get Done" loop, however, reveals other potential contributors to success. These may include a work environment

conducive to collaboration, employment policies that enable practitioner flexibility, hiring practices that shaped a highly talented and cohesive e-learning team, leadership fluent in e-learning best practices, commitment to completion of analysis and evaluation efforts, and more.

The researcher embarked on this study not to test a theory, but to obtain an accurate and up-to-date practitioner-driven illustration of the e-learning creation experience. While the outcome of interactive qualitative analysis satisfies that objective, it also offers an incubator in which theories may be generated and then tested using a variety of quantitative, qualitative, and blended approaches. Entrepreneurs, Chief Learning Officers, and those involved with e-learning as a business may exercise the system and generate/test theories as a means to improve client satisfaction and retention, reduce employee turnover, and reinforce the success of their internal and external e-learning products. Scholars and academicians may exercise the system to audit existing e-learning and instructional design programs of study in an effort to produce capable, confident, and qualified e-learning practitioners. Common among all implications, however, are the goals of advancing the discipline through rapidly changing environments and continually improving the e-learning creation experience.

Conclusion

The e-learning creation experience system consists of twelve affinities and the relationships among them. Affinity Production Interviews and practitioner interviews contributed to its creation and survey data defined degrees of influence. The system is a reflection of practitioners' professional lives and how different aspects of professional life act upon one another to shape outcomes—including the ultimate outcome of e-learning success.

Four feedback loops intersect one another throughout the system, beginning with the most influential Get Ready loop that includes leadership, organization, policy, and facilities. This loop influences the second loop comprised of facilities, the e-learning team, the instructional systems design process, resources, and practitioner training. Together, these affinities comprise the Get Done loop in which e-learning work takes place. The last two loops involve practitioner maturation as builders, and as professionals able to balance the need for quality against project constraints. The center of the Get Better (Build) loop is training; the loop also includes the instructional systems design process, resources, communication, and the client relationship. The Get Better (Balance) loop circles around the client relationship and also includes training, communication, e-learning products, and emotions.

The system suggests that the instructional systems design process, while the focus of the majority of e-learning research, is merely one element of a much larger system in which leadership plays an influential role. Issues such as leadership experience with e-learning, organizational structure and culture, and employment policies all heavily influence e-learning products and the ultimate outcome of e-learning success. Practitioners' stories shared common themes including difficulties with subject matter

expert relations, reluctance among clients and/or stakeholders to promote analysis and evaluation efforts, and an abundance of daily communication absorbing valuable project design and development time. These issues and more, when viewed through the lens of the e-learning creation system, reveal potential positive and negative outcomes as well as possible historically unconsidered root causes.

This IQA study and the resultant e-learning creation experience system encourage inquiry rather than solve problems or prove hypotheses. The affinities and their relationships emerged from the lives of modern practitioners and serve as a springboard for discussion, exploration, and research—the cumulative effect of which advances the discipline, improves the e-learning creation experience for practitioners, and maximizes benefits for target audiences.

APPENDIX A: OVERVIEW OF INTERACTIVE QUALITATIVE ANALYSIS PROCESS

by Norvell Northcutt and Danny McCoy

Northcutt, N. and D. McCoy, (2004), "Interactive Qualitative Analysis: A Systems Method for Qualitative Research," Sage Publications.

McCoy, Danny. *Interactive Qualitative Analysis: How to do Qualitative Research* Unpublished Manuscript 2014.

The following, subsequent descriptions of methodology were written by and used with the permission of Northcutt and McCoy.

IQA Methodology

What is IQA?

Developed by Northcutt and McCoy at The University of Texas and published in their groundbreaking book, *Interactive Qualitative Analysis: A Systems Method for Qualitative Research*, Interactive Qualitative Analysis (IQA) is a systems approach to qualitative research, which seeks to advance upon phenomenology and grounded theory. Where grounded theory falls short, IQA picks up with systematic, protocol driven procedures and the ability to draw a system of influence. IQA utilizes protocols to develop research design, identify themes and draw systems. IQA was developed to take the mystery out of research and to provide graduate students with a tool chest for dissertation research. IQA integrates the identification of the nature of the problem with solutions, even when you are not sure what the problem is.

IQA is the art of seeing what is invisible to others and naming it. IQA identifies connections between all causes of a problem with the ability to draw a system of influence, an easy to understand visual representation of the phenomenon. IQA integrates the identification of the nature of the problem with solutions, even when one is not sure what the problem is.

IQA also reconciles quantitative TQM rigor to a qualitative design of data collection and analysis. IQA seeks to capture the lived reality of people, actively involving participants in the mapping of their stories. IQA identifies relationships among self-identified components of an issue. IQA integrates the identification of the nature of the problem with solutions, even when you are not sure what the problem is. IQA builds consensus among the focus group participants. IQA builds strategies around the nature of the problem.

The purpose of an IQA study is to allow a group to create its own interpretive "map" then to similarly construct individual "maps" of meaning: together, the two levels of meaning are used by the researcher as the foundation for interpretation. The "map" is represented as a system of states (affinities) held together by roadways (relationships among affinities). In plain language, an IQA study prompts the participants to examine these issues with respect to a phenomenon important to them:

- ♦ What does this mean to you?
- ♦ What led to this?
- ♦ What are the results?

IQA begins with a group process methods adapted from the Total Quality Management (TQM) movement to produce and analyze qualitative data. IQA seeks on the one hand to

capture the "lived reality" of people and involve the participants in the study in the meaning of their stories, the identification of constructs and relationships, and the development of theory; and on the other hand to produce high-level abstraction of this reality that captures the participants" "cognitive map" or their "theory in perception."

The systems perspective views relationships as interconnected parts with the whole being greater than the individual parts. Change in one part, leads to changes among all parts and the system itself. IQA combines the tradition of phenomenology, which asks what is the structure and the essence of the experience of the phenomenon for the people in the study, and systems theory whose central questions is: how and why does this system function as a whole. So IQA asks two broad questions: 1) What are the dimensions of the phenomena from the participants" point of view; and 2) How do the dimensions relate to one another?

The dimensions are the result of both inductive and deductive group processes and are called "Affinities" or textual references or terms related around a common meaning or theme. After Affinities are defined by being grouped inductively (from the particular to the general) and then assigned a range of meanings deductively (from the general to the particular), their relationships are explored systematically to produce a comprehensive picture. The analysis of the textual data is done by three kinds of coding activities and the participants both generate the data and analyze it.

A theoretical framework will emerge through the coding activities of the participative research method. This theoretical framework will depict a "theory of action" or a "theory-in-use" or what the participants actually experience.

Hence, IQA is a method of qualitative research, which relies upon group processes, interviews, and observation to understand and explain naturally occurring phenomena in a naturally occurring state. In addition, data collection and much of the data analysis are socially constructed by the participants under study; resulting in a theory grounded in the data. The collaborative nature of the processes helps manage the influence of organizational politics and protects minority voices and perspectives.

IQA seeks to balance the paradigms. IQA is an approach to qualitative research that attempts to integrate and reconcile some of the disjunctures in theorizing about the purposes and methods of research.

IQA is the art of seeing what is invisible to others and naming it. IQA identifies connections between all causes of a problem with the ability to draw a system of influence, an easy to understand visual representation of the phenomenon. IQA integrates the identification of the nature of the problem with solutions, even when one is not sure what the problem is.

Understanding a System

Systems have two components: *elements* and *relationships among the elements*. The elements may be as disparate as physical objects (parts in a manufacturing process, for example), mathematical constructs (acceleration, profit, loss, or IQ, for that matter), or for the purposes of this approach to qualitative research, categories of meaning. Understanding a system means:

- ◆ Identifying the elements of the system
- ♦ Describing the relationships among the elements
- ♦ Understanding how the elements and relationships dynamically interact to result in different *states* of the system, which implies
 - o Interpretation What is the nature of the unity represented by the system?
 - Making intrasystemic inferences What are the logical effects of changes of state of some elements on others?
 - Making extrasystem inferences Analyzing the effects of outside influences (interventions) on the system – What may we logically expect the effects of extrasystemic effects to be?

The three major inquiries above apply to a single system. By *single system*, we mean the systemic representation of a phenomenon from one person or group's viewpoint. If we have more than one system, a fourth very useful inquiry is possible:

♦ How do two (or more) systems compare in terms of elements and relationships, and what are the interpretive implications, both intra- and extra-systemic, of the comparison?

IQA Phases

IQA research flow has four distinct phases: Research Design, Focus Group, Interview, and Report (Results/Analysis and Interpretation/Implications). Research Design provides a series of tools to help articulate problems of interest, to identify constituencies that have an interest in the problem, and to state research questions that are implied by the problem statement. IQA then uses focus groups to identify the "map pieces" (affinities) of a system or systems that will ultimately represent the group's experience with the phenomenon. The group next identifies the "states," or the relationships between each of the affinities. Using a set of protocols or rules stemming from IQA systems theory, a system is drawn that represents a "mindmap" of the group's reality. Affinities defined by the group are then used to develop a protocol for interviews, which are invaluable in to further explore the meanings of the affinities and their systemic relationships. A comprehensive system diagram is developed from the interviews to explain the phenomenon. The final report allows the researcher to describe the affinities and their

relationships, to make comparisons among systems and individuals, to make inferences (predictions) based on the properties of the system(s). Following is a summary of each of the stages in the research flow.

Research Design

- ♦ Identify the "problem" or phenomenon of study (what you want to study)
- ♦ Identify the constituencies (who you want to study)
- ♦ Identify comparisons (for strength of analysis)
- ♦ Produce an Issue Statement and Focus Group Warm-up Exercise

Focus Group

- ♦ Identify themes or "affinities"
- ♦ Draw a crude system
- ◆ Produce an interview protocol

Interview

- ♦ Obtain rich descriptions of each theme
- ♦ Obtain rich descriptions of each relationship
- ♦ Identify relationships between each theme
- ♦ Produce a system

Report (Results/Analysis and Interpretation/Implications)

- ♦ Describe each theme
- ♦ Describe each relationship
- ♦ Describe the system
- ♦ Compare groups
- ♦ Make predictions
- Identify other theories that resemble or support the researcher's findings

It is important to note that each of the phases in the IQA research flow is represented by a protocol, and each protocol is supported by a document or set of documents, resulting in a public data collection and analysis audit trail for the entire study. In other words, issues of credibility and trustworthiness are addressed at least in part not only by a standard analytical protocol that is dependent neither on the subject matter (the nature of the affinities) nor on the inclinations of the researcher, but by the standardization and documentation of each step in the research process. Below is a system summarizing the phase of an IQA study as well as the IQA document flow. Note that for each element in the research flow, which represents a particular protocol in the first system diagram, there is a supporting document or a set of documents that serves two purposes: First, an audit trail of both data gathering or generation and analysis is created, that is, open to public inspection; and second, information and analytical results from each step feed to the next.

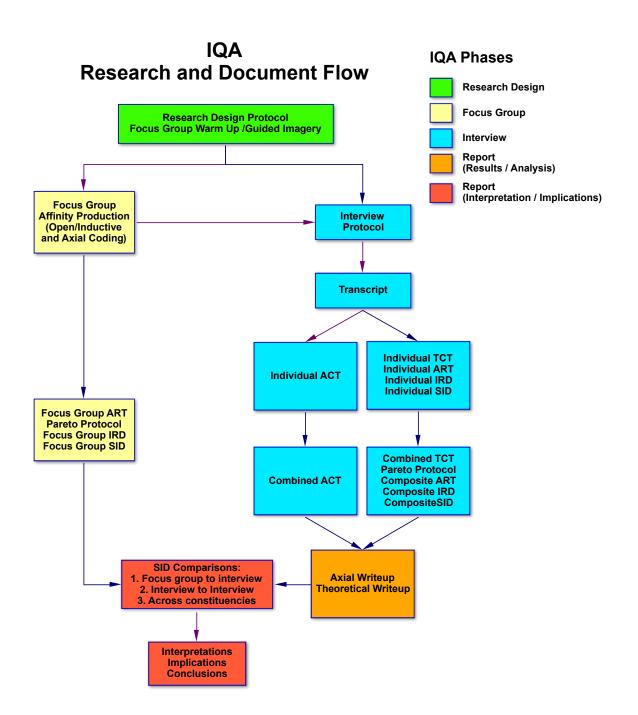


Figure A1: IQA Research Flow

IQA Research Design

Thinking about the design for a study typically begins with a problem statement, which at the early stages of design may be no more than a vague concern; a desire to know more about an ill-defined and poorly-understood phenomenon; or a need to correct or ameliorate a situation, the nature of which is not fully circumscribed. This initial lack of clarity is probably the most difficult hurdle for researchers to overcome, and the literature from both the quantitative and qualitative streams tends to give this element of research design less than meticulous attention. If the collection (or generation, or creation, depending on one's point of view), analysis, and interpretation of qualitative data can be approached from a systems point of view, it follows that the question of how to think about doing qualitative research can itself be the subject of an IQA systems analysis.

IQA research design starts with what is traditionally called a "problem." By "problem" we mean nothing more dramatic than an issue someone thinks is either interesting or needs attention. Often at this stage, a solution to some perceived problem is sought, but it is difficult to articulate what the problem really is. By its very nature, the problem is not clearly defined at this point. Rather than simply demanding that the problem be made explicit or simply hoping that a well-defined problem will somehow rise from the chaos of our activity, the IQA research flow presumes that ambiguity is a characteristic of the early thinking about a project and deals with this ambiguity, reducing it with every recursion around the IQA design cycle. IQA research design starts with the vague problem and seeks to identify those who have something to say about the problem (constituencies) and what question to ask them (an issue statement). Next research design seeks to identify comparisons of constituencies useful to understanding the phenomenon.

There are three universal research questions. It might be useful at this point to restate the section above, which describes the issues that may be addressed through systems representation of phenomena, in more conventional language. If we have only one system, two research questions are possible:

- 1. What are the components of the system?
- 2. How are the components related to each other?

If we have a minimum of two systems, then a third question can be asked:

3. How do the systems compare?

Note that the three questions are in a requisite sequence. One cannot answer a question about relationships without having first identified the things (components) that are in relationship to each other. Neither can the third question be answered unless the first two have been addressed with respect to at least two systems.

IQA research design is not conceived of as a linear get-it-right-the-first-time process; rather, it is circular in nature, as implied by the process graphic, which is shown below. However, while going in circles is a metaphor for getting nowhere, the recursive feature of IQA design allows for successive refinements of each of the following:

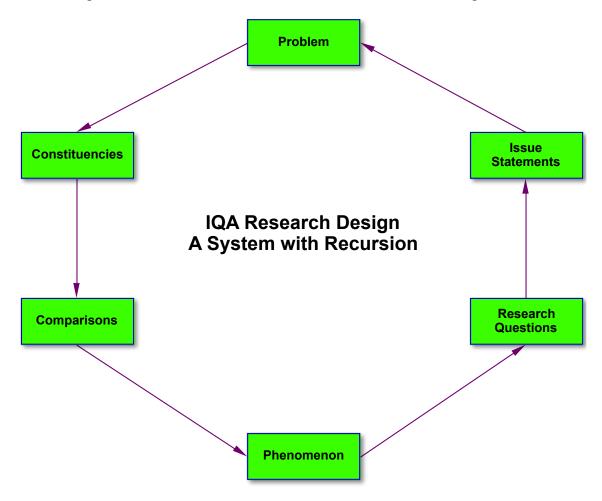


Figure A2: IQA Research Design

Problem - The problem reflects a simple observation or concern that the researcher is interested in further exploring. The problem seeks answers to *How* and *Why* questions.

Constituencies - Constituency is a term reflecting both an interest (perceptual or phenomenological distance) and power over the phenomenon, which is at the center of the problem. A constituency is anyone who

- ♦ Has something to say about the phenomenon
- Can do something about the phenomenon

Comparisons – Comparisons generate research questions.

Phenomenon - The phenomenon is an abstract idea (but a simple name) capable of producing a system with elements and relationships that not only describe the phenomenon, but how it works.

Issue Statement - Different constituencies have different perspectives on the same phenomenon, so the issue statement must be meaningful to each. The issue statement is quite simple and is always a variation of *Tell me about the phenomenon* but it must be presented in terms that are real to a given constituency. The issue statement is the question we ask to get the audience to speak about the phenomenon.

Research Questions – There are three universal research questions. If only one constituency is involved two, and only two, questions can be answered from a systems point of view:

- 1. What are the elements that make up the Phenomenon?
- 2. How do these elements relate in a system of influence?

If more than one constituency comprises the study, a third systemic inquiry is possible:

3. How do the experiences of constituency 1 compare to constituency 2?

Research Design Protocol

Problem		
Scenario		
**	simple observation or assumption for which the researcher is	
interested in knowing more about.		
Role of the Researcher	Purpose of the Study	
Academic Researcher	Academic Research	
Graduate Student	Dissertation	
Consultant	Solving a Problem	
Internal Organization Research	General Understanding of a Problem	
Other	Other	
Readers/Us	sers of the Study Results	
Identify any potential readers or uses of the res	rults of the study and why they will need it.	
	oblem Question	
Identify the Problem Question. The Problem	Question reflects a simple observation or concern that the	
researcher is interested in further exploring. The Problem Question often takes the form of a how or why		
question.		
Domain		
Identify the Domain. The domain reflects the ve	ery general topic or area in which the problem resides.	
Potential Causes of the Problem or Success		
Brainstorm potential causes of Do not cel	nsor your ideas. Identify as many as possible.	
the problem as possible.		
 ◆ ¯	•	
 •	•	
•	•	

Constituencies			
Constituency		Distance (Close to Far)	Power (High to Low)
	Individual		ĺ
	Intermediary	II	
	Authority		
	rathority		
Comparisons			
Individual	VS.		
Individual	VS.		
Intermediary	VS.		
	VS.		
Authority	VS.		
·	VS.		
Cross Constituency	VS.	VS.	

Phenomenon			
Constituency			Phenomenon
	Location of I	Events	
Individual	Intermedi	ary	Authority
Where Does This Take Place? ♦ •	Where Does This Take Place? • • •		Where Does This Take Place? ♦ •
	Range of T	ime	
Individual	Intermedi	ary	Authority
When Does It Take Place? ♦ • •	When Does It Take I	Place?	When Does It Take Place? ◆ ◆
Constituency	Research Qu	estions	Issue Statement
	 What are the elemake up the Phe How do these elin a system of in How do the expecton tituency 1 constituency 2? 	emomenon? ements relate ifluence? eriences of	Tell me about the Phenomenon.
	What are the elemake up the Phe How do these elin a system of in How do the expectonstituency 1 constituency 2?	enomenon? ements relate ifluence? eriences of ompare to	Tell me about the Phenomenon.
	1. What are the elemake up the Phe 2. How do these elin a system of in 3. How do the expension constituency 1 constituency 2?	ments that enomenon? ements relate ifluence? eriences of	Tell me about the Phenomenon.

Final Answer	
Problem:	
Constituency:	
Comparisons:	
Phenomenon:	
Research Questions:	
Issue Statement:	

IQA Focus Groups

Focus Group Warm-up Exercise

The final result of the IQA Research Design Phase is the Focus Group Warm-up Exercise. This protocol is used in the Focus Group Phase and uses guided imagery to ask the constituent groups to think about the phenomenon and provide a "dump" of thoughts.

IQA studies usually begin with a focus group, which is a group of people who share some common experience, work or live within some common structure, or have a similar background. This definition suggests that the researcher should think first about commonalities rather than differences when designing the composition of the group; IQA focus groups are formed with groups of individuals who may certainly have varied opinions and experiences with the system under study, but who more critically share a common perspective.

The Focus Group Phase of IQA begins with a guided imagery exercise using the Focus Group Warm-up Exercise produced in the Research Design Phase. From the researchers prospective, the IQA Focus Group Process is designed to identify the themes or affinities that make up the phenomenon. The focus group is asked to reflect on their experiences of the phenomenon and give a "dump" of all thoughts. The researcher next facilitates a "clumping" and "naming" exercise in order to identify the affinities. The final result of the Focus Group Phase is to identify the affinities that will be used to develop the Interview Protocol.

Focus Group Warm-up Exercise

I would like you to think for a while about the phenomenon—Very brief definition of the phenomenon

In a few minutes, I am going to ask you to tell me about your experience with the phenomenon.

So let's begin.

- Please allow yourself to be as comfortable as possible.
- Put your thoughts from the day aside to allow your attention to focus on the phenomenon.
- Close your eyes to increase your state of relaxation and your ability to focus on the phenomenon.
- Now imagine yourself in the environment of the phenomenon. See yourself in all of the places the phenomenon occurs. (long pause)
- Imagine yourself in the time frame the phenomenon occurred. (long pause)
- See all of the places, events and people the phenomenon. (long pause)
- See yourself engaging in the activities of the phenomenon. (long pause)
- Notice your surroundings. (long pause) Looking around you, take in the sights, the sounds that are associated with being in the environment of the phenomenon. (long pause)
- Allow yourself to become aware of your environment with all of your senses.
- Focus on what it feels like to be totally absorbed in the environment of the phenomenon. Be there in your mind. (long pause)
- Review all your recollections up to this moment. (pause)
- Allow all these thoughts to remain calmly in your consciousness and ready to be revealed.

Thank you for allowing these valuable observations and recollections to come forward.

Please allow yourself to gently allow your consciousness back to this time and place and when you are ready, open your eyes.

Good. Thank you.

And now, with all that you remember—and that is all that you just noticed—please write down your thoughts on these cards.

Write one thought or experience per card. Feel free to record a word, a phrase, a sentence, or a picture to capture that thought . . . and. . . Tell me about <u>the phenomenon</u>.

Identification of Affinities

The first step for an IQA focus group is silent brainstorming. During this phase a focus group is asked to write their experiences about the subject on note cards, one thought per card. After producing as many cards as possible, the focus group is asked to tape the cards along a wall. The researcher reads each card and the group comes to a consensus as to the meaning of the card, thus the foundations are laid for constructing, through discourse, a shared reality among group members. The facilitator then asks the group to silently organize the cards into groups of meaning, an activity referred to as inductive coding. Grouping is followed by the affinity naming and revision phase (axial coding), which consists of giving a name to the group (affinity) and sorting any cards that may have been miscatagorized into the proper group.

IQA data collection/analysis techniques originated from Total Quality Management (TQM) processes designed to capture knowledge from organizational members to solve problems and improve processes. A major TQM assumption is that people who are closest to the job best understand what is wrong and how to fix it. Similarly, IQA data collection techniques assist members of a group close to a phenomenon of interest in describing and labeling their experiences, and in articulating perceived relationships among these experiences to produce a theory in perception or a conceptual map, which is a systems representation of how a person or a group understands a particular phenomenon. This system consists of categories of meaning called *affinities* and the perceived causal relationships among the affinities.

The first step in creating a mind map is to assist the focus group members in organizing their thoughts into a manageable number of categories or affinities, sets of textual references that have an underlying common meaning or theme, synonymous to *factors* or *topics*. During affinity production, the constituents are given an opportunity to reflect upon their experiences and then express their thoughts and feelings. The thoughts of the group as a whole are combined and organized into common themes or affinities by the group itself with the aid of a facilitator. The group collectively names the affinities and helps the researcher create a detailed written description or definition of each affinity. The goal is to produce the smallest number of affinities with the greatest amount of detail or "richness."

Axial coding seeks to name, reorganize, clarify, and refine the affinities. While the first kind of coding is, as the name implies, almost exclusively inductive, axial coding cycles back and forth from inductive to deductive. Once the affinities are refined and often reorganized by the group participants, they are encouraged to narrow down the meanings of the affinities and their categories. Major categories of affinities are reviewed and then may be combined or divided into hierarchical systems of sub-affinities.

An affinity name is a general term that represents an experience to a particular group or individual when probed. The purpose of an affinity is to explore the range of meaning to any one group. An affinity typically has a range of meaning as well as a range of timbre. Further, both the meaning and timbre are not necessarily unidimensional (such as temperature, which can range only from hot to cold) and therefore can require sub affinities that exist in multiple dimensions. A common example is emotions. Emotions may have a range of timbre described by the group as positive (happy) to negative (sad). At the same time, there are possibilities of sub affinities within this affinity that show a range of meaning: such words as "frustration" "ecstasy" and "challenging" all point to differences in meaning as well as differences in timbre.

Once again, this process is achieved through group discussion and consensus. The descriptions are refined and narrowed by the group until each participant agrees that the definition accurately reflects the meaning of the affinity. Affinities are given titles that accurately reflect the meaning of the affinity. Affinities are given titles as determined by participants, which are documented on header notepads and placed at the top of each vertical column. An example is provided below.

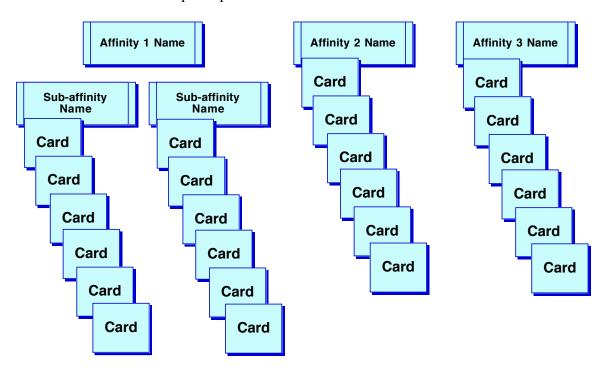


Figure A3: Affinity Naming

Renaming and Reconciling Affinities for the Interview Protocol

Renaming affinities is often necessary when using focus group work to build an interview protocol. Sometimes focus group affinity names are either too specific or metaphorical, or too abstract: in either case, the focus group name acts as a barrier rather than a facilitator to communication with an audience. For example, sometimes the group may put a qualifier on an affinity name. A very common one is "negative emotions" or "positive emotions." The two "affinities" are much more usefully and accurately represented as two subaffinities of the more general category of "emotions, "as are other labels such as frustration, anger, fun, and happy. As another example: A focus group produced the category (among others) they called "external context." An interviewee who did not participate in the focus group, when asked to talk about "external context" within the general subject of student achievement would probably have no idea of the reference for the name. An Affinity name should be simple enough to immediately trigger a response with a minimum of explanation by the interviewer. In this sense, the "best" affinity name requires the interviewer to say nothing other than, "Tell me about (affinity name)".

The whole idea of IQA is to allow members of a constituency to define the meaning and the range of the elements of the phenomenon and to articulate how these elements are connected in their understanding of the phenomenon. The researcher only facilitates drawing descriptions out of the group and organizing the descriptions into similar chunks: therefore, affinity descriptions in an interview protocol should only help to define the name and not indicate a "preferred" timbre or meaning of the category. A good affinity and description is a neutral presentation: It avoids any bias and does not lead the respondent down only one timbre path. For example, if you ask graduate students "Tell me about stress," they will tell you all about stress as a graduate student. But if you say, "Tell me about emotions," graduate students will tell you about stress, anxiety, fear, satisfaction, enervation, exhilaration, and perhaps even about even a few moments of contentment and relaxation. Leading a respondent down too narrow a path will rule out the possibility of describing all the other paths. A good affinity allows for the full range. A particular group may only experience one path, but that is what research often is about, to identify how one group compares to another. Ask a group of graduate students who are at risk of quitting about emotions and you will probably get an overwhelming set of negative descriptions, but a group who are about to graduate will very likely have a different understanding of negative emotions while at the same time remembering some as satisfying or happy

Some may fear that some affinities may be overlooked by the focus group. There is nothing wrong with adding additional affinities to the system if it gives more explanatory power to the topic. IQA recommends conducting 2 focus groups with different participants who are members of the same constituency and reconciling the two sets of

affinities. Often the researcher will note that both groups generate nearly the same affinities. Naming may be different but affinities could be paired off as having the same meaning. On occasion, one group might identify an affinity, whereas the other group might identify a category of meaning that they believed to be a sub-affinity, or the dialectic, of a larger category of meaning. While many of the affinities may the exact same name between both groups, there may be a few that on first appearance seem to be unique to one group. In order to check to see if an affinity is unique to just one group, the researcher must go back to the cards to see if were any references to that affinity in the other group. The researcher must reconcile whether it was an affinity or sub-affinity, the two groups had produced similar categories. The researcher resolves the issue by compiling a new affinity list that took into account both focus group responses.

Identification of Sub-Affinities

Sub-Affinities can be developed as a part of interview transcript analysis or through additional focus groups. To identify sub-affinities using interview transcripts the research conducts the interviews based on the affinities. Transcripts are examined and each affinity is coded to identify sub-affinities. Conducting additional focus groups may also be used to identify sub-Affinities. Using the same guided imagery process used to identify affinities, the researcher asks *tell me about each affinity*. Cards are generated, sorted and names. The process is repeated for each affinity.

Interview Protocol

The final result of the Focus Group Phase is to identify the affinities to be used in the Interview Protocol.

IQA Interviews

IQA Interviews

The IQA interview is a semi-structured interview. It is designed to capitalize on the consistency afforded by highly structured interview and the level of detail offered by open-ended or emergent interviews. The interview questions are designed and based on the affinities developed by the focus group members. An IQA interview protocol is designed to achieve specific objectives, each of which relate directly to the research questions of the study. The affinities produced by the focus group are used to create an interview protocol. The interview protocol is used to elicit descriptions of affinities created by the focus group and to identify and elicit descriptions of relationships among the affinities. In particular, IQA interviews serve to:

- ◆ Add richness and depth description of the meaning of affinities that is not possible with a focus group alone
- ♦ Allow for individual mindmaps, which can be used in a debriefing session as an interpretive aid to the investigator

Structuring the interviews with the same questions around affinities that are discussed in a prescribed order (although follow-up questions or probes in the first phase will naturally vary) allows the researcher to ensure that each affinity is explored thoroughly and consistently. Following this carefully prepared protocol then frees the researcher to focus attention on eliciting and responding to each interviewee's distinct responses. This careful, procedural preparation supports the interviewer's art in engaging and eliciting each person's experience. This process enables the researcher to achieve several critical purposes with the IQA interviews:

- To provide data representation the respondent's experience with the phenomenon
- ◆ To provide data representing the respondent's personal mind map
- ◆ To help the researcher code the impact and influences of these affinities in order to create a systems influence diagram
- ♦ To provide data representing the group's collective SID (mindmap)

The creation of an IQA interview protocol is straightforward. The interview protocol consists of two parts: 1) the open-end *axial interview* designed to provide rich description of affinities by the respondents; and 2) the structured *theoretical interview* designed to identify relationships between affinities. The axial interview section is derived from the affinities identified by the focus group, while the theoretical interview is presented through an Affinity Relationship Table.

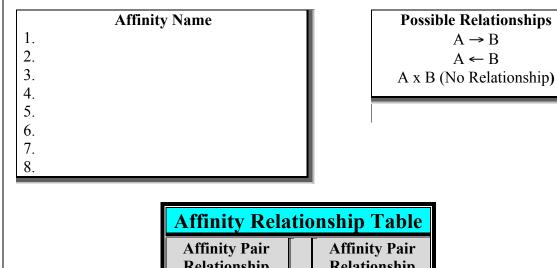
The focus group affinity identification is the basis of the open-ended questions of the axial interview. The interviewer need only address the affinity names themselves. The

interviewer seeks to address, "What does the affinity mean to you? Tell me about your experience with the affinity?"

The Affinity Relationship Table (ART) is the basis for the theoretical interview. The table provides a quick reference of all of the possible relationships between affinities. Presented with a copy of the table, the respondents are asked if they believe there is a relationship between each affinity and to explain why they believe so. They are probed to provide their experiences with the relationship. Each respondent is asked to determine the nature of the relationship between all possible pairs of affinities. For any two affinities A and B, there are only three possible relationships: either A directly influences B, or B directly influences A, or there is no direct influence between A and B. These *Rules for Hypothesizing* are summarized as follows:

For any 2 affinities A and B, either A → B (A influences B) A ← B (B influences A) A x B (No relationship)

They are asked to record their responses in an ART, which is a matrix containing all the perceived relationships in the system.



				'									
Aff	Affinity Relationship Table												
	finity F lations				inity P ations								
1	←	2		3	\rightarrow	5							
1	←	3		3	\rightarrow	6							
1	←	4		3	\rightarrow	7							
1	←	5		3	\rightarrow	8							
1	←	6		4	\rightarrow	5							
1	←	7		4	\rightarrow	6							
1	←	8		4	←	7							
2	←	3		4	\rightarrow	8							
2	←	4		5	\rightarrow	6							
2	←	5		5	←	7							
2	←	6		5	←	8							
2	←	7		6	←	7							
2	←	8		6	←	8							
						_							

Interview Transcripts

The final result of the Interview Phase is a collection of transcripts for each respondent.

IQA Report

The last phase of an IQA or any study is that of the report, which in the case of an IQA study proceeds not only from the descriptions of the affinities produced by the respondents, but from two other sources as well: (1) the respondents' judgments of the cause-and-effect relationships among the affinities and the system these judgments create; and (2) comparison of mindmaps, both at an aggregate level (composite SIDs from interviews for different constituencies) and at an individual level (examining individual mindmaps or the variability within a constituency). While there are several choices of formats for an IQA study, the dissertation format is most frequently used.

Affinities and relationships are described with the words of the group. Since IQA is designed to describe the perceptions of the phenomenon or the lived reality of the group, it makes sense to describe the affinity purely in the words of the group. Comparison is the fuel for the interpretive machine, and systems as represented by mindmaps or SIDs, provide multiple opportunities for comparison.

The IQA systems approach is designed to be of the greatest possible assistance in interpretation. The focus group is used to identify the affinities, each of which is well documented as part of the focus group protocol. Interviews then expand on the descriptions of the affinities. Since the primary result of an IQA study is a picture of a system or systems, it is no accident that the process that produced these systems is designed to aid in the writing process. The typical IQA report accomplishes three goals:

- 1. Naming and describing the elements of the system
- 2. Explaining relationships among elements of a system (system dynamics)
- 3. Comparing systems

To systematically approach the report, IQA splits the process into two phases (1) Results / Analysis and (2) Interpretation / Implications. These two phases are reflected in the typical Chapter 4 and 5 of the dissertation. "Results / Analysis" on the one hand and "Interpretation / Implications" on the other is arguably a distinction without a difference. These terms have a strong positivist flavor, and indeed the ontological barrier between our findings and the meaning we give them is much more permeable than the names imply. Nevertheless, the distinction can be useful for presentational purposes, and IQA makes a distinction that is consistent with the one described above. "Results / Analysis," in IQA terminology, refers to describing the affinities and the systems. "Interpretation / Implications" refers to comparing systems and setting these comparisons into the two larger contexts of theory (conceptual implications) and application (pragmatic implications).

The IQA Results / Analysis chapter provides the researcher the opportunity to describe the phenomenon in the participants voice and to present the data free of commentary,

interpretation or opinion by the researcher. Through a rigorous use of protocols, transcripts are coded and systems are drawn. The story of each constituency group is told by aggregating axial codes of each affinity to tell the story of the group as a whole. The system is built one relationship at a time by aggregating theoretical codes to tell the story of the group as a whole. The resulting report (dissertation Chapter 4) is an Axial Writeup, Theoretical Write-up and presentation of the SID.

The IQA Interpretation / Implications chapter (dissertation Chapter 5) provides the researcher the opportunity to describe the phenomenon in the researcher's voice. The researcher is free to interpret the data, suggest interventions and introduce other literature that reinforrces the researcher's results. In Chapter 5, the researcher re-engages with the literature to accomplish two goals: first, to re-interpret the literature reviewed in chapter 2 in the light of what has been learned and second, to identify other areas of literature that now have relevance in the light of what has been learned. The applications section of this chapter is the investigator's response to the question of pragmatic utility: What is the study good for?

IQA Report (Results / Analysis)

The results section provides to the reader the facts to be used in later discussion. This section should be as free from researcher interpretation and opinion as possible. By presenting only the facts, the researcher adds credibility to the data. This also provides an audit trail for later arguments. Providing just the data allows the reader to draw his or her own conclusions, free from researcher bias.

- ♦ System Elements (Describe each Affinity)
 - Composite affinity descriptions (affinity write-up)
 - o Describe each affinity from the point of view of the group as a whole
- ♦ System Relationships (Describe each Relationship)
 - o Composite theoretical descriptions (theoretical write-up)
 - Draw the cluttered SID one affinity at a time while describing the relationships
 - System influence diagram (SID)
 - Present the uncluttered SID

The Results / Analysis Phase of the IQA Report is primarily an exercise in organization and presentation. Raw transcripts are processed through a series of protocols designed with the purpose identifying the meaning of each affinity by telling the composite story of each constituency. This phase also produces the relationship-by-relationship building of the composite system while telling the group story of how each affinity is related to the others.

Transcripts

All interviews are transcribed word for word. The transcript is formatted to provide the researcher quick identification of the sections. The researcher then edits the transcripts to remove all spoken word stumbles and poor grammar. Personal identifiers are removed or generalized.

Axial Coding

Axial Code Table (ACT)

Once the transcripts had been prepared, the researcher analyzes the text for axial codes, which are specific examples of discourse that illustrate or allude to an affinity. The researcher then documents the reference for retrieval by recording the affinity number on the line of transcript that refers to the affinity and by documenting the line numbers and affinity numbers in the Individual Interview Axial Code Table (ACT). The ACT is the primary documentation for all utterances that illustrate the range of meaning of each affinity for each respondent.

The structure of the interview is designed to make this step very easy. The meaning of each affinity is explored with each respondent according to a standard (but flexible) protocol and the respondent's descriptions are transcribed line-by-line. The researcher examines the particular section of the interview transcript that addresses the affinity and looks for phrases or statements that define and provide examples of a specific affinity. These examples may be symbolic or metaphorical statements concerning the affinity, clearly stated descriptions of how the affinity becomes manifest in the experience of the respondent, or proximate descriptions of other affinities in the context of the one being addressed.

Quotes relating to a specific affinity are cut and pasted into the third column of the ACT, along with the line(s) of the transcript that are the source of the axial quote. There will usually be multiple axial quotes for any given affinity; each quote represented by another row in the ACT. Once all interviews are coded, the data from the interviews are summarized to create a composite of the individuals' experience with the phenomenon.

Sample Individual Interview Axial Code Table									
Affinity	Transcript Line	Axial Quotation	Researcher Notes						
1.									
2.									
3.									
4.									
5.									
6.									

Combined Interview Axial Code Table

Once all interviews have been coded, the data from the interviews are summarized to create a combined Axial Code Table that represents a composite of the individuals' experience with the affinities of phenomenon. Axial data are transferred from each Individual Interview Axial Code Table to a Combined Interview Axial Code Table. By combining all interviews into one table, the researcher creates a database for the entire set of respondents containing all Axial Codes for all affinities, with each code containing a link or a reference to the transcript and line numbers that produced the code. This table is very similar to the one used to record axial codes for an individual interview except that it also contains a link to the transcript that produced the code.

Composite Affinity Descriptions: The Affinity Write-up

The IQA Affinity Write-up is a composite story of the group. The researcher is tasked with organizing the multiple interviews so that they tell the story of the group as a whole. The researcher seeks to identify what "does the affinity mean?", "what are the sub components?" and "what is the range of meaning?" for each affinity. Since the group is the best source of describing their experience, why not describe it purely in their own words? Much like the process used to identify affinities with a focus group, quotes can be organized into common themes using a "Dump, Clump, Name, Organize" procedure. With all the quotes for a particular affinity contained in a Combined Interview Axial Code Table for that affinity, the meaning of the affinity can begin to take shape. IQA takes the stand that the researcher should have little voice in the Results / Analysis. The role of the researcher is to organize the data so that it tells the groups story and is interesting to the reader. The researcher is tasked with combining, naming and organizing the quotes. The researcher introduces the affinity and sub affinities to the reader but avoids any temptation to add the researchers voice and interpretation to the story. For this

reason, only a few introductory sentences are written in the voice of the researcher while the bulk of the Affinity Write-up is in the words of the group.

Once all interview have been organized and coded and system have been build all that is left to do is present the material in a manner that is informative, organized and fun to read. Since we are all prolific writers, this step is easy and need no further explanation. But for that rare researcher who looks at a blank piece of paper and has no idea where to start, IQA once again take a systematic approach to writing up the study. Knowing the data that IQA produces makes the writing process much less difficult. The transparent nature of the IQA process allows the researcher to present the results in an open forum and allows the reader to examine the data along with the researcher. Presenting the data in an open manner allows the reader to draw their own conclusions about the study. Most researchers work so hard and become so involved in the study that they cannot resist drawing conclusions and making predictions. But all too often researchers blur the line between presenting the data and interpretation. A systematic approach can help to avoid the pitfalls by drawing distinct lines between describing the data and interpreting the data.

In the "Dump" phase, each Combined Interview ACT is cut into strips of paper representing a single individual quote. The research in effect creates cards for a sub-affinity analysis. In the "Clump" phase, the researcher next examines all quotes for that affinity. Similar themed quotes are clumped together in piles. In the "Name" phase, the researcher examines each theme and gives it a meaningful name. These themes are called sub-affinities. They represent the overall range of meaning of the affinity. They often describe the affinity in either a range of timbre or tone or as a list of attributes that describe the affinity. In the "Organize" phase, multiple quotes for each sub-affinity are then woven together to develop a composite quote. The researcher organizes the quotes so that they tell a story about each sub-affinity.

While the resulting paragraphs of quotes are made up of quotes taken from individuals, the result is an affinity description that represents a composite story of the group as a whole. While this process may seem strange to qualitative researchers who are used to seeing quotations being treated in traditional ways, the process is not unusual. It is very common for a researcher to interview an individual many times over a period of time about the same subject. Researchers often compile quotes on a topic and report the results so that the story reads as a continuous piece.

Theoretical Coding

The purpose of IQA is to draw a picture of the system (Systems Influence Diagram or SID) that represents the perceptual terrain or the mindmap of an individual or group with respect to a phenomenon represented by the issue statement. The SID is a picture drawn using a set of rules for rationalization on a summary of the theoretical codes called an

Interrelationship Diagram (IRD) produced by the respondents. Theoretical Coding refers to ascertaining the perceived cause and effect relationships (influences) among all the affinities in a system. In the interview setting, this is accomplished by facilitating a systematic process of building hypotheses linking each possible pair of affinities.

All possible direct links between the affinities are investigated by developing hypotheses grounded in the data. IQA provides participants with a formal protocol to determine whether or not there is a direct influence between every possible pair of affinities in the system. If so, the respondent then determines the directionality of influence. The goal is to identify the underlying (and generally hidden) structure of the group mind map, which is summarized in a SID.

Theoretical Coding can serve two purposes, first to present an individual SID for each participant and second to produce a composite SID representative of the group as a whole. To produce a SID for an individual the researcher examines the transcripts for Theoretical Codes. Theoretical Codes are recorded in an Individual Interview Theoretical Code Table (TCT), which captures both directionality of relationships as well as descriptive explanations of how the relationships work in the respondent's words. In preparation for drawing an individual system the relationships are transferred to an Affinity Relationship Table (ART), which was described in the interviews section. The relationships are then processed through another protocol called an Interrelationship Diagram (IRD). Next, a Cluttered SID, one that contains all relationships identified by the respondent, is produced. The Uncluttered SID is the final version of the system in which redundant links are removed. Each of these protocols will be explained in detail to follow.

In order to build a composite system representative of the group as a whole a few extra steps are performed. For each interview an Individual Interview Theoretical Code Table (TCT) is produced. As each interview is processed an accounting of each affinity pair relationships is tallied in a Theoretical Code Frequency Table. The Theoretical Code Frequency Table captures the frequency of "votes" for each affinity pair for all members of the group. IQA uses a Pareto Protocol, which is used operationally to achieve consensus and analytically to create a statistical group composite of the group. The Pareto Protocol identifies which relationships the researcher should use to build the Composite SID. The relationships to be used are recorded in an ART. Following the same steps as an Individual System an IRD, Cluttered SID and Uncluttered SID is produced. The Composite SID process is described in detail following the process for the individual SID.

The SID Assignments Protocol

The purpose of the SID Assignments Protocol is to allow the researcher to analyze the entire set of relationships identified in the ART and determine the basic flow of the system from Driver to Outcome. The SID Assignments Protocol contains four tables, The Affinity Relationship Table (ART), The Interrelationship Diagram (IRD), The Sorted IRD and the Tentative SID Assignments Table. The SID Assignments Protocol is completed by examining the number relationships a particular affinity influences and is influenced by. In other words, the researcher examines the number of OUT arrows (Drivers) and IN arrows (Outcomes) of each affinity. The difference between OUT and IN arrows determines if the affinity is a relative driver or outcome. Affinities are then sorted from drivers to outcomes. The results of the sorted IRD are examined to determine the tentative order of the affinities in preparation for drawing the SID. Below is the blank SID Assignments Protocol.

	Affinity Name	
1.		
2. 3.		
3.		
4.		
4. 5. 6. 7.		
7.		
8.		

Possible Relationships	
$A \rightarrow B$	
$A \leftarrow B$	
A x B (No Relationship)	
	_

Affinity Relationship Table								
	ty Pair ionship			ity Pair ionship				
1	2		3	5				
1	3		3	6				
1	4			7				
1	5		3	8				
1	6		4	5				
1	7		4	6				
1	8		4	7				
2	3		4	8				
2	4		5	6				
2	5		5	7				
2 2 2 2 2 2 2 3	6		5	8				
2	7		6	7				
2	8		6	8				
3	4		7	8				

	IRD										
	1	2	3	4	5	6	7	8	OUT	IN	Δ
1											
2											
3											
4											
5											
6											
7											
8											
	Total										

Count the number of up arrows (\uparrow) or *Outs* Count the number of left arrows (\leftarrow) or *Ins* Subtract the number of *Ins* from the *Outs* to determine the (Δ) *Deltas* Δ = Out- In

Error Check

Add both the $\it Outs$ column and the $\it Ins$ column. The numbers should be equal. Add the Δ column. The value should be zero.

Paste the contents of the IRD into the table below and sort by $\boldsymbol{\Delta}$

	IRD – Sorted in Descending Order of Δ											
	1 2 3 4 5 6 7 8 OUT IN Δ										Δ	
1												
2												
3												
4												
5												
6												
7												
8												

Directions

Copy and paste the sorted affinity number column over the affinity numbers in the Tentative SID Assignments Table.

Examine the Sorted IRD Table for the following possibilities and change the Tentative SID order to reflect the rule.

Zero IN, Zero OUT Rule: If there is a **Zero In** within the system it must be moved up to a pure primary driver. If there is a **Zero Out** it must be moved down to a pure primary outcome.

Equal Delta Flip Rule: If there is a tied delta value, examine the relationship pair and identify which is the driver. The driver of the pair goes first in the table. Make changes to the SID order in the table below.

Te	Tentative SID Assignments								
1									
2									
3									
4									
5									
6									
7									
8									

The Cluttered SID

The first version of the SID contains each link present in the IRD and is referred to as the Cluttered SID. The system is saturated with links, a term appropriated from organic chemistry. Just as saturated hydrocarbons are composed of carbon atoms linked to as many hydrogen atoms as their structure will allow, the cluttered SID contains all of the links identified by participants in the protocol leading to the IRD.

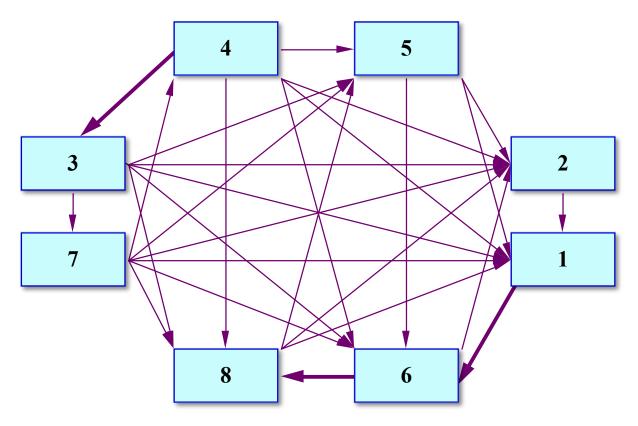


Figure A4: Sample Cluttered SID

The Uncluttered SID

The Cluttered SID deserves its name. The problem with saturation is that a Cluttered SID, while being comprehensive and rich, can be very difficult to interpret, even for a modest number of affinities that are highly interlocked or embedded within the system. While the Cluttered SID is extremely rich in descriptive capability, it serves better as an *objet d'art* (depending on one's sense of aesthetics) than as an interpretive device. In other words, many systems have so many links that the explanatory power of the system becomes bogged down in the details of the relationships. Comprehensiveness and richness are

certainly objectives of the SID; on the other hand, so is parsimony. A way to reconcile the richness–parsimony dialectic is to produce an Uncluttered SID, one that has redundant links removed. Redundant links are those between two affinities in which, even if removed, a path from the driver to the outcome can be achieved through an intermediary affinity. Redundant links can be thought of as the paths of least resistance. The Uncluttered SID has all redundant links removed. The Uncluttered SID is the simplest possible representation consistent with all the relationships contained in the IRD.

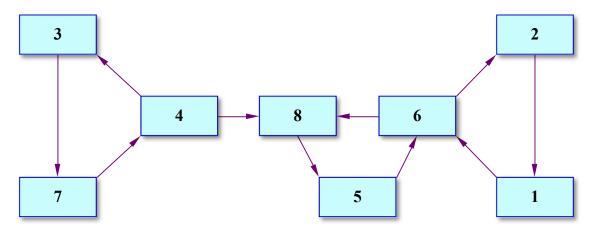


Figure A5: Sample Uncluttered SID

The Composite SID

Using the same procedure used to develop an Individual SID, a Composite ART, IRD and SID can be created for the group. Once all interviews have been coded, the data from the interviews are summarized to create a combined SID that represents a composite of the individual's experience with the phenomenon. A count of each theoretical code is entered into the Combined Interview Theoretical Code Frequency Table. Because individual respondents may have defined relationships differently, and may in fact disagree about the direction of a relationship, IQA provides a protocol (the Pareto Protocol with MinMax Criterion) to constructing a composite SID from individual interview SIDs.

The Pareto Principle

Selecting a protocol for representing the consensus or the "preponderance" of the group's analysis of relationships is similarly independent of the level of detail or group organization. A reasonably rigorous and powerful technique for achieving and documenting the degree of consensus in a group is the Pareto Principle, named after the 19th century economist Wilfredo Pareto (1843-1913), and popularized among

management and systems theorists by Joseph Juran (1988). Pareto wrote of the "trivial many and the significant few" in his analysis of productivity and economics. The principle has been used in quality management to help focus priorities by providing an easy-to-remember rule of thumb. Put in systems terms, the Pareto Principle states that something like 20% of the variables in a system will account for 80% of the total variation in outcomes (such as productivity or profit). Other (sometimes tongue-in-cheek) incarnations of the Pareto Principle are:

- ♦ Addressing the most troublesome 20% of your problem will solve 80% of it.
- In any organization, 20% of the personnel will cause 80% of your headaches.
- ♦ 80 percent of all work that is completed is really the result of 20 percent effort.
- ♦ 20 percent of all potential solutions will solve 80 percent of the problem

Whether the split is 20/80 or 70/30 or some other ratio depends upon the nature of the system, but the essential utility of the Pareto Principle is this: a minority of the relationships in any system will account for a majority of the variation within the system. Depending upon the variation of theoretical coding used, it is quite likely that there will be some disagreement among either individuals or subgroups about the nature of a given relationship. IQA uses the Pareto rule of thumb operationally to achieve consensus and analytically to create a statistical group composite.

The Pareto Protocol provides an efficient and, to group members who find themselves in an initial stage of disagreement, satisfying method for achieving consensus. A Pareto Composite System requires an exact count of each relationship code but has distinct benefits in that it takes into account close votes and identifies conflicting relationships not addressed in a simple vote. The frequency of each relationship is determined and recorded on a spreadsheet by tallying all of the relationships identified by each member of the group and recorded in an ART. The total number of "votes" (we omit the quotes from now on) for each relationship is calculated, and the relationships are sorted out in descending order. Cumulative percentages are then calculated for each relationship, which is to say a Pareto Protocol is constructed. The cumulative frequencies are used for two purposes:

- ◆ To determine the optimal number of relationships to comprise the composite system. "Optimal" is used in the sense that the researcher's goal is to use the fewest number of relationships (for parsimony's sake) that represents the greatest amount of variation (for the sake of comprehensiveness and richness). Relationships that attract a very low percentage of votes are generally excluded from the group composite.
- ◆ To help resolve ambiguous relationships, which are relationships that attract votes in either direction.

IQA Report (In terpretation / Implications)

The last phase of an IQA or any study is that of Interpretation / Implications, which in the case of an IQA study proceeds not only from the descriptions of the affinities produced by the respondents, but from two other sources as well: (1) the respondents' judgments of the cause-and-effect relationships among the affinities and the system these judgments create; and (2) comparison of mindmaps, both at an aggregate level (focus group SID, composite SIDs from interviews for different constituencies) and at an individual level (examining individual mindmaps or the variability within a constituency).

In the Interpretation / Implications chapter, the researcher begins to make comparisons and draw conclusion based on the data. Composite systems for each constituency are compared to each other. Individual respondent systems are compared to show typical or atypical variation form that of the group. The researcher draws inferences based on theoretical perspective. Finally, the researcher can make predictions based on the model or suggest interventions one may attempt to change the outcome of the system.

Comparisons

Comparisons can be made at two levels: A qualitative analogue to the statistical concept of variation is possible by comparing individual mindmaps to each other and to the composite; and a qualitative analogue to post hoc group comparisons is possible by comparing the composite mindmaps of different constituencies. These two interpretive protocols are the logical results of the dialectical nature of IQA research, as revealed in the following:

- 1. Individuals are unique in meaningful ways. Individual perspectives or voices are important and should not get lost in our attempt to find patterns. However ...
- 2. Patterns or communalities in perceptions do exist within constituencies. These patterns or abstractions are useful for both theoretical and practical purposes. Furthermore...
- 3. Comparison is the primary method of interpretation, both from the participant's point of view and from the investigator's. IQA focus group and interview protocols are designed to encourage constant comparison by the participants; and for the investigator, the following comparisons are provided by following the IQA research design process:
 - Among individuals within and across constituencies (comparing individual mindmaps to each other and to composites)
 - Comparisons among constituencies (comparing composites)

Scenarios Examined

A mindmap or SID, whether it is the map of a group's or an individual's perception, is a system, and systems are made to be "exercised." Systems may be exercised (or scenarios may be cast) in three basic ways:

- 1. The researcher may ask the model to "predict," based on its internal logic, the ultimate state of the outcome affinities given known states of its antecedent affinities.
- 2. The researcher may do the opposite, which is to ask what antecedents might, by the logic of the system, lead to a particular state of its outcomes.
- 3. The researcher may ask what might be the effect of extrasystemic influences or those forces not named or accounted for in the system.

In other words, IQA methodology allows for a representation of both individual and group realities, comparisons of which allow the researcher to ask the two great interpretive questions: "What is ...?" and "What if ...?"

Interpretation & Implications: Chapter 5 Guidelines

The implications section provides a forum for the researcher to analyze and interpret the data as well as draw conclusions based on the data. How one chooses to make comparisons is a matter of choice. IQA chooses to analyze the composite system first. Next, IQA chooses to identify opposing individual experience and compare them. Finally, IQA chooses to treat the system as a theoretical model that can be applied to other situations and make predictions based on the model.

- ◆ Composite System (Describe the System)
 - o Brief tour through the system.
 - Describe overall placement of the affinities in the systems. Describe links, building the model from left to right. Give examples (you can put theoretical quotes directly onto your SID) of each link.
 - O Highlight and *name* any feedback loops. Give an example, in the manner just above, of how each loop works; in particular, how it can *implode* or go negative. Describe way(s) to escape from a negative feedback loop.
 - o Zoom out by substituting the feedback loop names for the affinities comprising the loops, working from right (outcomes) to left (drivers).
 - Exercise the model by presuming some given states or conditions of the drivers and then examining what the expected results would be (prospective scenario). Then, do the reverse (retrospective scenario) by assuming some states or conditions of the outcomes, and then examine the model to see what conditions or states of the drivers could have produced these outcomes.
- ♦ Valence (Describe the Valence)

- o Describe the overall valence (hot to cold, positive to negative, bad to good, pleasant to unpleasant, lots of variation, little variation) of each affinity. Analyze the interviews based on valence and quotes.
- ◆ Predictions and Interventions
 - o Describe how the system can be used outside the context of the study.
 - o Describe how each Constituency (from Power/Proximity analysis in Research Design) could use the system
- ◆ Practical Implications (Provide Solutions to Identified Problems)
- ♦ Revisit the Literature
 - o Identify other theories that resemble or support the researcher's findings

Additional Interpretative Techniques

- ◆ Compare Groups (Compare System of Different Constituencies or Comparison Groups)
 - Compare and contrast drivers to outcomes, loops and the overall placement of the affinities in the systems.
 - o Compare and contrast the timbre of the individual's affinities to that of the composite.
- ♦ Individual System (Describe an Atypical and Typical Individual)
 - o Discuss each affinity in the context of an individual interview.
 - o Discuss each relationship in the context of an individual interview.
 - o Describe links, building the model from left to right. Give examples (you can put theoretical quotes directly onto your SID) of each link.
 - o Describe overall placement of the affinities in the systems.
 - o Highlight and *name* any feedback loops. Give an example, in the manner just above, of how each loop works; in particular, how it can *implode* or go negative. Describe way(s) to escape from a negative feedback loop.
 - o Zoom out by substituting the feedback loop names for the affinities comprising the loops, working from right (outcomes) to left (drivers).
 - o Exercise the model by describing the individual's path through the system.
 - Describe the overall valence (hot to cold, positive to negative, bad to good, pleasant to unpleasant, lots of variation, little variation) of each affinity. Analyze the individual interview based on valence and quotes.
 - o In the individual SID, identify the affinity, which, if its valence becomes negative enough, will likely lead to a decision to abandon the doctoral program. (This step is particular to our case study.)

APPENDIX B: THEORETICAL CODING

SID Assignments Protocol

Affinity Name	Possible Relationships
1. Leadership	
2. Policy	$A \rightarrow B$
3. Organization	A ← B
4. Instructional Systems Design	A x B (No Relationship
Process	
5. Personnel / Team	
6. Training	
7. Resources / Materials	
8. Facilities	
9. Communication	
10. Client Relationship	
11. Product	
12. Emotions	

	Affinity Relationship Table														
	finity F lations				finity I lations				ffinity l				Affinity Pair Relationship		
1	\rightarrow	2		2	\rightarrow	10		4	\rightarrow	11		7	\rightarrow	11	
1	\rightarrow	3		2	\rightarrow	11		4	\rightarrow	12		7	\rightarrow	12	
1	\rightarrow	4		2	\rightarrow	12		5	\rightarrow	6		8	\rightarrow	9	
1	\rightarrow	5		3	\rightarrow	4		5	\rightarrow	7		8	\rightarrow	10	
1	\rightarrow	6		3	\rightarrow	5		5	←	8		8	\rightarrow	11	
1	\rightarrow	7		3	\rightarrow	6		5	\rightarrow	9		8	\rightarrow	12	
1	\rightarrow	8		3	\rightarrow	7		5	←	10		9	\rightarrow	10	
1	\rightarrow	9		3	\rightarrow	8		5	\rightarrow	11		9	\rightarrow	11	
1	\rightarrow	10		3	\rightarrow	9		5	\rightarrow	12		9	\rightarrow	12	
1	\rightarrow	11		3	\rightarrow	10		6	←	7		10	\rightarrow	11	
1	\rightarrow	12		3	\rightarrow	11		6	←	8		10	\rightarrow	12	
2	←	3		3	\rightarrow	12		6	\rightarrow	9		11	\rightarrow	12	
2	\rightarrow	4		4	←	5		6	\rightarrow	10					
2	\rightarrow	5		4	\rightarrow	6		6	\rightarrow	11					
2	\rightarrow	6		4	\rightarrow	7		6	\rightarrow	12					
2	\rightarrow	7		4	←	8		7	←	8					
2	\rightarrow	8		4	\rightarrow	9		7	\rightarrow	9		_			
2	\rightarrow	9		4	\rightarrow	10		7	\rightarrow	10					

The Pareto Protocol

The I	E-Learning	Creation	Experience	Pareto Pro	otocol
Affinity Pair Relationship	Frequency Sorted (Descending)	Cumulative Frequency	Cumulative Percent (Relation)	Cumulative Percent (Frequency)	Power
1 > 2	31	31	0.8	2.1	1.3
1 > 5	28	59	1.5	4.0	2.5
1 > 3	26	85	2.3	5.8	3.5
2 > 9	24	109	3.0	7.4	4.3
1 > 7	23	132	3.8	8.9	5.1
1 > 4	22	154	4.5	10.4	5.9
3 > 5	22	176	5.3	11.9	6.6
1 > 9	21	197	6.1	13.3	7.3
2 > 5	21	218	6.8	14.8	7.9
2 > 6	21	239	7.6	16.2	8.6
4 > 11	21	260	8.3	17.6	9.3
8 > 12	21	281	9.1	19.0	9.9
9 > 12	21	302	9.8	20.4	10.6
1 > 6	20	322	10.6	21.8	11.2
1 > 11	20	342	11.4	23.2	11.8
3 > 12	20	362	12.1	24.5	12.4
5 > 11	20	382	12.9	25.9	13.0
9 > 11	20	402	13.6	27.2	13.6
1 > 8	19	421	14.4	28.5	14.1
2 > 10	19	440	15.2	29.8	14.6
7 > 11	19	459	15.9	31.1	15.2
1 > 10	18	477	16.7	32.3	15.6
3 > 4	18	495	17.4	33.5	16.1
3 > 9	18	513	18.2	34.7	16.6
6 > 12	18	531	18.9	36.0	17.0
9 > 10	18	549	19.7	37.2	17.5
10 > 11	18	567	20.5	38.4	17.9
10 > 12	18	585	21.2	39.6	18.4
2 > 7	17	602	22.0	40.8	18.8
5 > 9	17	619	22.7	41.9	19.2
7 < 8	17	636	23.5	43.1	19.6
1 > 12	16	652	24.2	44.1	19.9
2 > 8	16	668	25.0	45.2	20.2

The Pareto Protocol, cont.

3 > 6	16	684	25.8	46.3	20.6
3 > 10	16	700	26.5	47.4	20.9
8 > 9	16	716	27.3	48.5	21.2
11 > 12	16	732	28.0	49.6	21.5
2 > 12	15	747	28.8	50.6	21.8
3 > 7	15	762	29.5	51.6	22.0
3 > 8	15	777	30.3	52.6	22.3
3 > 11	15	792	31.1	53.6	22.6
5 > 7	15	807	31.8	54.6	22.8
7 > 9	15	822	32.6	55.7	23.1
7 > 12	15	837	33.3	56.7	23.3
2 > 4	14	851	34.1	57.6	23.5
2 > 11	14	865	34.8	58.6	23.7
4 < 5	14	879	35.6	59.5	23.9
4 > 6	14	893	36.4	60.5	24.1
4 > 12	14	907	37.1	61.4	24.3
6 > 11	14	921	37.9	62.4	24.5
2 < 3	13	934	38.6	63.2	24.6
5 < 10	13	947	39.4	64.1	24.7
6 < 7	13	960	40.2	65.0	24.8
6 > 10	13	973	40.9	65.9	25.0
8 > 10	13	986	41.7	66.8	25.1
5 > 12	13	999	42.4	67.6	25.2
5 < 12	12	1011	43.2	68.4	25.3
4 > 7	12	1023	43.9	69.3	25.3
4 > 10	12	1035	44.7	70.1	25.4
5 > 6	12	1047	45.5	70.9	25.4
5 < 8	12	1059	46.2	71.7	25.5
6 < 8	12	1071	47.0	72.5	25.5
7 > 10	12	1083	47.7	73.3	25.6
2 > 3	11	1094	48.5	74.1	25.6
4 > 5	11	1105	49.2	74.8	25.6
4 < 7	11	1116	50.0	75.6	25.6
4 > 9	11	1127	50.8	76.3	25.5
5 < 6	11	1138	51.5	77.0	25.5
5 > 10	11	1149	52.3	77.8	25.5
4 < 10	10	1159	53.0	78.5	25.4

The Pareto Protocol, cont.

5 < 7	10	1169	53.8	79.1	25.4
6 > 9	10	1179	54.5	79.8	25.3
8 > 11	10	1189	55.3	80.5	25.2
4 < 6	9	1198	56.1	81.1	25.0
4 < 9	9	1207	56.8	81.7	24.9
6 > 7	9	1216	57.6	82.3	24.8
1 < 3	8	1224	58.3	82.9	24.5
1 < 12	8	1232	59.1	83.4	24.3
4 < 8	8	1240	59.8	84.0	24.1
6 < 9	8	1248	60.6	84.5	23.9
8 < 11	8	1256	61.4	85.0	23.7
1 < 6	7	1263	62.1	85.5	23.4
1 < 10	7	1270	62.9	86.0	23.1
3 < 9	7	1277	63.6	86.5	22.8
5 < 9	7	1284	64.4	86.9	22.5
6 < 10	7	1291	65.2	87.4	22.3
6 < 11	7	1298	65.9	87.9	22.0
7 < 10	7	1305	66.7	88.4	21.7
9 < 10	7	1312	67.4	88.8	21.4
10 < 12	7	1319	68.2	89.3	21.1
1 < 8	6	1325	68.9	89.7	20.8
1 < 9	6	1331	69.7	90.1	20.4
3 < 11	6	1337	70.5	90.5	20.1
5 > 8	6	1343	71.2	90.9	19.7
7 < 9	6	1349	72.0	91.3	19.4
7 < 11	6	1355	72.7	91.7	19.0
10 < 11	6	1361	73.5	92.1	18.7
1 < 4	5	1366	74.2	92.5	18.2
1 < 7	5	1371	75.0	92.8	17.8
3 < 6	5	1376	75.8	93.2	17.4
3 < 10	5	1381	76.5	93.5	17.0
3 < 12	5	1386	77.3	93.8	16.6
4 > 8	5	1391	78.0	94.2	16.1
4 < 12	5	1396	78.8	94.5	15.7
6 > 8	5	1401	79.5	94.9	15.3
7 > 8	5	1406	80.3	95.2	14.9
11 < 12	5	1411	81.1	95.5	14.5

The Pareto Protocol, cont.

1 < 2	4	1415	81.8	95.8	14.0
1 < 11	4	1419	82.6	96.1	13.5
2 < 11	4	1423	83.3	96.3	13.0
3 < 8	4	1427	84.1	96.6	12.5
4 < 11	4	1431	84.8	96.9	12.0
5 < 11	4	1435	85.6	97.2	11.6
6 < 12	4	1439	86.4	97.4	11.1
9 < 12	4	1443	87.1	97.7	10.6
1 < 5	3	1446	87.9	97.9	10.0
2 < 12	3	1449	88.6	98.1	9.5
3 < 5	3	1452	89.4	98.3	8.9
3 < 7	3	1455	90.2	98.5	8.4
2 < 4	2	1457	90.9	98.6	7.7
2 < 5	2	1459	91.7	98.8	7.1
2 < 6	2	1461	92.4	98.9	6.5
2 < 7	2	1463	93.2	99.1	5.9
2 < 8	2	1465	93.9	99.2	5.2
2 < 10	2	1467	94.7	99.3	4.6
8 < 9	2	1469	95.5	99.5	4.0
8 < 10	2	1471	96.2	99.6	3.4
9 < 11	2	1473	97.0	99.7	2.8
2 < 9	1	1474	97.7	99.8	2.1
3 < 4	1	1475	98.5	99.9	1.4
7 < 12	1	1476	99.2	99.9	0.7
8 < 12	1	1477	100.0	100.0	0.0
Total Frequency	1477	Equal Total Frequency	Equals 100%	Equals 100%	Power = E-D

Influence Relationship Diagrams

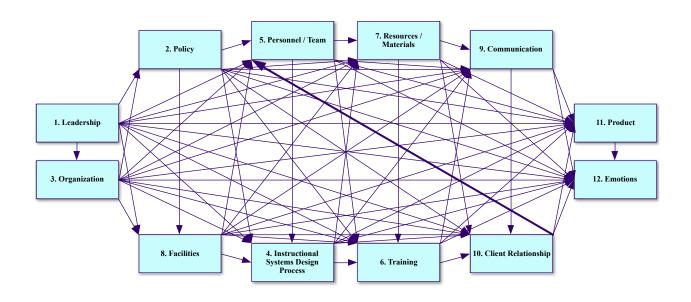
	Influence Relationship Diagram (IRD)														
	1	2	3	4	5	6	7	8	9	10	11	12	OUT	IN	Δ
1		1	1	1	1	1	1	1	1	1	1	1	11	0	11
2	—		\	1	1	1	1	1	1	1	1	1	9	2	7
3	\	1		1	1	1	1	1	1	1	1	1	10	1	9
4	\downarrow	\downarrow	J		J	^	^	J	1	1	1	1	6	5	1
5	\	\	—	1		1	1	←	1	←	1	1	6	5	1
6	—	—	.	—			—	←	1	1	1	1	4	7	-3
7	\	\	—		1	1		←	1	1	1	1	5	6	-1
8	\	\	J	1	1	1	1		1	1	1	1	8	3	5
9	1	\uparrow	1	1	\uparrow	\downarrow	\	U		1	1	1	3	8	-5
10	1	1		1	1		—	—	—		1	1	3	8	-5
11	\	\	—		1	—	—	←	←	←		1	1	10	-9
12	\	\	Ţ	J	1	J	J	\		←	—		0	11	-11
Total							otal	66	66	0					

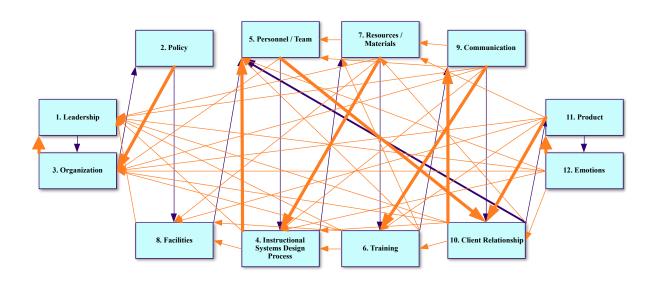
	IRD – Sorted in Descending Order of Δ														
	1	2	3	4	5	6	7	8	9	10	11	12	OUT	IN	Δ
1		1	1	1	1	1	1	1	1	1	1	1	11	0	11
3	\downarrow	^		1	1	1	1	1	1	1	1	1	10	1	9
2	1		\	1	1	1	1	1	1	1	1	1	9	2	7
8	\downarrow	J	↓	1	^	^	1		^	1	1	1	8	3	5
4	\downarrow	J	\		J	^	1	↓	^	1	1	1	6	5	1
5	1	\downarrow	—	1		1	1	←	1	←	1	1	6	5	1
7	1	J	↓	\	J	1		↓	1	1	1	1	5	6	-1
6	\	—	←	←	—		←	←	1	1	1	1	4	7	-3
9	\	—	←	←	←	←	←	←		1	1	1	3	8	-5
10	—		←	←	1	←	←	←	←		1	1	3	8	-5
11	U	\	←	←	—	—	←	←	—	←		1	1	10	-9
12	←	—	←	←	←	←	←	←	←	←	←		0	11	-11

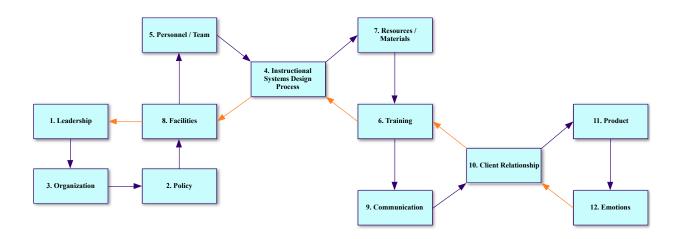
Tentative SID Assignments

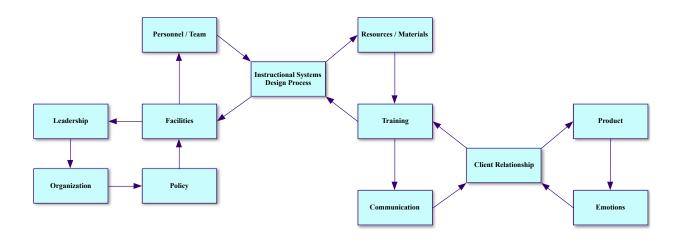
Te	Tentative SID Assignments							
1	Primary Driver							
3	Secondary Driver							
2	Secondary Driver							
8	Secondary Driver							
5	Secondary Driver							
4	Secondary Outcome							
7	Secondary Outcome							
6	Secondary Outcome							
9	Secondary Outcome							
10	Secondary Outcome							
11	Secondary Outcome							
12	Primary Outcome							

96% Pareto









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